

We Are Not Alone: Perception and the Others

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Abstract

In this paper, I have outlined an original Metaphysics of Perception which takes into consideration some of the most common views about perception in the contemporary debate. Then I will look at the consequences of this metaphysics about our perception of others and what we know about them. In the third section, I suggest how to make sense of certain neuroscientific discoveries about social perception and social cognition. In the conclusion, I recap what has been done to say that others are what we can know after all.

Introduction

I would like to propose a metaphysics that considers the most important positions on the metaphysics of perception in the contemporary debate, without rethinking them from the beginning, and how it relates to our social perception and what we know about others. The Intentionalist view, the versions of The Causal Theory of Perception coherent with Indirect realism, some thesis of Naïve realism and so on will be the background of this present work and, where not better specified, a silent one.

The Metaphysics of Perception I have outlined focuses on the composition of our perceptual experience in its fundamental aspects as well as the position of people within the perceptual experience. This first step will be followed by a discussion of the necessary and sufficient condition of perception and by the discussion of the role that our phenomenal experience plays in perceptual activity.

Having sketched the fundamental aspects of this Metaphysics of Perception, I will draw some epistemological and metaphysical consequences that deal with the understanding of what we can genuinely know and what cannot be directly known. At the end of the chapter I will introduce a simple model appropriate to describe how this Metaphysics of Perception works.

In the third section, I will consider some neuroscientific examples describing the functioning of brain areas in elaboration of face perception, important for social cognition, and a description of how the mirror neurons system works in social cognition. I will propose a way of interpreting the neuroscientific data that is coherent with the Metaphysics of Perception I want to propose. Then I will draw from some fundamental aspects of the functioning of central nervous system and from the interpretation of neuroscientific discoveries taken into consideration some epistemological consequences about social cognition.

In conclusion, I will retrace the thesis developed in the first three sections and summarize my metaphysical and epistemological vision about human perception and how it relates to social perception and social knowledge as well as the relative interpretations of some aspects of the brain functioning.

Sketching a Metaphysics of Perception

The Metaphysics I want to propose is a Threefold Metaphysics of Perception. It expresses four related senses of perceiving in philosophical terms and three related subjects that take part in a person's perceptual activity.

First of all, as those who embrace an Indirect Realist account of The Causal Theory of Perception [1] or as it is silently embraced by those who deal with perception at neuroscientific level [2], I think that a causal nexus between the objects perceived as well as the sensory organs and brain areas of a human living body in a conscious human person who perceives is necessary for a proper discussion of perceptual activity; even though, as argued by Grice, this causal link cannot be metaphysically proven:

“The Causal Theory of Perception (CTP) has for some time received comparatively little attention, mainly, I suspect, because it has generally assumed that the theory either asserts or involves as a consequence the proposition that material objects are unobservable, and that the unacceptability of this proposition is sufficient to dispose of the theory. [...] But it may be argued that (in which is perhaps a somewhat special sense

of consequence) it is an unwanted consequence of the CTP that material objects are unobservable: for if we accept the contention of the CTP (1) that perceiving is to be analyzed in causal terms, (2) that knowledge about perceived objects depends on causal inference, and (3) that the required causal inference will be unsound unless suitable general principle of correspondence can be provided, then we shall admit that knowledge about perceived objects is unobtainable. [...] Now an example of causal inference could be an inference from smoke to fire; the acceptability of such an inference involves the possibility of establishing a correlation between occurrences of smoke and of fire; and this is only possible because this is a way of establishing the occurrence of a fire other than by causal inference. But there is supposed to be no way of establishing the existence of particular material objects except by a causal inference from sense-impression; so such inferences cannot be rationally justified. The specification of principles of correspondence is of course an attempt to avert this consequence by rejecting the smoke-fire model (if this model is rejected, recourse may be had to an assimilation of material objects to such entities as electrons, the acceptability of which is regarded as being (roughly) a matter of their utility for the purposes of explanation and prediction; but this assimilation is repugnant for the reason that material objects, after having been first contrasted, as a paradigm case of un invented entities, with the theoretical constructs or *entia rationis* of the scientist, are then treated as being themselves *entia rationis*)." [3]

From a theoretical point of view, a way to base the Causal Theory of Perception metaphysically is an argument at the best explanation [4]: empirically we can argue that, after having examined the everyday life experience and the results of neuroscientific research, it is very improbable that we are like a brain in a vat [5] or something similar.

Once the causal nexus is established, the phenomenal experience of the environment of the human person composed by colored objects, persons, voices and so on is opened. The human person at this level of perceptual activity is a colorful, solid and scented object as are other colorful, solid and scented objects of phenomenal experience.

The third point of perceptual activity of a human person is the intentional, free activity of a conscious human person's attention to one object or another of the environment opened by phenomenal experience. Only at this moment and at this metaphysical level the ideas about perceptual activity of philosophers of perception like Naïve Realists and Intentionalist can be properly understood. As a matter of fact, if we consider ourselves as conscious people within the phenomenal experience, the Naïve Realist condition of an experience being transparent is met.

At the level of conscious person experience, the intentionalists are probably right in saying, that perception is an intentional relation to an intentional content even though this is not the only level of perceptual activity. [6]

As shown by Searle:

“The visual experience is as much directed at objects and states of affairs in the world as any of the paradigm Intentional states that we discussed in the last chapter, such as belief, fear, or desire. And the argument for this conclusion is simply that the visual experience has conditions of satisfaction in exactly the same sense that beliefs and desires have conditions of satisfaction. I can no more separate this visual experience from the fact that it is an experience of a yellow station wagon than I can separate this belief from the fact that it is a belief that it is raining; the “of” of “experience of” is in short the “of” of Intentionality.(In both the cases of belief and visual experience).” [7]

On the other hand, this Metaphysics of Perception, despite the perception of the material environment, is not direct at all. The phenomenal experience opened by the perceptive faculty is completely transparent for the perceiving conscious person as an object among other objects inner the phenomenal experience.

As exposed by Martin the transparency condition can be retained satisfied if a Metaphysics of Perception can satisfy a description of reality like that:

“When I stare at the stragglng lavender bush at the end of my street, I can attend to the variegated colours and shapes of leaves and branches, and over time I may notice how they alter with the seasons. But I can also reflect on what it is like for me now to be staring at the bush, and in doing so I can reflect on particular aspects of the visual situation: for example that at this distance of fifty metres the bush appears more flattened than the rose bush which forms the boundary of my house with the street. When my attention is directed out at the world, the lavender bush and its features occupy centre stage. It is also notable that when my attention is turned inwards instead to my experience, the bush is not replaced by some other entity belonging to the inner realm of the mind in contrast to the dilapidated street in which I live. I attend to what it is like for me to inspect the lavender bush through perceptually attending to the bush itself while at the same time reflecting on what I am doing. So it does not seem to me as if there is any object apart from the bush for me to be attending to or reflecting on while doing this.” [8]

But this description is a description that every conscious person inner the phenomenal experience can do although what is transparent are not the material objects of the material environment in themselves but the material environment through the phenomenal experience. What seems to be a trick, the transparency of experience, taking the three levels of this Metaphysics of Perception seriously, is perfectly legitimate from the experiential point of view of a conscious person. This is because, as we have previously seen, given that the material objects in themselves always remain hidden after all, our perceptual experience is the experience of a conscious person inner the phenomenal experience and nothing more.

Perceiving in the broader sense is what comes from the interaction of the previous three levels of perception. For a person's phenomenal experience to be the perception of an object or situation it is required that the unconscious bodily subject must successfully move inside the realm of the physical related objects or situations causally responsible for the phenomenal experience when the conscious person moves inside the realm of the phenomenal experience; this is the necessary condition.

The sufficient condition for a person's phenomenal experience to be the perception of the objects and situations causally responsible for the phenomenal experience is that, if the unconscious bodily subject moves successfully inside the realm of the physical related objects or situations causally responsible for the phenomenal experience, then the conscious person has to move successfully inside the realm of the phenomenal experience.

Here the distinction between physical realm and experiential realm is not a distinction between something that is physical and something that it is not; but it is the distinction between the material objects that enter in physical relation with our sensory organs and the correspondent phenomenal experience, although in scientific or philosophical terms they can both be considered part of the physical realm.

If what has been said so far is true, then perception activity is not a matching or representative relation. The phenomenal experience is an interface between the conscious person and the material objects of the material environment causally responsible for the phenomenal experience. The conscious person acts on the material environments through the phenomenal experience to which he takes part. Inversely to a change in the relation between human body and material objects or, better, in the material environment included the human body corresponds to a change in phenomenal experience.

The perceptual experience as a unique activity comes from the interaction between the human body, the conscious person and the phenomenal experience ensured by the activity of the central nervous system. The continuous updating of the phenomenal experience by the central nervous system translates changes in material environment, including human body and material objects into changes in phenomenal experience. The changes in the conscious person's will are translated into behavioral processes through the awaited results of the human person's voluntary action in the phenomenal experience. This is how human life becomes practically possible.

Our phenomenal experience is the counterpart of the material environment with which the human body is sensory related. Speaking not only about the human realm but also animals, between an environmental physical situation and its phenomenal counterpart there is not any particular or mandatory relation.

If an animal body moves successfully in its causally related physical environment when a conscious animal moves in the causally corresponding phenomenal experience, then the phenomenal experience is a good counterpart of the physical environment with which the animal body is causally related.

For a poor and strange phenomenal experience of a non human conscious animal, the animal, bodily considered as usual, can have a correspondently acceptable ability to live in its environment.

To understand the importance of previous condition of perception we have to understand that perception is a dynamic activity in every level of analysis of this Metaphysics of Perception, which is a question that often is not considered at all.

As we see with Alva Noe:

“Any account of perception that ignores this dependence of how things look on one's movements (that is, on changes in one's relation to how things are), and in effect ignores the distinctively perspectival aspects of perceptual content, will fail to provide an adequate account of what perception is.” [9]

The gain for a human person who perceives to be a conscious person that has a phenomenal experience through which he bodily moves in the material environments is that, for a human person, there is something to know and something to adapt to a will of

a conscious person, the opened phenomenal experience, and not only a physical stimulation to react to.

Moreover, it is senseless to ask if a human person can do what he does without being conscious and without a phenomenal experience because a phenomenal experience has a proper character and the phenomenal experience is what in perception a conscious person is aware of. The fact that “I take the black keys to my home” cannot be translated in “ My body takes the keys to my home” simply because in the second case there is nothing that is of some phenomenal type or consciously mine, in any sense, anyway.

To summarize when “I take the black keys to my home” I bodily act on an object thanks to my ability to appreciate the particular hardness and color and resistance to my action that make up my phenomenal experience of the keys in an allocentric point of view and that is something I am aware of as a perceiving conscious person.

Taking this Metaphysics of Perception seriously, I will discuss some consequences of this metaphysics about the objects that enters in perceptual activity and the knowledge that we have about them from an epistemological and neuroscientific point of view.

The others are what we really know

Between the objects that enter in our perceptual experience there are others, the people that we encounter in our everyday life. While other objects (except for non human animals) are characterized only by colors, smells, shape and so on of the phenomenal experience that we have of them and, coherently with our Metaphysics of Perception (that they do not materially have), other people are characterized by particular expressions, voices, movements and highly recognizable behaviors.

This means that the phenomenal experience associated to humans is something special compared to perception of ordinary objects and richer than the perception we have of non human animals too.

Moreover, it should be noted that, given this view of Metaphysics of Perception, while the so called ordinary material objects are not made of what is considered proper of human phenomenal experience we have of them, a human person is in his experience constituted by a corporeity, his phenomenal appearance and his awareness as a conscious person. Neither material objects nor human bodies we have said can be known properly because

they are hidden from our human phenomenal experience despite their corporeity. The fact that they have a body is well known in every action, objects movement and causal relation between objects and bodies of our everyday life.

That a human person is in his experience constituted by a corporeity, his phenomenal appearance and his consciousness as a conscious person is true because we know ourselves and we take ourselves as ourselves within the conscious and phenomenal experience. Moreover, and more importantly, thanks to the fact that, to a considerable extent my perceptual faculty and phenomenal experience of others are very similar, one's phenomenal experience of another person is like the phenomenal experience that person has of himself.

We have already noted that the richness of phenomenal experience of people is much higher than that of ordinary objects and animals. It is also comparable to other humans as their phenomenal experience is, at least in its "external features", as rich as the one I have of myself.

That said, we can conclude that while we cannot know properly material objects in ourselves nor non human animals, we can properly know ourselves and the others in our place inner the phenomenal experience in which we take part.

From a Metaphysical point of view we do not know if others perceive as we do and if they are like us and in any respect human. It is possible that others are something extremely different to me and that they are not human at all. But from an empirical point of view there are too many things that make me think that what I take to be human and similar to me in phenomenal experience is really what I take them to be.

A model that can express what has just been said is what I will call the Aquarium model from now on. I am a red fish in an aquarium, I can see other objects and myself in the aquarium only through the water, my phenomenal experience. I do not know that I am in an aquarium and the awareness of being in an aquarium does not really make a difference. What the water lets me see about me is my experience of my visible appearance and my experience inner the aquarium is a part of what I am; the life in the aquarium is the only life I can live. While the other objects are unknowable except for how they are in the aquarium, I am not alone. The others, red fish like me, join me at least in my phenomenal life and I can recognize them to be similar to me.

Neuroscience and the others. Say the same things with other words.

From a neuroscientific point of view it is well known that the doors and the barriers to the central nervous system are the sensory organs. The doors because the nervous signal departs from the retina, the receptive cells of the skin and so on are the first steps in the elaboration of the stimuli of the physical environment. The barriers because all that has the phenomenology of the mental like our phenomenal experience is the product, coherently with the Metaphysics of Perception exposed, of the central nervous system beginning with what departed from the sensorial nervous signals.

In a sense the perceptive phenomenology and in particular the phenomenology of the human persons that we encounter in our everyday life is something that comes from the dynamic activities of some areas or maybe all areas, in a holistic perspective, of the central nervous system.

With Rizzolatti talking about emotions of the others:

“As in the case of action understanding, it is likely that emotions are understood in two ways. The first is through a cognitive elaboration of the sensory information captured during the observation of others’ emotion, the other is through a direct mapping of this sensory information onto the motor structures that determines the experience of the observed emotion in the observer. These two ways of recognizing emotions are profoundly different. With the first, the observer understand the emotion expressed by others, but does not feel it. He deduces it. A certain facial or body pattern mean fear another happiness. There is no emotional involvement. With the other mechanism. The recognition occurs because the observed emotions triggers in the observer the same emotional state. It is direct first person recognition.” [10]

Although for many philosophers cognition plays its part in perceptual activity, I will not be examining this topic. Rather, we will look at the second branch of the above citation, when facial and behavioral recognition directly involve a first person response. This is because of the fact that the human conscious person inner the phenomenal experience is intentionally involved in perceptual activity already explained during the description of the previous Metaphysics of Perception.

Let us first consider the neuroscientific works concerning face recognition. Here it is well known that there are specific neural areas for the elaboration of visual information.

As seen with Rolls:

“Considerable specialization of function is found in the architectonically defined areas of temporal visual cortex (Baylis et al., 1987; Rolls, 2008a) (Figure 4.1). Areas TPO, PGA and IPa are multimodal, with neurons that respond to visual, auditory and/or somatosensory inputs; the inferior temporal gyrus and adjacent areas (TE3, TE2, TE1, Tea, and TEM) are primarily unimodal visual areas; areas in the cortex in the anterior and dorsal part of the superior temporal sulcus (e.g. TPO, IPa, and IPg) have neurons specialized for the analysis of moving visual stimuli; and neurons responsive primarily to faces are found more frequently in areas TPO, Tea, and TEM, where they comprise approximately 20% of the visual neurons responsive to stationary stimuli, in contrast to the other temporal cortical areas where they comprise 4% to 10%. The stimuli which activate other cells in these TE regions include simple visual patterns such as gratings, and combinations of simple stimulus features (Gross et al., 1985; Tanaka et al., 1990). Due to the fact that face-selective neurons, though found in high proportion in some subregions (Tsao et al., 2006), nevertheless are found in lower proportions in many temporal lobe architectonic regions (Baylis et al., 1987), it might be expected that only large lesions, or lesions that interrupt outputs of these visual areas, would produce readily apparent face-processing deficits.” [11]

This description of the discoveries about face elaboration by the central nervous system is a neutral description; neutral because it is probably one of the most basic descriptions free from one or another of the philosophic positions in neuroscience concerning perception and face perception.

Following the metaphysics sketched in the first two sections, the best way to interpret this data is not what seems to be the natural one, that is to say that the brain areas active during the face observation are the areas responsible for the elaboration of this observational data. On the contrary, at least some of these areas are responsible for the production of the public phenomenal experience that we have of others when they enter in one's receptive field and the remaining areas are responsible for our social detection of faces as intelligent conscious persons from an individual perspective.

The phenomenal experience is something to retain public because although two different agents cannot have exactly the same phenomenal experience at the same time, the

things and the phenomenal character of what they see are the same. According to the previous model, they stay in the same aquarium after all.

If this interpretation is correct, the role of mirror neuron system in social cognition regards the human conscious person inner the phenomenal experience.

Rizzolatti says:

“Humans understand disgust, and most likely other emotions, through a direct mapping mechanism. The observation of emotionally laden actions activates those structures that that give a first person experience of the same actions. By means of this activation a bridge is created between ourselves and the others” (...) [12]

Mirror neurons in my non neutral interpretation provide the link between my emotions and others' emotions producing a particular and complex human experience within a certain phenomenal experience of others. In a sense, it is only because our central nervous system is able to produce a phenomenal experience of others and something like a conscious person that others can enter in our phenomenal experience. We are not alone because, although in mine perspective the human phenomenal experience is a production of the central nervous system, inside which material objects take their role. As conscious persons we are conscious persons with other conscious persons within our similar phenomenal experience. In a sense, taking others for what they seem to be, it is very unlikely that we are always wrong.

From an epistemological point of view, the Metaphysics of perception discussed till now and the interpretation of neuroscientific data have some important consequences.

As I have said, if my phenomenal experience is something due to the brain elaboration, and if what is elaborated is the output of the receptive cells of our sensory organs and nothing more, then what we can know are not the objects in themselves but the objects through the phenomenal experience or through the help of some instruments that play the role of artificial sensory organs. The sensory organs translate environmental stimulation in brain signals, measure instruments translate environmental stimulation in numbers to be interpreted, to say in the simplest way possible.

Moreover, what we genuinely know as conscious persons is first of all our phenomenal experience and then all that comes from our phenomenal experience. And because

human persons are what they are exactly as conscious persons inner a phenomenal experience and we have at least a partial phenomenal experience of the others like conscious persons inner our phenomenal experience; while the other objects inner the phenomenal experience are not like they are as material objects, we can get closer to the knowledge of the others as they are in themselves that is as conscious persons inner ours similar phenomenal experience. For first and in other words, what we can really know are the others and nothing more.

Conclusions

In the first section of this papers I have sketched a Metaphysics of perception that puts in the spotlight three related subjects present during perceptual experience; the material body of a human person, the phenomenal subject as a part of the phenomenal experience and the human conscious person who can move towards the phenomenal experience. Their existence is guaranteed and verifiable by everyone in their ordinary experience once the metaphysical perspective is understood.

The theoretical basis of the Metaphysics of Perception proposed is a causal view of perception in line with Indirect realism. On this basis I have shown that perception is composed by a phenomenal experience and a conscious person inner the phenomenal experience who perceive in the intentional sense of perceiving. At this point the ideas of Naïve Realists have been made clear, the request for transparency of the perceptual experience is satisfied by the openness of phenomenal experience at the conscious person level of perception.

After that, I have given necessary and sufficient condition for a human person to have a working perceptual faculty in terms of fitness to an a living environment and I have discussed the relations between the human body as a material object between material objects, the phenomenal experience and the human conscious person.

From a metaphysical point of view I showed the gain to be conscious person inner a phenomenal experience and given an answer to who thinks that the condition to be conscious person in a phenomenal experience is something eliminable.

Sketched a Metaphysics of perception in the first section, in the second section I have argued some metaphysical consequence regarding our knowledge of the others and the fundamental distinction between knowledge of objects and knowledge of persons from a metaphysical and epistemological point of view. What I argue is the priority of the

knowledge of others over any other kind of phenomenal knowledge like that of objects of non human animals.

To explain how the perceptual experience seems to work, I have provided simple model called the Aquarium model.

In the third section, I took some elements to the neuroscientific approach to social perception such as perception of faces and its link with mirror neurons system and showed how it is possible to talk about neuroscientific discoveries neutral to one or another philosophic thought in a way that is coherent with the previous Metaphysics of perception.

Done that, it turned out that the epistemological conclusions of the exposed Metaphysics of Perception regarding the knowledge of others and the epistemological conclusions of the interpretation of neuroscientific data about some fundamental elements of social perception are exactly the same. We are not alone, others are what we can really know.

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Footnotes:

1. For a overview about causal theories of perception see : Grice, H. P. (1961), "The causal theory of perception", *Proceedings of the Aristotelian Society* 121:121-152; Child, William (1992). "Vision and experience: The causal theory and the disjunctive conception", *Philosophical Quarterly*, 42 (168):297-316; Snowdon, P.F., (1979–80), "Perception, Vision and Causation", *Proceedings of the Aristotelian Society*, 81:175–92; Strawson, P.F. (1979) "Perception and its objects". In Alva Noë and Evan Thompson (ed.), *Vision and mind : selected readings in the philosophy of perception*, MIT Press, pp.91-110; Vision, Gerald (1997). *Problems of Vision: Rethinking the Causal Theory of Perception*. New York: Oxford University Press.
2. For the principle of the neuroscientific approach to perception see Kandel, Eric R. et al.(2013). *Principles of Neural Science*. McGraw Hill pag. 314-428
3. Grice, H. P. (1961), "The causal theory of perception", *Proceedings of the Aristotelian Society* 121,pag 121
4. Child, William (1992). "Vision and experience: The causal theory and the disjunctive conception", *Philosophical Quarterly*, 42 (168):297-316.
5. Among the skeptical positions on perception see Putnam Hilary [1999], "Brains in a Vat", in *Reason, Truth, and History*, Cambridge: Cambridge University Press, Chapter 1: 1–21; reprinted as "Brains in a Vat", in DeRose & Warfield 1999: 27–42 (Chapter 2). All page references are to DeRose and Warfield 1999.

6. See Byrne, Alex 2001, "Intentionalism Defended", *Philosophical Review*, 110:199–240; Dretske, Fred (2003). "The intentionality of perception". In Barry Smith (ed.), John Searle. Cambridge: Cambridge University Press, pp.154-168; Speaks, Jeff (2009), " Transparency, intentionalism, and the nature of perceptual content", *Philosophy and Phenomenological Research*, 79:539-573.
7. Searle, John (1983). *Intentionality*. Cambridge University Press, pag.39
8. Martin, M.G.F., (2002), "The Transparency of Experience", *Mind and Language*, 17:376–425.
9. Noe, Alva (2003). "Causation and perception: "The puzzle unraveled", *Analysis*, 63 (2):93-100. Noë, Alva, (2004), *Action and Perception*, Cambridge, MA: MIT Press
10. Giacomo Rizzolatti, Leonardo Fogassi, *Mirror neurons and social cognition*, oxford handbook of evolutionary psychology 191
11. Face Neurons Edmund T. Rolls Oxford Handbook of Face Perception, 2011, Oxford University Press pag.3 2011
12. Giacomo Rizzolatti, Leonardo Fogassi, *Mirror neurons and social cognition*, oxford handbook of evolutionary psychology 193 2007