

The aesthesiological paradigm: a resonant cycle between movement and perception

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Introduction

My talk will be an explanatory presentation of my doctoral thesis in the form of an *opinionated introduction*. This kind of essay is very popular (*mainstream*) in the context of the analytic philosophy because it is very useful in clearly individuating what are the main problems in a certain branch of philosophy. On a side, it allows the presentation of the state of work in a simple and very “reader-friendly” way. On the other side, it gives to the author the possibility of discussing his own opinions putting them in relation with the historical heritage in that branch. Normally the authors conclude their works with some speculations on present trends and possible futures and today surely I will not dispense myself to do this.

My research has the goal of putting into contact some philosophical theories of perception in order to draw a sort of new (old?) paradigm more fruitful than the others for solving some issues.

During my talk, I will outline:

1. What is, precisely, the field of application of the philosophy of perception;
2. Which are the contemporary theories to which I feel more “attuned”;
3. What is the ancient paradigm within which I think the contemporary theories should be integrated;
4. Why this paradigm nowadays can be still useful in the context of the philosophy of perception.

The philosophy of perception

The standard definition for philosophy of perception is: the “philosophical enquiry on the nature of perceptual experience and the status of perceptual data”. One preliminary question is the following: What is a “philosophical enquiry” and why differs from, say, a scientific enquiry?

We will start from a simple (commonsense) example. We are able to live in our environment thanks to the information delivered by our sensory systems. So one possible question is: “How do we - as human beings - perceive?”, “How does our perceptual system work?”

Different sciences (psychology, physiology, biology, neurosciences, etc.) offer different answers to these questions but we are able to gain an overall (general) idea of what is a scientific explanation of the nature of perceptual experience, despite the variety of methodologies and outcomes proposed by each science.

Here I am not referring to the precise definition of “scientific explanation” - which is yet a subject matter for discussion in contemporary philosophy of science¹ - but simply to the naïve idea that a “layman” can have of what is “science”.

Consequently, if the “how-question” about perception pertains to science, philosophy must handle different issues:

1. What do we perceive when we perceive?
2. Can we have confidence in perception?

¹ See for example (Ladyman, 2002, p. 196-228).

The first one is an ontological question; the second one is an epistemological question. In this framework, philosophy has the function of conceptual clarification and it can easily be an “ally” of science working together (surely, with different tasks) to increase our knowledge about senses. That is the mainstream interpretation of the nature of philosophy of perception but, in my view, it has, at least, 2 weaknesses:

1. Philosophy maintains an ancillary role in relation to science (from “*philosophia ancilla theologiae*” to “*philosophia ancilla scientiae*”)
2. Looking back to the history of philosophy (e.g. Gorgias, Plato, etc.), we can easily notice that the sense of the philosophical interrogation about the nature of senses always had a much more deepness than a mere conceptual clarification.

I suppose that this sense is the fact of positing perception *as a problem* and *inquiring into the Problem of Perception*, as Tim Crane wrote in the corresponding entry of the Stanford Encyclopedia of Philosophy². The central problem, in his words, is «how to reconcile some apparently obvious truths about our experience of the world with the possibility of certain kinds of perceptual error». This problem is more extended than the epistemological problem because it focuses the perceptual deceit as a genuine part of our possible experience, that we have to account for as such, and not as the simple evidence for the unreliability of the senses. Philosophy of perception investigates perception as a problem developing all the tangles enveloped in the topic “perception” and sketching out the reasonable questions and their possible answers.

This proposal has much in common with Deleuzian definition of the term “problem” (Deleuze, 1990, p. 54). According to Deleuze, a problem is determined as a problem only by the singular points, which express its conditions of possibility. In geometry a singular point is the point of the curve where the curve loses the properties it had in the other (regular) point: it is the point of *inflection* where something “happens” in the curve.

My hypothesis is that philosophy found the “singular point” of perception and, in doing so, it defines precisely the *problem* of perception. This point lies at the crossing of two simple principles, which common sense accepts as *apparently* undisputed, with another one that seems to characterize genuinely the perceptual experience:

1. The *Phenomenal Principle*: «If there sensibly appears to a subject to be something which possesses a particular sensible quality then there is something of which the subject is aware which does possess that sensible quality», (Robinson, 1994, p. 32);
2. The principle of the *Transparency of the experience*: «when one has an experience of something blue, say, one is not aware of one’s experience having certain intrinsic properties; rather one ‘sees through’ (hence transparent) to the blueness itself» (Crane, 2001, p. 140);
3. The *Phenomenological principle*: this kind of perceptual experience is *mine*, I do experience what I am experiencing.

According to points 1. and 2., the perceptual experience is a way of gaining *access* to the world (a way of being “in touch” with the world): it is a degree of our *openness* to the world (McDowell, 1996, p. 111), but this kind of access is (point 3.) essentially *perspectival*: it is a 1st person experience. These three principles (regular points) can short-circuit in the cases of *illusion* and *hallucination* (singular points).

The structure of arguments of Illusion and Hallucination is common (Smith, 2002):

1. We are directly aware of the physical world (realistically construed),
2. Illusions (or hallucinations) can occur,

² Crane, Tim, “The Problem of Perception”, The Stanford Encyclopedia of Philosophy (Spring 2011 Edition), Edward N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/spr2011/entries/perception-problem/>>

3. «Whenever something perceptually appears to have a feature when it actually does not, we are aware of something that does actually possess that feature»,
4. «Since the appearing physical object does not possess that feature which, according the previous step, we are immediately aware of in the illusory situation, it is not the physical object of which we are aware in such a situation; or, at least, we are not aware of it in the direct, unmediated way in which we are aware of whatever it is that possesses the appearing feature—that direct way in which we formerly took ourselves to be generally aware of normal physical objects»,
5. In no illusory situation we are directly aware of the physical object that looks to us other than it is,
6. We are immediately aware only of sense-data and only at best indirectly aware of normal physical objects, in all perceptual situations, veridical as well as illusory.

Every philosophical theory of perception must face this issue and every theory tried to solve it according to its own general framework. All the terms of contemporary debate in philosophy of perception (direct or indirect realism, representationalism or relationalism, internalism or externalism, etc.) find their origin in this possible short-circuit between the three above-quoted principles and the philosophy of perception itself circumscribes its field of application in the network of issues generated by this first “trigger”.

The sensorimotor account

Since 1980s and during 1990s a new cast of mind in psychology, philosophy, robotics and cognitive science developed itself in strong opposition with cognitivism, computationalism and Cartesian Dualism, which were the dominant paradigms at that time. Authors like George Lakoff, Francisco Varela, Evan Thompson, Andy Clark and Rafael Núñez, (Lakoff & Johnson, 1999), (Varela, Thompson, & Rosch, 1992), (Clark, 1998) called into question the old paradigm according to which the body had to be considered peripheral to understanding the nature of mind and its cognitive processes. They held that the nature of the human mind is largely determined (*shaped*) by the form of the human body and so the cognitive processes have to be explained as *embodied*, that is, other aspects of the agent's body beyond the brain play a significant causal or physically constitutive role in shaping those processes.

Within this general framework, in 2001 two American scholars – the philosopher Alva Noë and the psychologist Kevin O'Regan - published a very important paper, (O'Regan & Noë, A sensorimotor account of vision and visual consciousness, 2001) where they presented for the first time a new explanatory theory for visual experience: the sensorimotor theory.

Before exposing in details this theory, I want to clarify the reason why I endorse it. First, I think it offers a better overview of the problem of perception as I state in the first paragraph. Secondly, it is a better empirical and philosophical explanation of the issues of perception, since it allows explaining the reasons of the multimodality of perception, of the structural differences in the modal variety and of the phenomenal character of perception (*qualitativeness*).

According to Noë and O'Regan seeing is not something that happens in our brains but it is something that *we do*. It is an active exploration of the world made possible by our practical familiarity with the ways our eye movements lead and modulate our visual encounter with the world. In sum, seeing is an activity which requires *skills* (the mastery of a repertoire of explorative abilities). When we see something we are exercising our mastery of the relevant sensorimotor contingencies, we are, in a certain sense, “attuned to” the ways the movements of our eyes affect the character of our sensory input. These contingencies are the correlative ways of change amongst eye movements and visual inputs that show a special “law-like” relation of dependency. Sensation concerns the apparatus-related sensorimotor contingencies, “to have a perception” means, instead, exercising mastery of *object-related* sensorimotor contingencies. In this way, the visual experience turns out to be an active relation between the apparatus and the object seen in the world, put together by the sensorimotor cooperation. Complete visual awareness occurs only when

sensation and perception are integrated into perceiver's current planning, rational thought and speech behavior.

In fact, (O'Regan, *Why Red Doesn't Sound Like a Bell: Understanding the Feel of Consciousness*, 2011, p. 23 ff.), having a visual awareness of an object implies to recognize it, namely recognizing how its parts are kept together. Nevertheless, this kind of recognizing is active and explorative: seeing is constituted (not caused) by the *engagement* in the explorative exercising of that mastery in a sort of process of asking and answering with the environment. The sense of *wholeness* and *temporal continuity* of visual awareness are guaranteed, respectively, by the practical knowledge (discovered during the process) that different aspects of the object are *immediately available* for the exploration and by the effectively engagement in the process of sensory data capture. This line of reasoning can be generalized to other sensory modalities so that the modal quality of each perception corresponds to the practical understanding of the familiar specific way in which each different movement produces a change in sensory input. Different sensory modalities are simply different style of exploration of the world, (Noë, *Out of Our Heads: Why You Are Not Your Brain, and Other Lessons from the Biology of Consciousness*, 2009, p. 61).

The effective engagement in the process of "attuning" to the changes occurring in the sensory input or caused by the movements of the organism "produces" the feeling of *perceptual presence* of what is perceived. This perceptual presence has four typical features (O'Regan, *Why Red Doesn't Sound Like a Bell: Understanding the Feel of Consciousness*, 2011, p. 31-32):

1. Richness: the real world perceived is richer in details than a world merely imagined or remembered;
2. Bodiliness: each time the body is moved somewhere and in any direction, an immediate change in the perceptual input occurs;
3. Partial Insubordinateness: the sensory input is not totally controlled by my own body;
4. Grabbiness: the fact that sensory stimulation can grab my attention away from what I was previously doing.

Sensorimotor contingencies pertain properly to the second and the third feature, but only the combination of all four features guarantees the typical and qualitative feature of the perceptual presence.

According the sensorimotor account, what explains the possibility of an illusion (or hallucination) is the simple fact that the very same sensorimotor skills engaged in perceptual contact with the world could get *triggered* by the wrong thing or by a wrong aspect of a thing or by nothing at all, (Noë, *Varieties of Presence*, 2012, p. 67). This fact explains also that a perceptual contact with the world is a *successful* exercising of the sensorimotor mastery, that is, an *achieved* contact with the real world mediated by sensorimotor skills. The sensorimotor account has also the great advantage of explaining both the peculiar nature of illusion/hallucination, both its phenomenological feature of being "like-a-perception". In fact, it is not a mere coincidence that an illusion or hallucination can be modal exactly as perception is.

The sensorimotor theory is surely a realist theory - a theory which affirms the independent existence of the real world – but it is not sure that it coincides perfectly with standard *naïve realist* theories, which hold the view that direct contact with the world is achieved through perception. In sensorimotor framework, there is a mediation, even if it is accomplished by some peculiar (and practical) skills. The nature of those skills is debated. Those who endorse the sensorimotor account mainly think that there is no place for something like a representation in perceptual account, and they call themselves the enactivists. Others, like (or among which) Noë, name themselves activists so as to underline their refusal to representative mediators (Noë, *Action in Perception*, 2004). Kevin O'Regan has a more "veiled" position, perhaps most interesting, (O'Regan, *Why Red Doesn't Sound Like a Bell: Understanding the Feel of Consciousness*, 2011, p. 62-64).

He conceives the world as a sort of *external memory* where the information the senses convey is *available* for exploration. According to him, that information must be elaborated by the human brain in order to be “readable” for the neurons, but “elaborated” means *encoded*, that is, somehow *represented*. So the concept of “representation” must not be excluded from sensorimotor framework on condition that we do not make the mistake, flagged by Dennett (Dennett, 1991, p. 131), of mixing up the vehicle (the representing) with the content (the represented). In order to explain the perceptual process, it is important the way the content is *used* and not how the vehicle determines (or shapes) the content. The brain does not “generate” the perceptual experience, but the latter is *constituted by* the sensorimotor interaction between the organism and the environment: an interaction which is *modally* differentiated. On this point, another disagreement between Noë and O'Regan emerges: according to the first one, the Action is *necessary* for defining a process *visual*, according to O'Regan, instead, what makes an experience *visual* is the simple fact that information can be obtained by *using* the visual apparatus, (O'Regan, *Why Red Doesn't Sound Like a Bell: Understanding the Feel of Consciousness*, 2011, p. 66-67)

The sensorimotor theory is also capable to account for another crucial problem for philosophy of mind, a problem intrinsically related to the problem of perception: the problem of *phenomenal structure* of our experience.

When we do experience some *pain*, when we see a color, when we listen to some music or smell some flavor, etc., we (as human beings) *feel* something, we have a *raw feel* (Feigl, 1967), so there must be a special *felt quality* for those different sensations. However, *what is like to have a raw feel?* That is the problem of the *qualitativeness* of the experience.

O'Regan defines the raw feel as the *nucleus* of the felt sensation which remains after ruling out the extra components (personal mental associations, semiotic states, usual bodily reactions, physiological states created by that sensation). This nucleus represents the *quality* of ongoing perceptual interaction. It is not localized somewhere in the brain, but it is a particular aspect of the sensorimotor contingency that is happening during the interaction. This aspect specifies the *quality* or *phenomenality* of the perceptual presence and it is characterized by four features we already know:

1. Richness;
2. Bodiliness;
3. Partial Insubordinateness;
4. Grabbiness.

The first feature derives from the effective engagement in the process of “attuning” to the real world which conveys the richness in details of the sensory input (and it represents one of the differences with the illusory/hallucinatory experiences). The second one shows the degree of control we have during perceptual processes, finally, the third and the fourth exhibit the limits of this control (and, conversely, the degree of autonomy the world has in relation to us). Only the second and fourth features are exclusive prerogatives of the perceptual process, but only the combination of all four features defines specifically the *qualitative* nature of the perceptual presence and the phenomenal essence of the raw feel.

On the basis of this account I think we can find some point in common with a philosophical theory not so famous in the history of philosophy but extremely important for the explanation of the qualitative feature of the experience: the aesthesiology proposed by Helmuth Plessner (Plessner, 2003).

The aesthesiology

In order to understand what Plessner means for “aesthesiology”, it is necessary to focus on the problem he tries to solve.

How can the information conveyed to man by different sensory modalities be held together in the image of a world apparently coherent, solid and meaningful like our World-of-Life? Is our experience of it a mere *epiphenomenon* of the underlying physical processes?

Before answering this question we have to highlight the fact that in this case we are talking about a *triadic* relation between the Man, the World and the *meaningful* experience of the World as perceived.

According to Plessner, science cannot explain the *way of appearing* (*Erscheinungsweise*) of the world because it focuses only upon the quantitative aspect of it, leaving apart the qualitative one. Furthermore, he finds that the problem of the *unity* of the senses is intertwined with the problem of their *objectivity*³, but he is deeply convinced that their legitimacy can be obtained only on the level of their *modal* (*Wie*) side, not by means their (alleged) *thingness* (*Was*). The modal side coincides with their operative level, that is, the moment when the senses are *at work*. Focusing on the dynamical aspect of perception, Plessner intends to solve the problem of the *constitution* of the aesthetic object in its qualitateness, trying to explain the active way the aesthetic objects attain their *phenomenal configuration* (*Beschaffenheit*). The problem of the objectivity of the senses becomes a problem pertaining the *material* epistemology no longer the formal epistemology. It is not a problem of validity, it is rather a problem about the way the different sensory modalities are a result of an "agreement" amongst the bodily sensibility and the "mental"⁴ meaningfulness. So, according to Plessner, the objective value of the qualitative aspects of the experienced world is a modal (not substantial) problem, and the qualities themselves are not something you can find hypostatized in a "consciousness". Rather, they are something you must observe in through the work of the senses.

Plessner embraces what he calls the "perspective of the performance" (*Leistungsperspektive*) because he thinks that only this perspective would allow us to ask sensible questions about the "quality" of sensory modalities. «What does a given sensory modality allow a human being [...] to do that humans could not have done (in that way) without it?» (De Monticelli, 2013, p. 41).

The perceptual relation, we said, is a triadic relation whose members are:

1. The perceiving subject, considered as a *person*, that is, a psychophysical unity, a complex of mind⁵ and living body⁶ with a proper *attitude* (*Haltung*) towards action and mobility that Plessner calls, in a broader sense, *sensibility*;
2. The experience, considered as a *meaningful* relation with the world (*meaningfulness* as a reciprocal interaction between sense-grasping and sense-bestowal)
3. The world as an *Umwelt* (von Uexküll, 2010), that is, an expressive and practical *milieu*.

Plessner's answer to the question upon the sense of the senses is simple and coherent with his own conceptual framework: by means of the senses, we, as humans, are able to *live meaningfully* in the world considered as our practical *Umwelt*.

In sum, Plessner's goal is to show that between the sensory multimodality and the different human possibilities of sense-bestowal there are *structural correspondences and accordances* (*Akkordanz*): certain perceptual materials are *necessary* for certain forms of sense-bestowal. However, these correspondences

³ Gorgias abundantly uses this intertwining in his arguments in favor of the thesis that "Nothing exists", (Aristotle, 1936, p. 496-507).

⁴ With the term "mind" I translate the German "*Geist*" that in the academic lexicon of the time when Plessner wrote meant the unity of every possible sense-bestowal, following the Hegelian definition. It was a sort of synonymous of "*culture*".

⁵ Complexion of possible exercising of meaningful contact with the world, see note 4.

⁶ Please, remember famous Husserlian definition of body as a "zero-point of orientation", (Husserl, 1989, p. 135).

show themselves only within the operative dimension of the senses: during the *actions* of seeing, touching, hearing, etc.

The sense of perceptual experience lies, for Plessner, in the *performative* content of the accomplished exercising of the senses. This kind of content is intrinsically *qualitative* because represents a peculiar *mode* of appearing of a world that is already a practical *Umwelt* in the face of a subjectivity, which is yet a complex of mind and body not (artificially) separated. While living (and feeling) the perceptual experience, the *person* (intended as a mind-body complex) discovers itself as an active, experiential subjectivity (namely, as a sentient body), in a retroactive way by means of the accomplished performance of the senses.

Perception is a form of *intuition* (*anschauen*), that is, a way of making present a presentative content in a *determined* way, as something which is *qualitatively* given in itself. The way that content is grasped rests upon the *attitude* (*Haltung*) of the perceiver in so far as there is a structural (material) correspondence between that content and that attitude during the *modal* perceiving. Intuition achieves a contact amongst a perceptual form that has in itself an "impressive" capacity (*Prägnanz*) and a person which has a determined attitude and the achievement of this contact is the realized form of perception. Here the "*how*" (the *visual* way) coincides with the "*what*" (the *visual* thing), because the sensory modality, guaranteeing the accordance, represents the *quality* or *atheoretical sense* of the perception, a sense that is by itself independent from the conceptual sense.

Plessner defines "aesthesiology" the critique of the senses or the science which analyzes the possibilities of a meaningful use of the senses. His problem is the critical-transcendental problem of showing the possibility of thematizing the quality through (and with) which the meaningful experience fulfills itself and the correlate problem of pointing out the ways the experience fulfills itself in a meaningful way.

Towards a unified approach

My hypothesis is that the combination of the sensorimotor account's empirical outcomes with the theoretical framework of the aesthesiological pattern can be a more complete new paradigm for the philosophy of perception.

By individuating law-like correlations (the resonant cycle) between senses and movements during the act of perception, the sensorimotor theory offers a better explanation of the real achievement of the process of perception and of its intrinsic difference with the illusion and hallucination phenomena. It offers, moreover, a more fruitful description of the features needed for the characterization of the qualitateness of the perceptual presence. Nonetheless, it is unsatisfactory for a thorough comprehension of the role played by senses in human life.

Our senses work in that way, they are subject to possible illusions for precise reasons intrinsic to their real exercising, during the experience of perception we actually feel something *like to feel ourselves perceiving*, but what are we really doing when we see, listen, etc.? What is the sense of, say, a vision and why does it intrinsically differ from listening? Why isn't it possible to smell a C major or to touch the sweetness of the honey in a non-metaphorical sense?

Aesthesiology tries to answer directly to these questions by means of the individuation of *a priori* material structures of *accordance* between a sense and its peculiar meaningful content; hence, in my view, it can be the perfect complement of the empirical analysis proposed by sensorimotor theory.

Through this combined approach, I think we can gain a more fruitful access to the effective perceptual experience, defining its limits, its boundaries, its prerogatives and its precise possibilities.

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