CLOTILDE CALABI

Università degli Studi di Milano clotilde.calabi@unimi.it

ELISABETTA SACCHI

Università Vita-Salute San Raffaele sacchi.elisabetta@hsr.it

INTRODUCTION

The papers collected in this volume originate from the international conference "Sense and Sensibility: Empirical and Philosophical Investigations on the Five Senses", held in January 2013 at San Raffaele University and organized by the Research Unit "Person, Social Cognition and Normativity" (Prin 2008), the Research Center in Phenomenology and Sciences of the Person and the Research Center in Experimental and Applied Epistemology of San Raffaele University. Its aim was to promote a thorough exploration of the world of sensory experiences from phenomenological, cognitive, and neurobiological points of view. The questions addressed in the conference and in the papers that constitute the present collection are the following: What is the nature of the senses and how do the different senses operate? In particular, can each sense modality be understood in isolation from any other such modality or, in order to fully understand each sense modality, do we need to understand how that modality relates to the others? Are our perceptual experiences representational states? And, if so, what and how do they represent? Moreover, what is the relation between the representational features of our sense experiences and their phenomenal qualities? Apart from modal experiences, are there also "crossmodal" experiences and, in the positive case, how do they differ from modal ones? How do we account for the multi-modality of sensory experience and how is the information gathered from different sensory modalities bound together in such a way as to account for the fact that our experiences are phenomenally unified?

This issue of the journal *Phenomenology and Mind* opens with a section from Helmuth Plessner's book *Die Einheit der Sinne* (*The Unity of the Senses*), entitled "The objectivity of the senses", in which the author presents his philosophical account of the nature of sensory perception. We think that Plessner's analysis of perceptual experience anticipates in many interesting ways important ideas circulating in current debates on the nature of perceptual experiences. For this reason, we have decided to position this text as an introduction to the present collection. Plessner places the analysis of perceptual experience under the label "aesthesiology". Roberta De Monticelli in her postface stresses both the novelty and the virtues of this approach. She argues that Plessner successfully overcomes the limits of the traditional intellectualist approach to perception, which treats it as a passive reception of information by a disembodied and disengaged mind. Plessner, instead, places the lived body at the very center of his analysis. In

this sense, his aesthesiology can be seen as the forerunner of the embodied and enactive approach to sensory perception, that is so popular nowadays. The other papers are organized in two sections. Section 1, "Perception, Embodiment, Sensibility", collects contributions, both theoretically and experimentally oriented, that in one way or another present a strong connection with the phenomenological tradition and with the embodied and enactive approach. Section 2, "Representationalism, Phenomenal Character and Subjectivity" collects works that are more concerned with the analytic approach in the study of perceptual experience. They focus on some of the main issues currently debated within the philosophy of mind, such as the relation between the qualitative and the representational aspects of perceptual states, the externalist vs internalist individuation of phenomenal character, the relation between perceiving and visualizing and the content of perceptual experience.

Let us present now the contents of the papers in some detail, starting from Ferraris' contribution. He addresses the general question of why perception matters for philosophy. His answer is that perception (conceived not as a representational state, but as a direct contact with the world, not mediated by our conceptual scaffoldings) provides the most powerful argument in favor of realism. For, as he claims, the main feature of perception is what he calls "unamendability", which reveals reality as it is. Zhok focuses, too, on the relation between perception and reality, by comparing and contrasting the views of two giants: Husserl and Gibson. Although they both claim that perception provides access to reality, the ways in which they ground their claims differ radically concerning the role they attribute to "subjective" features in the constitution of the percept. In his analysis Zhok also addresses the question whether Gibson's replacement of subjective features in favor of biological ones is ultimately compatible with his declared naturalism.

Of course, the idea that perception discloses reality raises many other questions. One might ask, for example, whether there is any sense modality that enjoys a privileged rank in that respect. If it is true, as Ferraris' motto goes, that "what exists, ontologically, is essentially what resists", the most plausible answer to that question is that touch enjoys that rank, because it is through touch that the resistance opposed by the world becomes manifest. A paper devoted to the role of tactility is Fugali's in which the author maintains that this sense modality is fundamental both in our apprehension of reality and in the development of our body self-awareness. This complex role is made possible by the functional duplicity which distinguishes touch from other senses: as an exteroceptive sense it is outward-oriented and as

an interoceptive sense it refers to the body and its states. The interoceptive sense grounds the emergence of what phenomenologists call "the lived body".

Both Forlè's paper and the paper by Bower and Gallagher are devoted to the general topic of embodiment. Forlè analyses the role of the body and the role of *kinaestesia* for the constitution of the objects of our own experience. What grounds the claim that there is a strong relationship between the experienced sense of our body states and the way in which we experience the world around us? Forlè makes reference to several empirical findings that highlight the role of proprioception in providing us with a prereflective awareness of our own body and a primary sense of ourselves as embodied subjects. One author who, more than anyone else, has vigorously stressed the role of bodily factors in our perceptual encounters with the world is Noë. Taking Noë's picture as their starting point, Bower and Gallagher claim that in order to properly understand enactive perceptual agency, Noë's theory of perception has to be integrated with an account of the complex motivational dimension that animates body-world interactions. What is needed to that end is in their view the acknowledgement of what they call the "affective dimension" of embodied experience, where bodily affect is conceived as a sui generis form of intentionality having a practical more than a theoretical import. The paper by Gregori Grgič and Claudio de'Sperati deals with the question of whether a discipline such as psychophysics, conceived as the quantitative branch of the study of perception, can possibly capture the conscious, subjective dimension of perceptual experience. By building upon the results of a motion perception experiment they show how psychophysics, despite being objective and quantitatively oriented, can recover certain aspects of conscious perception. They suggest a first step towards a sort of "phenomenologization of psychophysics" analogous to that suggested by Gallese, some years ago, in the field of cognitive neuroscience.

Gualandi's paper addresses the pathological experience of hearing voices, which characterizes the schizophrenic syndrome. The paper provides a theoretical comparison between some contemporary scientific approaches to this syndrome and Straus's aesthesiological approach. In Gualandi's view, the best theoretical framework for understanding the syndrome comes from integrating aesthesiology with anthropology, along the lines indicated by both Gehlen and Plessner.

The last two papers in section 1 deal with two different aspects of our perceptual experience, namely our perception of other people's emotional states and our perception of values. The first topic is dealt with by

Songhorian. In her paper she challenges the traditional view of TToM as the basis of intersubjectivity and claims that the tool for our basic understanding of others is provided by our affective ability to "mirror" other's people emotional states. Such mirroring can be conceived as a sui generis perception, sub-personal and unconscious. Ferrarello's paper is about value perception. The author asks whether evaluating acts possess some kind of intentionality (a sort of practical intentionality) and, in the positive case, she further asks how practical intentionality differs from epistemological intentionality. Practical intentionality involves validity and epistemological intentionality involves truth, but validity and truth are interwoven with each other.

The major unifying theme of the papers in Section 2 is the nature of the qualitative/phenomenological properties (the "what-it-is-likeness") of our experience and their relation with representational/intentional properties. Nowadays many philosophers endorse representationalism according to which the qualitative/phenomenological properties are merely a kind of representational/intentional properties (strong version) or, at least, necessarily co-vary with them (weak version). Both the strong and the weak version of representationalism give place of honor to the notion of (mental) representation: they conceive the mind as a field of homogeneous phenomena and try to account for homogeneity by claiming that the essential feature of all mental items is precisely their representational/ intentional content: for this view, intentionality is the mark of the mental. This variety of representationalism can be called "intentionalism". Although intentionalism looks very appealing in so far as it avoids awkward ontological commitments, such as the one towards intrinsic, non-relational properties of the experience (sense data), the question arises whether it is possible to fully capture the phenomenal character of mental states in terms of their representational/intentional content.

In his paper Voltolini argues that intentionality is *not* the mark of the mental and defends an alternative view. He criticizes what he takes to be the best version of intentionalism, namely the one defended by Crane, according to which intentionality is a necessary, albeit not sufficient, condition of the mental. Voltolini claims that there are states that do not possess the basic features that endow a mental state with intentionality (namely: the possible non-existence of the intentional object of a state and the aspectual shape of such a state). His alternative hypothesis is that the mark of the mental is not intentionality, but rather consciousness. Sacchi's paper, too, deals with representationalism (alias intentionalism). She criticizes its strong version and argues that the attempt to account

for the qualitative/phenomenological dimension of perceptual states only in terms of representational properties ends up with promoting either an inadequate account of phenomenology or an inadequate account of content. She proposes instead to account for the phenomenal aspects of perceptual experience not in terms of representational properties, but in terms of presentational properties, conceived as properties of the experience that belong on its mode-side (and not on the content-side of the state, as intentionalists claim). A defense of intentionalism is provided instead by Uggé in her analysis of the experience of ambiguous figures. In looking at one such figure, we have visual experience of it as an A or, alternatively, as a B. Is the difference between the two experiences a difference in the phenomenal character (as anti-intentionalists claim) or in their representational content? Uggé says the latter. She acknowledges that we cannot analyze our experience of ambiguous figures (and of the Gestalt switch this experience involves) in terms of a one-level account of the non-conceptual content of the experience. In fact, she argues that a sophisticated account of content is more suitable, such as the one put forward by Peacocke, who articulates the non conceptual content in the two levels of scenario content and proto-propositional content. Locatelli focuses, too, on the phenomenal character of perceptual experiences. She discusses the most radical anti-intentionalist view on the nature of phenomenal character, namely Mike Martin's phenomenological disjunctivism. As it is well known, most intentionalists adopt the socalled common-content view. They claim the best explanation of the fact that perceptual experiences and hallucination are indistinguishable (we often mistake a hallucination for a veridical experience) is that perceptual experiences and hallucinations share a common content, the difference being that for veridical experiences the content is true and for hallucinations it is false. Phenomenal disjunctivists, instead, both acknowledge that perceptual experiences and hallucinations are indiscriminable, and, at the same time, claim that they are phenomenally different. But theorists criticize their inconsistency. Locatelli wants to provide an elucidation of the commitments and motivations in the disjunctivist rejection of the common content view, a rejection that, in her view, is often misconstrued. Locatelli shows that, far from being committed to self-contradiction, Mike Martin's version of disjunctivism promotes a radically new conception of the nature of phenomenal character. Martin rejects the idea that the "what-it-is-like" aspect of perceptual experiences is a mysterious "special stuff" added to their representational content. Phenomenal consciousness requires no special stuff of any kind. Rather, to

enjoy phenomenal consciousness (that is, to have conscious experiences) is simply a matter of having a point of view on the world, and having such a point of view, as Locatelli puts it, is simply being sensorily conscious *and* being aware of what one is conscious of. Most importantly, this account of phenomenal consciousness explains in what sense there is both phenomenal difference between perception and hallucination and, at the same time, indiscriminability.

Calabi concentrates on visual experiences and her paper addresses a more specific issue concerning their "what-it-is-like" aspect. When we observe an object that is partially behind another object, given our point of view, we are aware not only of the visible parts of this object, but also, in some sense, of its occluded parts: it is as if they were consciously present, albeit not visually present to the observer. Some theorists claim that we visualize such parts, while she criticizes the argument they provide in favor of visualization.

Perceptual experiences raise a number of metaphysical quandaries, too. Tomasetta and Di Bona address two such quandaries. Tomasetta's question is what kind of entity the subject of a perceptual experience is and, more generally, what kind of entity the subject of any conscious experience is. He moves from the Cartesian idea that a human person is identical to an immaterial soul and recounts a short history of the recovery of the bodily self. After resuming skepticism about Cartesian souls, transcendental egos, and eliminativist accounts of the self, such as Dennett's and Parfit's, he focuses on two recent attempts to restore the bodily self: the constitutionalist account and the animalist account. Constitutionalists claim that persons are not the same as human animals, although they are constitutively connected to them. Tomasetta is unconvinced by their idea that there is a duality (of persons and organisms) without dualism. Instead, he takes the side of animalism, according to which persons are identical to human animals.

Di Bona is interested in the metaphysics of sounds and their audible qualities. According to some theorists, sounds are identical or supervenient upon sound waves and according to another view (the so-called "distal view") they are identical to the vibrations of the sounding object. In the first view pitch and other audible properties are explained in terms of a correlation with the sound waves' properties. Di Bona argues that these properties are interestingly correlated to the properties of the sounding object, too. In particular, she argues that pitch is a cue that allows us to recover important information on the sound-producing source. Whether correctness of the distal view provides further evidence for realism, which

is the concern of some of the philosophers contributing to this collection, is yet another story.

The two last papers in the volume deal with the issue of multimodal sensory integration, in relation to the sense of taste and the sense of touch. In his paper, "The Nature of Sensory Experience: The Case of Taste and Tasting", Barry Smith focuses on taste and challenges the widespread idea that we have immediate and infallible knowledge of the properties of our taste experiences. He argues that there are aspects of our experience of taste that go missing in how things appear to us, and therefore, we should make a distinction, within experience, between appearance and reality. In support of this claim, Smith considers recent works in both psychology and neuroscience that show that what we call "taste" is not simply sensations from the tongue, but rather the multimodal integration of taste proper with olfaction (of the "retronasal" variety), with somatosensory sensations, trigeminal irritation and mechanoreceptors triggered by chewing. The object of perception in tasting is therefore not taste but flavor, which can be considered as a multi-sensory product, that is, the effect of a complex interaction of smell with olfaction. The fact that the contribution of smell to what we call "taste" is not immediately available as part of the subject's awareness explains, according to Smith, why theorists until recent times have considered our experience of tasting rather simple, and until recently it has remained vastly underexplored. If we want to make progress in our understanding of taste experiences, we must get rid of the "dogma" according to which these experiences are simply phenomenological facts and an analysis of their phenomenology ultimately settles questions about their nature. The importance of the issue that Smith addresses goes far beyond flavor perception, in so far as many sense scientists now recognize that multimodal perceptions are the rule, not the exception. The paper coauthored by Vittorio Gallese and Sjoerd Ebish is devoted to an exploration of the sense of touch in relation to the issue of social cognition. The authors provide a new account of multisensory integration in the brain, within the framework of the theory of Embodied Simulation. They study multimodal sensory integration in relation with the crucial role played by both action and motor system and aim at showing how vision, touch and action are inextricably related. According to them, visual perception of the tactile experiences of others systematically leads to the activation of the observer's motor and somatosensory systems. Thus, the theory of Embodied Simulation explains basic and crucial aspects of our intersubjectivity, by showing how our understanding of other's sensations is grounded in our power of re-using our own motor, somatosensory and viscera-motor representations.

C. CALABI Università degli Studi di Milano E. SACCHI Università Vita-Salute San Raffaele

As this introduction has highlighted, the topic of sensibility constitutes a very rich and complex field of inquiry. We hope to have given the reader a flavor of how fascinating this subject is and of how large is the realm of things we can learn about us as sensing creatures by investigating the questions that surround this area of investigation.