Fiorenza Toccafondi (ed)(2012): Fenomenologia e scienza. Punti d´incontro passati e presenti. Firenze: Le Lettere, ISBN-13: 978-8860876355. Pp 284, € 30,80.

Fenomenologia e scienza was recently published by the publishing house *Le Lettere* and edited by Fiorenza Toccafondi, who, in the concise introduction, makes clear the common aim of the four essays included in the volume: in a contemporary scenario which proposes always more requests to establish an agreement between phenomenological observation, philosophical reflection and scientific inquiry, it could be useful to rethink the salient moments in which phenomenological, scientific and philosophical approaches have met. A particularly salient moment is the Gestaltism of the Berlin School, considered as the first real effort to link the methodological supremacy of subjective experience, typical of phenomenology, to naturalistic inquiry. Through a renewed look at the reflections of Gestalt psychology, with a foray into the linguistic strategies of Galileo, the volume contributes to the clarification of questions ever more central to the contemporary debate: those concerning perception, representation and, more generally, mind-body relation.

The first part of the volume includes the broad and articulate contributions of Carmelo Calì and Fiorenza Toccafondi.

Fenomenologia della percezione: modelli, mereologia e sperimentazione is the essay of Calì, which aims to individuate the characters shared by all the conceptual and experimental theories that recognised themselves in the phenomenology of perception and tried to answer the central question: "Why do things appear as they appear?" On this basis, Calì articulates a rich research path to clarify the different possible declinations that the phenomenology of perception can assume. He starts from Metzger and Katz, who present the phenomenology of perception as a definition of method and domain adequate for the science of perception, and moves to Stumpf, who intends the phenomenology of perception as a neutral science of the structural laws of phenomena. Calì also analyses the positions of Brentano, who understands the phenomenology of perception as an independent theory of phenomena, and, of course, of Husserl, to whom phenomenology of perception appears as a meta-theory of the theory's forms and of the sciences of perception. Calì also considers the Italian world and, in particular, the phenomenology of perception as empiric and experimental science, as delineated by the research

of Bozzi and Kanizsa. In spite of their differences, broadly explained by Calì, all these declinations of the phenomenology of perception share a recourse to the phenomenological method in perception research, which aims to explain the cognitive function that makes environmental characteristics phenomenally accessible for the observer. The use of the phenomenological method is justified because it would allow a description of phenomena at face value, which would lead us to discover the independent conditions that regulate the phenomena, that are not understood as casual aggregations of sensitive qualities. In order to enable this discovery, an inquiry method and validity criteria, independent from knowledge that cannot be justified through direct experience, are essential: the phenomena must be researched in their independent conditions of establishment and must not be considered as clues to a surrounding reality, that only physic science can reveal. In recognizing the shared characters of the different variants of the phenomenology of perception, Calì reserves special attention for Köhler's perspective too and, in particular, the theory of the neurological foundation of perception, where the commensurability problem between concepts and explicative procedures belonging to different disciplines comes out as a crucial one. The solution proposed by Köhler is "isomorphism", where, starting from the typical characteristics of the perceptive phenomena, a model that allows the identification of the non-observable entities candidate for the function of correlates can be derived. This deepening in Köhler's vision can be explained in terms of the modernity of his research, that shows "the contribution the phenomenology can give in terms of explicative power in reference to the order and the structure of the perceptive phenomena, providing in that way essential knowledge for the construction of models of phenomenological conditions of specific perceptive performance or for the formulation of criteria concerning the theory form that an interdisciplinary research on perception can usefully assume" (p.126).

The essay of Fiorenza Toccafondi, *Vincoli, rappresentazioni e realismo: un punto di vista fenomenologico*, also analyses the point of view of the Berlin School Gestaltism which is characterized by the research of a constructive joint between phenomenological observation and scientific inquiry, in an effort of "naturalization" of phenomenology, able to avoid a *tout court* reductionism. This choice is pursued in virtue of the wide and current "method indications" that the gestaltist perspective can still give: leaving partially the Husserlian path, Stumpf, inside the relation between phenomenology and physiology, gave to his scholars an idea of phenomenology as a "propaedeutic" science, independent from psychology, as well as from physics and physiology, with a high "heuristic" role and a sort of "predictive" capacity of the laws underlying the phenomenal experience. In this way Stumpf took on Hering's point of view, where the phenomenological observation arises as a point of view more fruitful than external approaches inspired by physics, chemistry or functional and morphologic brain

inquiries. Hering's point of view is exactly the one followed also by Köhler with his hypothesis of isomorphism, analyzed by Calì. The aim of Toccafondi is then to clarify some fundamental questions that arise from the analysis of the gestaltist position and that in turn lead to clarification of some central themes of the contemporary philosophical debate. A basic problem is, for example, that of the status of the perceptive experience contents and of the characterisation of the non-conceptual representational contents, with which *Gestaltpsychologie* largely defines perception. This problem drives the authors not only to ask if and in what sense the term "representationalism" could be used to define the gestaltist position, but also and more generally to discuss what we really mean with this term "representationalism", analysing the semantic changes evident in the concepts "representation" and "representationalism". Toccafondi suggests that if we refer to the classical way of understanding the representation, in an interpretation strictly linked to forms of indirect realism and the sense data theory, it will be very difficult to define Gestalt psychology as a "representationalist" theory, but if we start instead from a more "liberal" sense of representationalism, for example as a representationalism *à la* Dretske, then this term can be used for the gestaltist perspective too. This discussion leads the author to consider also the realism question: in what sense, for instance, can we define Köhler's position as realist? Could Köhler's hypothesis of isomorphism, intended as an inquiry into the possibility of a "structural similarity" between the perceptive world and macroscopic physic entities, be meant not as a form of naive realism, but instead as a form of critical realism, "a form of realism, for sure not naive, able to bring the physics closer to the experience world and to resize then the discrepancy between subjective dimension and natural world" (p.163)?

In the second part of the volume we find the essays of Michele Sinico and Ian Verstegen.

Sinico's essay is titled *Virtus osservativa nel linguaggio scientifico-letterario di Galileo* and considers the relationship between scientific and common language, establishing an interesting parallel between Galileo Galilei and the Gestalt psychologists. The hypothesis of Sinico is that "the exigency to adopt a free observation, to consign at the reasonable experiences an epistemic prior role, led Galileo to prefer a language unbound from the ideal links of tradition, still bound at the date of immediate experience" (p.240). If scientific language has, on one side, the partial advantage of allowing a terms disposition in an ideal structure offering a certain terms disambiguation, on the other side scientific language is unavoidably rigid: often it fits only partially the shades of the empiric data and, then, the risk is that this language can become a real hindrance for phenomenological observation. Common language instead can assume a value in the scientific context because it can set itself free from preformed ideal connections and it can really fit the data of the empiric world. The fact that

common language can also be reconciled with the necessary precision required in science is broadly exemplified in Galilean language, where elegancy and precision are superbly harmonized. Just through the analysis of linguistic choices, Galileo can be considered as a sort of phenomenologist *ante litteram*, again and again bound in respect to the empiric data, in an effort to emancipate himself from a crystallised and tying language, which not only inhibits an alternative conceptualization, but first compromises phenomenological observation.

The essay of Verstegen, titled *Un vero realismo richiede rappresentazioni: l'enattivismo e il paradigma epistemologico gestaltista*, intends to confront two different philosophical perspectives that both refer to phenomenological tradition, but that are competing among themselves: namely, sensorimotor enactivism and Gestalt psychology. The Verstegen essay emphasises the value of gestaltism's strong points, in particular the capacity to give birth to a program that follows a programmatic reduction, but, on the other hand, excludes an ontological reduction and, then, it is a program at the same time reductionist, on one side, and able to preserve the phenomenological description, on the other side; a program that "has developed a way of talk of experience and brain that is unique, difficult to imitate and that is worth following still today" (p.246). The enactivist point of view, with some traditional forms of *naïve* realism and of *new realism*, is instead the real controversial target of the author, for whom the enactivist approach is a sort of upturned physicalism, that seems to despise the experience and the *qualia*, revealing itself at the end as a form of eliminativism. In particular Verstegen criticizes the strong anti-representationalist position shared by enactivism and eliminavistic realism: if we really want to do justice to the phenomena and make them an inventory to submit to experimental inquiry, a minimal definition of mental representations is necessary, in terms of intentional *qualia*, otherwise we risk dropping the consciousness feel and removing the best evidence for developing a cerebral activity theory. The main criticism of the enactivistic position concerns the incapacity to grasp the non-epistemic elements of experience which are real *qualia*, elements instead largely enhanced by the gestaltic perspective.

In conclusion, this is a collection of challenging essays, brought together to show the potentialities and the modernity of the phenomenological perspective. It is also very useful as an introduction to gestaltist phenomenology and some basic concepts of the modern philosophical debate.

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