

## Philosophy of sound, Ch. 1 (English translation)

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## 1. METHODOLOGICAL ISSUES

### *1.1 The value of descriptive analysis*

Most of the descriptions of acoustic phenomena that I can give depend on my perceptual familiarity with them. I can notice the difference between a C and a B (they *sound* different to me) when I am presented with them, even if I am not able to explain the physical basis of this difference, for instance by way of a description referring to the frequency of vibrations. The description and the analysis of what I hear, of what I have the impression of perceiving - independently from what I can learn from non-perceptual information, for instance from a book on physics - belongs to the phenomenological component of philosophical research. A description of sounds which needs to refer to the concept of frequency would not be a phenomenological description, whereas a description of them in terms of their apparent pitch would be. What are the reasons that justify the adoption of a phenomenological approach in the philosophy of auditory perception?

(1) A detailed phenomenology of experience may constitute a preliminary condition of a metaphysical or epistemological approach. For example, in the case of the reduction of a given experiential object to simpler logical entities, or to entities that are epistemically more easily accessed (as in classic phenomenism), a faithful preliminary description of the object in terms of its precise experiential characteristics cannot be dispensed with.

If one thinks that some  $x$  can be reduced to some  $y$ , it is reasonable for one to wish to have the clearest possible idea of the way  $y$  appears in experience, bearing in mind that the reduction to  $y$  might possibly force one to modify one's first impression. Of course, the example of reduction is merely an illustration. Even if one is not considering a metaphysical reduction of  $y$ , one must first draw upon the apparent characteristics of  $y$  that one (normally) has the impression of grasping, based on one's experiences. It is often the case that these characteristics are employed merely with a view to establishing the reference of theoretical terms, and not in order to supply the meaning of these terms, considering that they might (possibly, not necessarily) no longer be needed once the essential properties of  $y$  are targeted (Kripke 1972, 1982: 119-120, 142). For instance, the reference to the term "heat" is fixed by the use of certain phenomenological characteristics, but metaphysically heat is independent from these characteristics.

(2) A similar observation can be made concerning certain psychological explanations. If one believes that there is no  $x$ , and that only  $y$ s really exists in the world, and if one is also under the impression that one is perceiving  $x$ , then it is obviously necessary to explain where this false impression comes from. If, for instance, one has the impression that one is perceiving green objects, but comes to learn that some of these objects are not green but red (say); then one is pushed to examine one's own perceptual system in order to understand what is going wrong. Phenomenology has a heuristic value in the context of the psychology of perception: psychology often discovers new perceptual mechanisms by studying the discrepancies between the (physical) description of the stimulus and the (phenomenological) description of perceptual content. Hence the necessity, at this stage, of commanding a fairly detailed description of such content.

(3) Finally, the phenomenological examination of auditory

experience is of interest in its own right: it presents us with a vast and complex field of experience, as yet insufficiently explored by philosophy (contrasting with the immense volume of analysis that has been devoted to the subject of color).

We use the term “phenomenology” in a broad sense that is neither technical nor dogmatic. We are not claiming to be representative of the official views of the historical phenomenological movement, nor do we claim to express the position of the authors who belong to this tradition (even though, from time to time, we may quote from some of these authors or make reference to their ideas). We merely wish to provide a description of what we hear, a faithful description of the content of auditory perception.

### *1.2 The nature of our analysis*

In order to better understand what characterizes the phenomenological approach, let us consider the following case. John lifts his arm and hits a gong. Mary, who is in the next room, makes the following observation: “I’ve heard the sound of a gong”. Which John answers by saying: “The sound of the gong was the effect of my moving my arm”. Wherefrom Mary correctly infers: “Then I heard the effect of your moving your arm”. On the other hand, and on the basis of the information available to her, Mary cannot claim that she heard the sound of the gong to be the effect of the movement of John’s arm. Mary could have heard the same sound, but not as having been produced in such a way; if she restricts herself to what she hears, the same sound could have occurred by its own, without involving John’s arm movement in any way. The phenomenology of what she heard does not, in this case, include the conditions of the sound’s production. Here we draw inspiration from a distinction that is systematically used by Fred Dretske (1969) between simple perception (that of an object or of an event) and epistemic perception (in this instance, perceiving something as something else).

In fact, the use of the accounts of simple perception (“mary heard the sound of a gong”) does not suffice to enable one to seize or indicate the phenomenological complexity of the perceptual content. From hereon we shall apply two basic principles: first of all, phenomenological analysis *considers experiential content only*; secondly, experiential content is normally *expressed by non-simple accounts* (“to see that...”, to hear... as...”)

### *1.3 A few difficulties*

We are still left facing some difficulties, however, since these two principles are obviously mere general guidelines. Phenomenological distinctions could slip through the net cast upon experience by a completive clause (that is to say, a clause which is introduced by “as”) if one assumes that it covers all experience. The phenomenological difference between seeing with one eye that the cat is on the mat, and seeing it with both eyes, does not necessarily correspond to a difference in the clauses that are used in order to report the experience: in both cases, one sees that *the cat is on the mat*. This phenomenological difference can, of course, be expressed through an adverb that modifies the verb from outside the clause (i.e., “with one eye” modifies the perceptual verb): this is precisely what we did in presenting our example. Nonetheless, the role of the adverb does not consist in describing the phenomenological difference at stake, but in specifying the considerations that make the difference discernible.

Moreover, certain types of content, especially analogical elements of content, are normally undetermined when compared with the concepts that may be used for their description, and this fact poses a problem (Dretske, 1981, Peacocke, 1986). If, in order to express

temporal characteristics, one makes use of a vocabulary which is limited to the names of the hours, then it is impossible to express with adequate precision, by means of the vocabulary, the perceptual content of seeing the short hand of a clock pointing to the position it should normally point to at 5:15 PM. In such a case, one might be able to say that the hand indicates a point between 3 and 4 o'clock PM, but this is no more than an approximation of what one really sees.

It is also often difficult to precisely select the appropriate description of perceptual content. Whenever, for instance, one looks at the picture of a half full cup of coffee, the content of what is seen by means of the picture is that the cup is half full of coffee. But the purely pictorial content of the picture is, in a sense, poorer: the picture only represents part of the coffee (a mere fraction of its surface, as it happens). In fact, the picture does not lie, since it can only represent the coffee which is visible from the point of view from which the picture was taken. So, it seems that the perceptual content *exceeds* the mere pictorial content, and transcends the limits imposed on the pictorial content by the angle of vision. In spite of these difficulties, we will continue to speak of perceptual content as that which can be expressed by non-simple accounts of perception, assuming that there is no ambiguity.

#### *1.4 Thought experiments.*

We have acknowledged the value of phenomenological analysis, but we are not blind to its limitations, which we would like to show. It is clear that in certain cases, phenomenological description does not have the capacity to decide between conflicting hypotheses or theories. For example: the acceptance of a representational theory of perception,

which claims that the direct objects of perception are sense data, and that it is by the means of sense data that perception gives us an indirect access to external objects, is not threatened in any way by the fact that we have the impression of directly perceiving external objects. The representational theory is not supposed to provide an explanation of what we have the impression of seeing, but of the structure of perception (see section 5.2).

Other precautions must be taken with respect to the phenomenological approach. By insisting too much on descriptive analysis, we run the risk of neglecting the distinction between those aspects of the phenomenon considered that are central or essential and those that are secondary or accidental. Since the phenomenon to be described is often considered in the light of a particular context, some of the relations to the context can be external, and not constituents of the phenomenon in question. Thus it is important to underline that the distinction between essential and accidental aspects of a phenomenon is not necessarily accessible from the point of view of descriptive phenomenology. This point holds for whatever interpretation of the distinction in question is found to be exact, be it grounded on the thing itself or on the conceptual level only.

What method(s) can we adopt in order to select the aspects that are constitutive of a phenomenon? In the present text, we will make liberal use of thought experiments in which the application of a concept is tested in an unusual context. Classical phenomenologists themselves were well aware of the necessity of leaving the purely descriptive plane behind when distinguishing between essential and accidental elements of phenomena (see, for example, the insistence on the role of imagination in Husserl, 1913 § 70). Two kinds of thought experiment can be distinguished based on the way one acts upon the context. On the one hand, a concept's context of application can be systematically *impoverished*. I.e., if a sound without a specific pitch cannot be conceived, then pitch must be considered to be an essential aspect of sound. In the same way, if a situation in which a perceptual experience is

causally independent from its object cannot be conceived, then causality should be credited with an essential role in perception. The history of philosophy abounds with examples of thought experiments in which the context of application of a certain concept is voluntarily impoverished. Berkeley tested the notion of experience in the case of an angelic, disembodied intelligence. Condillac examined the concept of sensory modality by imagining a statue which, in its initial condition, is utterly *devoid* of sense-perception, and asked himself what features were missing in order to reproduce such or such an aspect of our perceptual faculty. The thought experiments proposed by Nicod or Strawson that we discuss in chapter 10 are of this same kind.

On the other hand, a concept's context of application can be systematically *enriched*. It is the case for the well known thought experiments of the Twin Earths (Putnam, 1975). One is to imagine a planet, Twin Earth, which is a quasi-perfect replica of our planet, except for a small number of relevant details: for instance, the liquid which makes up its seas and drips from its faucets has the superficial appearance of water, but its molecular structure is unheard of (not H<sub>2</sub>O, say, but XyZ). The value of these thought experiments consists in the possibility of testing our intuitions about the application of the concept of water to the Twin earth liquid. One of the relevant philosophical questions consists in ascertaining whether the correct application of our concept of water is sensitive to the molecular structure of the substance in cause. The thought experiments that involve a certain spatial or qualitative inversion and which we refer to in chapters 2, 7, and 9 belong to this second kind of experiment. The differences between the two kinds of experiment may be metaphorically summarized as follows: the use of impoverished contexts reveals the lower limits of the application of a concept, while the use of enriched contexts gives indication of the upper limits of the application of a concept.



### 1. 5 *Conceptual analysis and theoretical definition*

In this context, language is the guiding thread. Analysis attempts to show up the criteria of application of a term used by a certain linguistic community, for which purpose it retraces the constitutive relationships between different concepts that are explicitly or implicitly used by the speaker when he uses that particular term. In truth, the expression “conceptual analysis” has been used to designate a number of significantly different philosophical activities, such as Austin’s (1962) ordinary language philosophy and Strawson’s (1985) descriptive metaphysics. Ordinary language philosophy is often reproached for neglecting the distinction between essential and accidental traits of a concept (a distinction we have mentioned above). It is true that this form of philosophy appears to restrict itself to collecting the idiosyncratic aspects of a term’s use by a given linguistic community, without exploring the speakers’ intuitions concerning the application of the term in less ordinary contexts such as those that are considered in thought experiments. Descriptive metaphysics, on the other hand, aims for a higher degree of universality, partly by using this kind of experiment.

Generally speaking, the conceptual analysis of a term is an attempt to explain the relationship between its use, on the one hand, and the beliefs and intuitions of the speakers who make use of it on the other (Neander, 1991:§2). In this sense, conceptual analysis does not necessarily result in a *theoretical definition*, which should provide the extension of a term by isolating, wherever possible, the essential properties of the members of the said extension. When a term has no extension, as is the case of “phlogiston”, it is not possible to provide a theoretical definition for it, but this fact does not prevent us from supplying a conceptual analysis, if, for instance, we want to make the internal contradictions of the concept manifest to a speaker who is convinced of the existence of phlogiston. Another interesting divergence between conceptual analysis and theoretical definition concerns the limitations affecting the application of ordinary concepts.

Certain thought experiments can reveal the limitations of the speakers' intuitions concerning the application of a term. These limitations can be revealed either by the fact that different speakers' intuitions do not match, or by the fact that these intuitions are totally lacking. In such a situation, a theoretical definition may result from a stipulation as to the precise extension of the term. For instance, such a stipulation may enable the physicist to consider the possibility of broadening the concept of sound so as to include inaudible mechanical vibrations, such as ultrasounds.