A philosophical view on concepts in psychiatry

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ABSTRACT

This essay first outlines a philosophical theory of concepts and then applies it to two areas of relevance to psychiatrists, especially forensic psychiatrists. In the philosophical theory, the respective roles of verbal and non-verbal definitions are illuminated, and the importance of the phenomenon of division of semantic labour is stressed. It is pointed out that vagueness and ambiguity of a term often result when the term is used for several practical purposes at the same time. Such multi-purpose uses of terms may explain both the current problems associated with the Swedish forensic–psychiatric concept of a severe mental disorder and some of the shortcomings of DSM-IV.

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1. Introduction

What could, and should, philosophy do for psychiatry? A not uncommon answer to this question is that philosophers should scrutinize and analyze central psychiatric concepts, criticize these concepts if they do not fulfil their tasks in communication, and then if possible suggest improvements of them. We agree that these are proper aims for the philosophy of psychiatry. However, the tasks of conceptual scrutiny, analysis, criticism and reform – let us use the term "conceptual investigations" as a general term – can each be carried out in several different ways. This is partly due to the fact that what you take a conceptual investigation to be depends on what you think a concept is and how you think a concept works. Therefore, we have decided to allocate a fair space in the beginning of this paper to a discussion about concepts and to state our own view of what a concept and a conceptual investigation is. After that we will give two examples from psychiatry where conceptual investigations by philosophers might be of value. The first of these concerns the concept of **severe mental disorder**,[1] which plays a central role in Swedish forensic psychiatry and has been subject to ongoing critical discussions for years. The second example concerns the nature of the DSM-IV categories.

2. What is a concept?

Although it is a basic function of language to convey information about states of affairs that hold in the real world, and although an important function of words is to refer to real objects, the functions of language can to a remarkable degree be uncoupled from these states of affairs and objects. In short, there are *false statements* and *descriptions of non-existing objects*. The sentence "It's raining here and now", uttered in plain sunshine does not refer to any fact, but still we clearly understand the sentence. Regrettably, the description "the first Nobel Prize winning female psychiatrist" does not (yet) refer to any existing person, but still we understand it. How can that be? A classical answer consists in introducing *meaning* as another dimension of language function, apart from truth and reference. When we understand a linguistic phrase – so the classical story goes – we grasp its meaning. Because of this grasp of meaning, we know what the world *would* be like *if* the sentence were true or, in the case of a descriptive phrase, what it *would* be like for the phrase to refer. In other words, false sentences and non-referring descriptions describe possible – albeit not real – facts and objects.

Where do concepts enter this story? Well, it depends on whom you ask, but it is common among present-day philosophers to equate concepts with the meanings of words and phrases.[2] When we understand the meaning of the phrase "Nobel Prize winning female psychiatrist", we do this by mentally grasping or apprehending a concept, namely, the concept **Nobel Prize winning female psychiatrist**. Let us also introduce another idea, namely that of the *extension* of a word or phrase. The extension of a predicate such as "woman" is the set of all objects that the predicate is applicable to, in this case the set of all women. The applicability of a term to its extension is traditionally thought to be an indirect affair: the term ("woman") stands for the concept (**woman**), all objects in a certain set (all women) fall under the concept, and therefore the term has this set as its extension. When a philosophical discourse involves extensions, concepts are usually called *intensions*, so the traditional view can be expressed by saying that the extensions of terms are determined by their intensions. Obviously, the extension of "Nobel Prize winning female psychiatrist"

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[1] We use boldface for concepts and quotation marks for linguistic expressions.

[2] Whether this equation is intended to be exact varies from the one philosopher to the other, but that need not bother us here.

is the same as the extension of "unicorn", namely, the empty set. This is just another way of saying that neither phrase refers to any object.

This standard philosophical view of concepts as being the meanings of words and the determinants of their extensions allows for a great number of specific theories about the nature of concepts, or intensions. The most famous of these theories is Platonism, according to which concepts exist in a separate "world of ideas". There are however several alternatives to Platonism that do not entail such metaphysical extravagancies. Like Platonism, they all presuppose that concepts are essentially intersubjective: when several people attach the same meaning to a word, *the same concept* is apprehended by them all. There is another common use of the word "concept" today, in which it stands for a *mental representation* – the mental vehicle *by means* of which you *apprehend* a meaning. This use is common among cognitive scientists. We will stick to the standard philosophical use of "concept" here.

3. Ostensive definitions

How are terms *given* their meaning? Definitions, in the sense of statements expressing necessary and sufficient conditions for the application of a term, undoubtedly play an important role in fixing the meaning of terms where this is needed.[3] It is obvious, though, that definitions in this sense – verbal definitions – cannot be the *only* meaning-givers. Such definitions essentially connect two linguistic expressions with each other – the term to be defined, and the term(s) through which it is defined – and thus presuppose that some terms already have meaning. If we want to understand how meaning is given to language in the first place, we have to look elsewhere.

A traditional suggestion is that the needed complement to verbal definitions is to be found in the so-called "ostensive explanations" of meaning, or "ostensive definitions" as they are also called. According to the same traditional conception, an ostensive explanation of meaning essentially consists in *pointing out* the meaning of a word by uttering the word in the presence of what it means. Certainly, many of us have taught, or tried to teach, our young children the meaning of the word "lamp" by pointing to a lamp and saying "lamp". And most of us have succeeded in doing so, which is actually somewhat mysterious since we cannot point to meanings but only to concrete objects. The individual, concrete lamp that we show our child is just that – an individual, concrete lamp. But the meaning that we want to attach to the word "lamp" is not that very lamp, but something that can be applied to other lamps as well – the general concept **lamp**. How can one point to a general concept? And how does the young child come to understand that this is what we are doing? Even if we point to several different members of the extension of a term (i.e., to several lamps), the child has to abstract and generalize from the examples and as a result of these mental operations attach the correct concept to the word. Regrettably, a finite set of examples always allows for many different generalizations, so how does the child know which one to choose?

Before we try to answer that question, a generalization of the concept of an ostensive definition has to be mentioned. Consider the definition "blue is the color of the sky on a sunny day". How does it do its work? Essentially, what you are telling the child is "If you want to see something blue, then go outside on a sunny day and look at the sky!". The commonality between this meaning-explanation and an ordinary ostensive definition lies in the fact that in both cases, the child has to generalize from an example. What distinguishes them is

that in the former case, but not in the latter, the example is present so that you can point to it. In the generalized case, you instead *describe* a way to find the example.

Several peculiar features of definitions that are actually given in empirical science can be explained by the hypothesis that they are not definitions in the sense of statements of necessary and sufficient conditions, but rather generalized ostensive definitions. Remember that a common way of defining a category is through a description of its *typical* exemplars. As with all generalized ostensive definitions, such a verbal procedure needs an empirical complement: to understand what category is actually meant, one first has to acquaint oneself with the typical cases. Then, while getting more and more familiar with the full range of variation of the species, one gradually comes to understand how to generalize from the typical to the non-typical cases. This generalization task can be more or less easy. Easier if the actual species in nature has distinct borders; more difficult if there are intermediate cases or even continuous transitions between species. Think of the white-headed eagle and a Hieracium (hawk-weed) species in botany as examples. It goes without saying that many psychiatric concepts are of the Hieracium rather than the white-headed eagle kind. But note that species with continuous transitions are as real as the discrete ones, i.e. both exist in nature and are not constructed by us (more about this below).

Most so-called *operational criteria* are also best thought of as stating generalized ostensive explanations of meaning. Moreover, a set of operational criteria can sometimes be used as a specification of meaning although there is no independent definition of the concept. This is a common occurrence when a new species are discovered. An illuminating historical example is given by the discovery of Legionnaire's disease. We can now define the disease in terms of its aetiological agent, but for some time it could only be indirectly specified through its typical symptoms. von Economo's disease (European sleep sickness) is another example. Here we still have to rest content with indirect characterizations of the disease in terms of observable characteristics, since its true nature was never revealed.[4]

Let us now return to the problem how ostensive procedures, be they of the classical or the generalized kind, can ever fix meaning. A considerable part of Ludwig Wittgenstein's late philosophical writings deals with this problem.[5] He suggests that its solution lies in our common human nature. That the child finally comes to use the same concept **lamp** as her parents, or a very similar one, is simply due to the fact that human beings tend to extend the use of terms from one object to another in the same way.[6] There is no logical necessity involved in this but instead a set of strong, partly innate psychological dispositions. But Wittgenstein also broadens our view of ostensive language learning by showing that such learning involves much more than looking, pointing and talking. It also involves more concrete kinds of action which relate the words with the things spoken about, especially giving verbal instructions and acting on such instructions. One might say that we learn the meaning of terms "by doing". More generally, mastering a language is knowing how to use it in one's interactions with the world, meaning that it is to a large part practical knowledge or "know-how", not theoretical knowledge. In most cases of practical knowledge, the knower cannot verbalize the full content of her knowledge, and it should by now be obvious why this is also the case for our knowledge of language.

4. What *is* a concept?

The authors of this essay support a so-called *realistic* standpoint concerning scientific categories and dimensions. This entails that the

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[3] Contrary to a common opinion, the fact that many concepts, e.g. in DSM-III, are introduced via *alternative* sets of sufficient criteria does not invalidate the idea that definitions should state necessary and sufficient conditions for a concept. It could just be that for these concepts, the full defining condition is disjunctive (like it is for **sibling** when defined as **sister or brother**). American Psychiatric Association. 1980. *Diagnostic and Statistical Manual of Mental Disorders,* 3rd Edn. (DSM-III). Washington DC: American Psychiatric Association.

[4] See Malmgren (1984) for a discussion of these two examples.
[5] See especially Wittgenstein (1989) [1953].
[6] For a recent formulation of the same idea, and some support for it from cognitive science, see Csibra and Gergely (2009).