

Explaining an Explanatory Gap

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Discussions of the mind-body problem often refer to an “explanatory gap” (Levine 1983) between some aspect of our conscious mental life and any imaginable objective physical explanation of that aspect. It seems that whatever physical account of a subjective conscious experience we might imagine will leave it completely puzzling why there should be such a connection between the objective physical story and the subjective conscious experience (Nagel 1974).

What is the significance of this gap in understanding? Chalmers (1996) takes the existence of the gap to be evidence against physicalism in favor of some sort of dualism. Nagel (1974) and Jackson (1982, 1986) see it as evidence that objective physical explanations cannot account for the intrinsic quality of experience, although Jackson (1995, 1998, 2004) later changes his mind and comes to deny that there is such a gap. Searle (1984) argues that an analogous gap between the intrinsic intentional content of a thought or experience and any imaginable functionalist account of that content is evidence against a functionalist account of the intrinsic intentionality of thoughts. On the other hand, McGinn (1991) suggests that these explanatory gaps are due to limitations on the powers of human understanding—we are just not smart enough!

A somewhat different explanation of the explanatory gap appeals to a difference, stressed by Dilthey (1883/1989) and also by Nagel (1974), between two kinds of understanding, objective and subjective. Objective understanding is characteristic of the physical sciences—physics, chemistry, biology, geology, and so on. Subjective understanding does not play a role in the physical sciences but does figure in ordinary psychological interpretation and in what Dilthey calls the “*Geisteswissenschaften*”—sciences of the mind broadly understood to include parts of sociology, economics, political theory, anthropology, literary criticism, history, and psychology, as well as ordinary psychological reflection.

The physical sciences approach things objectively, describing what objects are made of, how they work, and what their functions are. These sciences aim to discover laws and other regularities involving things and their parts, in this way achieving an understanding of phenomena “from the outside.” The social and psychological sciences are concerned in part with such objective understanding, but admit also of a different sort of subjective understanding “from the inside,” which Dilthey calls “*Das Verstehen*.” Such phenomena can have content or meaning of a sort that cannot be appreciated within an entirely objective approach. There are aspects of reasons, purposes, feelings, thoughts, and experiences that can only be understood from within, via sympathy or empathy or other translation into one’s own experience.

Suppose for example we discover the following regularity in the behavior of members of a particular social group. Every morning at the same time each member of the group performs a fixed sequence of actions: first standing on tip toe, then turning east while rapidly raising his or her arms, then turning north while looking down, and so on, all this for several minutes. We can certainly discover that there is this objective regularity and be able accurately to predict that these people will repeat it every morning, without having any subjective understanding of what they are doing—without knowing whether it is a moderate form of calisthenics, a religious ritual, practicing a dance, or something else. Subjectively to understand what they are doing, we have to

know what meaning their actions have for them. That is not just to see the actions as instances of an objective regularity.

Similarly, consider an objective account of what is going on when another creature has an experience. Such an account may provide a functional account of the person's brain along with connections between brain events and other happenings in the person's body as well as happenings outside the person's body. Dilthey and later Nagel argue that a completely objective account of a creature's experience may not itself be enough to allow one to understand it in the sense of being able to interpret it or translate it in terms one understands in order to know what it is like for that creature to have that experience. Such an account does not yet provide a translation from that creature's subjective experience into something one can understand from the inside, based on one's own way of thinking and feeling.

Nagel observes that there may be no such translation from certain aspects of the other creature's experiences into possible aspects of one's own experiences. As a result, it may be impossible for a human being to understand what it is like to be a bat.

We are not to think of *das Verstehen* as a method of discovery or a method of confirming or testing hypotheses that have already been formulated. It is rather needed in order to understand certain hypotheses in the first place. So, for example, to understand hypothesis or theory about pain involves understanding what it is like to feel pain. An objective account of pain may be found in biology, neuroscience, and psychology, indicating for example how pain is caused and what things pain causes (e.g., Melzack and Wall, 1983). But it is possible to completely understand this objective story without knowing what it is like to feel pain. There are unfortunate souls who do not feel pain and are therefore not alerted to tissue damage by pain feelings of burning or other injury (Cohen, Kipnis, Kunkle, and Kubsansky 1955). If such a person is strictly protected by anxious parents, receives a college education, and becomes a neuroscientist, could that person come to learn all there is to learn about pain? It seems that such a person might fail to learn the most important thing—what it is like to experience pain—because objective science cannot by itself provide that subjective understanding.

Recent defenders of the need for *das Verstehen* often mention examples using color or other sensory modalities, for example, a person blind from birth who knows everything there is to know from an objective standpoint about color and people's perception of it without knowing what red things look like to a normal observer (Nagel 1974).

With respect to pain and other sensory experiences there is a contrast between an objective understanding and a subjective understanding of what it is like to have that experience, where such a subjective understanding involves seeing how the objective experience as described from the outside translates into an experience one understands from the inside.

In thinking about this, I find it useful to consider an analogous distinction in philosophical semantics between accounts of meaning in terms of objective features of use, for example, and translational accounts of meaning.

For Quine (1960) an adequate account of the meaning of sentences or other expressions used by a certain person or group of people should provide translations of those expressions into one's "home language." In this sort of view, to give the meaning of an expression in another language is to provide a synonymous expression in one's own language. Similarly, if one wants to give the content of somebody else's thought, one has to find a concept or idea of one's own that is equivalent to it.

Imagine that we have a purely objective theory about what makes an expression in one's home language a good translation of an expression used by someone else. For example, perhaps such a theory explains an objective notion of use or function such that, what makes one notion the correct translation of another is that the two notions are used or function in the same way. Such a theory would provide an objective account of correct translation between two languages, objectively described. (This is just an example. The argument is meant to apply to any objective account of meaning.)

To use an objective account of translation to understand an expression as used in another language, at least two further things are required. First, one must be able to identify a certain objectively described language as one's own language, an identification that is itself not fully objective. Second, one must have in one's own language some expression that is used in something like the same way as the expression in the other language. In that case, there will be an objective relation of correct translation from the other language to one's own language which translates the other expression as a certain expression in one's own language. Given that the correct translation of the other expression is an expression in one's own language "E," one can understand that the other expression means E. "Yes, I see, 'Nicht' in German means not."

This is on the assumption that one has an expression "E" in one's own language that correctly translates the expression in the other language. If not, *Das Verstehen* will fail. There will be no way in one's own language correctly to say or think that the other expression means E. There is no way to do it except by expanding the expressive power of one's language so that there is a relevant expression "E" in one's modified language.

Let me apply these thoughts about language to the more general problem of understanding what it is like for another creature to have a certain experience. Suppose we have a completely objective account of translation from the possible experiences of one creature to those of another, an account in terms of objective functional relations, for example. That can be used in order to discover what it is like for another creature to have a certain objectively described experience given the satisfaction of two analogous requirements. First, one must be able to identify one objectively described conceptual system as one's own. Second, one must have in that system something with the same or similar functional properties as the given experience. To understand what it is like for the other creature to have that experience is to understand which possible experience of one's own is its translation.

If the latter condition is not satisfied, there will be no way for one to understand what it is like to have the experience in question. There will be no way to do it unless one is somehow able to expand one's own conceptual and experiential resources so that there will be able to have something corresponding to the other's experience.

Knowledge that P requires being able to represent its being the case that P. Limits on what can be represented are limits on what can be known. If understanding what it is like to have a given experience is an instance of knowing that something is the case, then lacking an ability to represent that P keeps one from knowing that something is the case.

About the case in which nothing in one's own system could serve to translate from another creature's experience to one's own, Nemirov (1980), Lewis (1998), and Jackson (2004) say in effect that one might merely lack an ability, or know-how, without lacking any knowledge that something is the case. For them, understanding what it is like to have a given experience is not an instance of knowing that something is the case, a conclusion that I find bizarre.

I prefer to repeat that a purely objective account of conscious experience cannot always by itself give an understanding of what it is like to have that experience. There will at least sometimes be an explanatory gap. This explanatory gap has no obvious metaphysical implications. It reflects the distinction between two kinds of understanding, objective understanding and *Das Verstehen*.¹

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¹ For additional discussion, see (Harman 1990,1993). I am indebted to comments from Peter Boltuc and Mary Kate McGowan.

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