Title: Three Distinctions about Knowledge and Their Relevance to the Toolbox Approach to Cross-Disciplinary Research

Prospectus: The Toolbox Approach identifies the linguistic and conceptual divides among disciplines as two of the main causes of communication challenges for investigators engaged in cross-disciplinary research (Eigenbrode et al). Communication problems arise not only when speakers fail to realize that they are using their terms in different senses within the context of a given research project, but also when the same terms are used with different goals in mind and with different degrees of precision. According to preliminary results in experimental epistemology, as well as to recent assessments of why there has been a general lack of agreement in traditional epistemology, our epistemic vocabulary doesn’t seem to be exempt from the variations in meanings, purposes, and degrees of precision that affect communication in other fields (Moser; van Woudenberg; Weinberg; Brown; DeRose). A methodological assumption of the proposed chapter is that, regardless of how widespread in ordinary language the mentioned variations are, effective communication can only be achieved when researchers specify how they use their terms in the context of their investigations. Such specifications must include the epistemic terms that are used to define the goals of a research project, as well as the standards that are used to evaluate whether those goals have been met. The chapter discusses the methodological implications of three sets of distinctions about knowledge and suggests ways in which they can be used to solve some of the communication challenges that result from inconsistencies and ambiguities in our epistemic vocabulary.

First, I discuss the distinction between (a) the probabilistic conception of knowledge and (b) the notion of knowing as having cognitive access to states of affairs. According to (a), knowledge is an epistemic position that is sufficiently strong to indicate that one’s beliefs are very probably true, but not strong enough to guarantee (or logically imply) that they are true (Fantl and McGrath). Whereas according to (b), knowledge is a relation between cognitive beings and some portion of reality; organisms at one end of that relation have access to what is actually the case, not just to what is only probably the case (Sayre). Traditionally, epistemologists have assumed that there is a unique concept attached to the term ‘knowledge’, which can be made explicit by describing our practices of knowledge attribution (Jackson; Kaplan). Given such an assumption, conceptions such as (a) and (b) have been regarded as competing definitions. Epistemologists who have recently rejected that assumption suggest that we should focus instead on the roles that ‘knowledge’ is expected to play and account for the theoretical value of the concepts attached to those roles (Weinberg et al; Ahlström). Conception (a), for example, can serve as a guide to action (especially from the first-person perspective) since most of the time we have to make decisions based on probabilities and expectations. It also gives structure to our scientific theories by providing a criterion (i.e., high probability) for the propositions that should be at their core. Conception (b) serves to explain successful behavior and scientific progress, and operates as an ideal for individuals and research communities. Since both conceptions are valuable, there is no need to choose either of them as the “correct” concept of knowledge. However, it is crucial that researches identify which conception is at play in a particular debate and disambiguate the propositions in which ‘knowledge’ is used.

A second distinction that is relevant for dealing with communication challenges is that between the tasks of (c) defining how ‘knowledge’ is to be used in the context of a debate and (d) determining the conditions for something to count as knowledge in the context of that debate. One of the reasons why this distinction is important is that the resources for completing each task
are different. Depending on the background information of one’s interlocutors, specifying what one means by ‘knowledge’ might be achieved by using synonymous terms, using terms that are more basic, or providing a sufficient number of examples to which the term applies. On the other hand, depending on which conception of knowledge is used, determining the conditions for having knowledge might be a matter of describing the requirements for the proper functioning of perceptual and brain mechanisms, or of deciding the right kind and amount of evidence required for accepting a claim as sufficiently probable or supported. Task (c) should be less difficult for it involves a stipulative component; whereas (d) might require collaborative research and a reflective process of finding standards that help advance inquiry.

Finally, I discuss a third distinction between epistemic levels (e.g., S knows that p vs. S knows that S knows that p), which, despite is simplicity, has not always been acknowledged. Failure to make this distinction leads to what has been regarded as one of the “fundamental and pervasive confusions in contemporary epistemology”, namely, the assumption that “what is true of a proposition, belief, or epistemic state of affairs on one level is *ipso facto* true of a correlated proposition, belief, or epistemic state of affairs on another” (Alston 153). This distinction, I shall argue, is especially relevant to task (d) above.

References