

Chapter Eight

Conclusion

In this dissertation, I have woven together philosophical issues with issues in empirical developmental psychology, in hopes of producing a work that may usefully be read by people in both disciplines. My primary goal has been the clarification of three concepts employed centrally in the two disciplines, the concepts of *theory*, *representation*, and *belief*. I have treated these concepts, and the words with which we label them, as practical tools that philosophers and psychologists use in understanding the human (or animal) mind. As tools of this sort, I have argued that they should be evaluated functionally, in terms of their ability to assist us in reaching an informed understanding of the mind, and that we should feel free to modify them in whatever way best helps us achieve this goal. Adopting such an approach, I have proposed novel accounts of the concepts of *theory* and *belief*, and I have shown some of the dangers of an inconsistent approach to the concept of *representation*.

In my approach to the concept of a theory, I had two practical applications in mind. Primarily, I wanted to develop an account of theories that would be useful in clarifying the developmental debate over the extent to which the cognitive development of children should be described as "theoretical." Secondly, I wanted to develop an account of theories that

applied equally to the informal theories of everyday life and the technical theories of advanced science, on the assumption that there is some important continuity between the two types of "theory" that might be revealed by such an account. If the first goal were to be met, it seemed the second would also have to be met, since if it makes any sense at all to debate the extent to which children are theorizers, the debate must depend on an understanding of theories that includes the informal theories of everyday life. The resulting account connected theories tightly with the satisfaction of a "drive to explain": Theories were necessarily to be evaluated in terms of their capacity to generate good explanations on the topic at hand, and a person was said to subscribe to a theory when she was disposed to employ it in explanations, or at least for the resolution of "explanation-seeking curiosity." If such an account of theories is acceptable for the purposes of the debate over the "theory theory" in developmental psychology, then, I argued, we ought to see patterns of affect and arousal indicative of the emergence and resolution of explanation-seeking curiosity in the kinds of puzzling situations that would, according to the theory theory, stimulate development by forcing the generation of new theories. Thus, I suggested, affect and arousal offer a new domain of evidence against which the theory theory should be tested.

My goals in discussing the concept of representation were also multiple. One of those goals can be thought of as primarily developmental and another as primarily philosophical. The philosophical goal was a clarification of the difference between

two types of account of representation -- one I labeled 'contentive,' the other 'indicative' -- a difference that, I argued, has not always been clearly noticed, even by philosophers instrumental in the development of these accounts (such as Stampe and Fodor). The developmental goal was the diagnosis of the failure of a certain research program in developmental psychology, the existence of which, I argued, depended on assumptions that only seemed to be justified given a conflation of these two types of representation. In particular, I argued that the research program in question depended on the assumption that the child's understanding of desire must undergo a transformation at age four analogous to the child's transformation in understanding belief at that age. In lieu of the vain search for such a transformation, I suggested another direction for research on the child's understanding of representation, involving the child's understanding of representational art. A third, overarching goal also motivated my discussion of representation. As is suggested by the title of the chapter on representation, I see the chapter as a case study of how philosophical errors can be harmful to empirical research. Perhaps if enough such cases are elaborated, that will help motivate people in empirical fields to seek out philosophical understanding in developing their more theoretically-loaded experiments and views. Also, it may help strengthen the conviction of some philosophers that there is interesting philosophical work to be done in the interpretation and motivation of empirical research.

My discussion of the concept of belief covers four chapters of the dissertation, and is the most variously motivated. Chapter two was primarily motivated by a concern over what seems to be a common form of philosophical myopia: the tendency of some philosophers to dictate to academics in other fields the use of certain words and concepts without sufficient concern for the interests of researchers in those fields in using those concepts. In particular, I argued that developmental psychology and cognitive ethology would be damaged by insistence on avoiding the ascription of beliefs to infants and non-human animals without language. Especially given the failure of arguments attempting to establish the gross inapplicability of that concept to such creatures, I argued that we ought to consider it a condition of acceptability of a general-purpose account of belief that it apply to infants and at least some non-human animals.

In the fifth, sixth, and seventh chapters of the dissertation, I offered a novel analysis of the concept of belief. I suggested that we think of believing that P as matching, to an appropriate degree and in appropriate respects, the "dispositional stereotype" for believing that P. Since the term 'belief' is already common coin in both philosophy and psychology, it is useful to develop an account of belief that matches fairly well in extension with existing usage: Most of what philosophers and psychologists consider to be cases of believing should turn out to be cases of believing, under the new definition, and most of what they consider not to be cases of believing should turn out not to be. Otherwise, integration of

the account into existing theoretical structures might cause unnecessary difficulties. The account I offered satisfies this practical condition. In addition, the account has, I believe, the pragmatic virtues of clarity and simplicity. However, the primary virtue that I claimed for the account over and above other accounts was its facility in handling "in-between" cases of believing, cases in which the subject is not accurately described either as completely believing that something is the case or as completely failing to believe it. Although some such in-between cases can be described well enough with Bayesian degrees of belief, I reviewed a wide variety of cases for which this was not so and upon which typical philosophical and psychological approaches to belief have foundered. In chapter seven, I explored four such cases in depth, and I showed how a dispositional account of belief allows us fruitfully to describe such cases and move on with our philosophical and psychological work.

Conceptual analysis is one of the most fundamental tasks of philosophy. Yet, since concepts are ours for the remaking, there is always an indefinite variety of possible analyses of any particular concept. Without particular practical goals in mind against which to measure the success of our analyses, philosophical debates can seem to be ungrounded and empty. Connecting philosophical work with the empirical sciences not only gives it a relevance beyond the sometimes insular world of the philosophical journals, but also can provide the very ground that makes philosophical inquiry meaningful.