

associative manipulations of the latter. In short, he held that we somehow perceive causal connections ([1.112], 5). Lotze broke away even more completely from the empiricist position. Whereas Hume had claimed that the impression of the mind's transition (which accounts for the idea of necessary connection) is reducible to the process of transition itself, Lotze asserted unequivocally that ideas of relations depend on a reflexive awareness of the mind's transitions. Moreover, he drew a distinction between the object of the reflexive act (a second-order mental content) and the relationship represented as obtaining between the transcendent objects of the first-order impressions ([1.78], 537-8). Willard points out that these distinctions are unthinkable within the context of the usual empiricist account of cognition. There is no way, for example, of reducing Lotze's relating activities to the mere having of automatic transitional processes, or of reducing his second-order contents to faded and less forceful copies of impressions. On the other hand, these authors continue to interpret mental activities as purely inner psychological happenings, and they do not explicitly call into question the empiricist description of mind as a theatre of representations. Hence, their modifications of the Humean account do not constitute a full fledged revival of the premodern notion of cognition. None the less, once the distinction between activity and content had been re-established, and once the notion of irreducible second-order operations and contents had been elaborated, the stage was set for a comprehensive reappraisal of the modern thesis that the terminus of our knowing is located within the mind's inner space.

LOGICAL INVESTIGATIONS

Husserl was the first to challenge the modern position squarely. During the period from 1894 to 1900, further reflection on the incoherence of psychologism and on the need for a new foundation for logic led him to make a more decisive break with the modern epistemological model for mind. There is no evidence that he engaged during these years in any prolonged study of medieval or later scholastic literature on the topic of cognition, or that he was markedly influenced by a reading of the relevant texts of Aristotle. Yet he was able to achieve what amounts to a reconstruction of the premodern notion of the intentional continuity between mind and nature. His reflections during this period culminated in the publication of his greatest work, *Logical Investigations* (1900-1). This book begins with a series of prolegomena which make a powerful critique of the tenets of psychologism. The rest of the work develops a more positive account of how our cognitive acts have the capacity to yield access to objective truths. Its six investi-

gations are devoted to the following related topics: signs and signification, universals and particulars, parts and wholes, logical grammar, intentionality, evidence and truth.

In the prolegomena, Husserl demonstrates the incoherence of trying to reduce the objectivity of numbers, propositions, and truth itself to subjective states or activities. Like Frege, he calls attention to the self-contradiction involved in every attempt to defend the thesis that truth is reducible to our acceptance of it. One cannot coherently propose a theory that subjectivizes truth and then go on to make objective claims for that theory. To make any statement whatsoever, including a statement in defence of relativism, is to make a claim that something is the case independently of one's making that claim. Like Frege, Husserl also contends that the principles of logic cannot be regarded as provisional generalizations because inductively derived laws could never serve as standards for adjudicating between valid and invalid arguments. It would make no sense to criticize some individual's thinking as illogical or inconsistent on the basis of inductive generalizations about how thinking occurs. The idiosyncratic thinking in question might legitimately be characterized as unusual, but not as invalid. Husserl holds that psychologism also fails to account for the kind of evidence belonging to principles of logic, such as the laws of the syllogism. He criticizes John Stuart Mill's description of logical laws as inductive generalizations on the grounds that the evidence for logical laws is absolutely certain rather than merely probable and provisional ([1.35], 187-96). This sort of argument would be unacceptable to Frege, who insisted that any appeal to evidence blurs the distinction between a proposition's truth and its being recognized as true. According to Frege, a proposition is simply true or false in itself. He argued that genetic accounts of how people come to think of propositions as true are irrelevant to the issue of truth ([1.64], vi; [1.66], 133; [1.86], 32-8). Husserl contends, on the contrary, that there is no reason why an appeal to evidence should entail the reduction of truth to its recognition. When the objective truth of a proposition makes itself manifest to the seeker of truth, it does not thereby become subjective.

The first investigation opens with a discussion of two kinds of signs: indications and expressions. Indications either stand for what they signify (a flag as the sign of a nation) or point to the existence of some absent reality (smoke as a sign of fire). In both cases, association provides the link between sign and signified. As opposed to indications, linguistic expressions introduce a stratum of meaning. Their use requires acts of interpretation on the part of speakers and listeners. A speaker's words ordinarily accomplish three functions: they express meanings, refer to objects, and 'intimate' to a listener the intellectual activity of the speaker. Husserl observes that the 'intimating' function