PREFACE

Since the revolution in philosophic method that began about a century ago, the focus of philosophic attention has been on language as used both in daily conversation and in specialized institutional activities such as science, law, and the arts. But language is an extremely complex and varied means of communication, and the study of it has been increasingly incorporated into such empirical disciplines as linguistics, psycholinguistics, and cognitive psychology. It is becoming less clear what aspects of language remain as proper subjects of philosophical study, what are to be "kicked upstairs" (J. L. Austin's phrase) to the sciences. This work is a study of those logical features of language that remain central to philosophy after completion of kicking up. It conducts this study by describing similarities and differences between signs at differing levels, starting with natural events as primitive signs in the environments of their interpreters, and proceeding to pre-linguistic signaling systems, elementary forms of language, and finally to the forms of specialized discourse used within social institutions. The investigation of comparative features requires isolating basic mental capacities that are present in the most primitive forms of organisms capable of sign interpretation. The problem then becomes one of tracing the emergence from these capacities of such categories as substance, attribute or quality, and quantity that we apply to natural languages. The study of sign levels is thus the construction of a genealogy of logical categories marking the development of natural languages.

Many will find themselves protesting against the generality and abstractness required for comparisons between sign levels. In defense, let me just say at this stage that through much of its history philosophy has been a testing of the limits of generality, an attempt to construct a framework serving to integrate the principal forms of human activity and relate them to the activities of lower forms of nature in a way consistent with the science of the day. Since the collapse of 19th century systems of idealism all but a few philosophers have rejected this conception of their subject. Instead, attention has tended to focus on critiques of the assumptions of Cartesian philosophy, on analyses of various forms of language, and on a variety of programs designed to restate what has been regarded as the special province of philosophy in a form amenable to study by the empirical sciences. Nevertheless, the urge towards generality persists, towards the construction of a system relating human life to that of other species and relating structures of the various institutional specialties to logical forms of natural languages shared by all within a speech community. In the absence of such a system we have only an accumulation

of isolated results. Provided it is approached in a responsible way that maintains the same standards of logical rigor characteristic of the best of the linguistic philosophers, its construction seems an end worth pursuing.

To pursue it, however, requires fighting against powerful trends in recent philosophy. Philosophy occupies a domain somewhere between the natural sciences and literature, and forces driving towards specialization in the 19th and 20th centuries have increasingly tended to push the subject towards one or the other of these two cultural poles. On the one hand, we have those who regard philosophy as the hand-maid of the sciences, a discipline whose principal task is to translate the traditional conceptions of philosophy into empirically identifiable terms that qualify them for use within the sciences. These advocates of what is labeled "scientism" regard the completion of this task as marking the end of philosophy as an identifiable subject. Contrasted to these friends of the natural sciences, we have the litterateurs that constitute the movement labeled "postmodernism," and who also call for the demise of philosophy as it has been traditionally understood. Our language, Richard Rorty tells us, is the product of the contingent processes of evolution, the product of chance mutations no different in kind from those that produced orchids and anthropoids. Philosophy in the past has sought "to achieve universality by the transcendence of contingency," but the pursuit has been shown by Freud, Nietzsche, and Foucault to be a futile activity masked by self-deception. Poetry, novels, and the arts constitute for Rorty a kind of "self-creation by the recognition of contingency." As expressive means for inspiring and instilling ideals, they should replace philosophy with its illusory goals.[1] As for the friends of science, this is also a call for the end of philosophy as a distinctive subject.

In Chapter 3, I consider and reject some reductionist accounts of signs by those advocating the hand-maiden conception of philosophy. Suffice it to say at this stage that to adopt sign terminology is to implicitly assume comparisons to linguistic signs as the paradigm. Any comprehensive study of signs includes within its scope both the language of daily conversation and the specialized languages characteristic of institutional specialization. Use of such languages requires evaluations of what is true or false and right or wrong, and such evaluations fail to accommodate themselves to reductionist projects. The answer to philosophy's litterateur enemies is less obvious, and is provided to the extent that the sign comparisons of Chapters 3-7 are plausible. Rorty's observation that language is the product of the same contingent evolutionary processes that produced wings for insects and fins in fish is of course true. The emergence of language cannot be derived from the laws of physics and chemistry. But there are features for a given level of signs that are necessary for the signs to perform their pragmatic functions of extending reference and increasing specialization of function. It is possible

that organisms capable of using language did not evolve on this planet. Given the fact of its emergence of a language-using capacity, however, we can inquire about logical features that language must have, and it remains philosophy's unique role to engage in such an inquiry.

Central to the comparative study of sign levels in Chapters 3 through 7 is the concept of primitiveness used to isolate the special features introduced at the linguistic level. This in turn becomes the basis for comparisons between uses of language in everyday conversation and uses in specialized and institutionalized contexts. Much as comparative physiology helps us to understand the functions of organs in ourselves by tracing them to forms developing earlier in evolution, and anthropology helps us to understand the complexity of contemporary social institutions by studying their origins in primitive societies, so philosophic understanding arises from comparisons between language and its evolutionary antecedents. "Not a form so grotesque, so savage, nor so beautiful but is an expression of some property in man the observer," writes Emerson of the myriad variety of forms of life.[2] This intuition is confirmed by tracing institutionalized forms of language to their origins in primitive signs. In carrying out this project, philosophy contributes to social integration by using comparisons to primitive signs, for these become a means of showing relationships between what have tended to become isolated social specializations. It thus helps to overcome the cultural divisions producing the warring contemporary "isms" of scientism and postmodernism.

I hope to be able to show also how these comparisons provide a means for untangling some of the knots tied by philosophers in their attempts to describe the workings of language. Some solutions to problems are possible by isolating features of primitive sign interpretation and then extending these features to the linguistic level. The problem of understanding the relations between meaning, reference, and causality represents one application of this method, as we shall see in Chapters 5 and 6. Other problems are due to a failure to recognize unique features introduced at the level of discursive language, and these are considered in the final three chapters. The early pragmatists Charles Peirce, John Dewey, G. H. Mead, and Charles Morris considered language interpretation and use from the vantage point of evolutionary theory, and this work is intended as a continuation of this project. The solutions to problems in the philosophy of language I offer here can be broadly described as "pragmatist," despite the dangers of applying this much abused label.

The first two chapters are devoted primarily to some imposing methodological hurdles to any attempt at sign comparisons. In our everyday interactions with others we occupy an intermediate position between two kinds of extremes: the specialized cultural forms of mathematics, science, law, and the

arts, on the one hand, and learning and primitive signaling within infrahuman species, on the other. We observe and describe from an "external" perspective learning and signaling behavior of organisms reacting to their environments and interacting in social relations. But we are "internal" participants in the cultural forms of our society, reading and learning from the discoveries of the sciences, debating prospective legislation, and appreciating the arts. In our daily lives we also combine both roles of observers and participants. We observe what others do, and on the basis of these observations explain and predict their past and future conduct. At the same time, we also participate with them in forming beliefs, making decisions, appreciating and deprecating what surrounds us, and assuming social responsibilities. As such participants, we are aware of feelings and sensory images, and can judge when a wide variety of rules we normally follow are complied with or violated. The mental terminology we apply to ourselves and others combines aspects of both the perspectives of observer and participant, and reflects our continual switching back and forth between what Pierre Bourdieu calls the "spectator's point of view" and "actor's point of view."[3]

These problems are at the forefront in attempts to formulate the sign comparisons that concern us in this work. Here we are forced to occupy the position of external observer of lower-level sign behavior, while relative to disciplines requiring special education and training we adopt the internal stance of either learner or active contributor to our particular discipline. We are thus forced to adopt a kind of methodological dualism which for natural languages takes the form of switching between external and internal descriptions. Some have found such a combination unacceptable, and attempted to impose a methodological monism on sign interpretation. In recent American philosophy the favored perspective – or at least the one controlling philosophic discussions – has been that of the external observer. We shall be considering this methodology in Chapter 3, where our topic is alternative theories of sign behavior based on developments in behavioral and cognitive psychology. Difficulties with these theories will serve to reinforce our utilization of both external and internal descriptions.

The framework for comparing sign levels should be regarded as a device for ordering a wide variety of conclusions reached by both philosophers and investigators in the special sciences. Chapters 3 and 4 represent a summing up of the principal results of discussions during the past century that relate experimental psychology and ethology to philosophy. Chapters 5 and 6 summarize some results of logical investigations in the past 50 years as viewed from the framework developed in earlier chapters. There are references throughout to sources for these principal results that I hope will serve as a useful guide through the literature.

An early manuscript version of this work was posted online on the web. My thanks to Mason Cash and Ronald Jump for some valuable corrections and comments. It was gratifying to read the comments of an anonymous reader for Kluwer, one who understood well what I was trying to accomplish and diagnosed correctly some weaknesses. This reader's comments have led to some important improvements.

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