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ETHICS AN INTERNATIONAL JOURNAL OF SOCIAL, POLITICAL, AND LEGAL PHILOSOPHY

Volume LXV

OCTOBER 1954

Number 1

DIALECTIC AND POLITICAL THOUGHT AND ACTION¹

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ANALYSIS of the influence and the effects of philosophy on politics presents problems of a theoretic and of a practical order. It is difficult to formulate the bearing of philosophic thought on practical action because the relation of theory to practice (and indeed the possibility or manner of distinguishing the two) is conceived and elaborated differently in different philosophies. When these different conceptions of philosophy and its relation to practice are applied in their different ways, consciously or by inadvertent use of ideas that have traditional philosophic bases and implications, to the construction of practical policy or to the organization of co-operation toward common ends, the utility of making explicit the philosophic tradition imbedded in the practical program is subject to highly divergent judgments. At one extreme, practical politicians as well as politically-conscious philosophers argue that nothing is more important to understanding the tensions and problems of our times than the philosophies which are opposed in group actions and aspirations and the philosophic means that may be used in the resolution of the opposition—that our basic problems arise out of conflicts of ideas. At the other extreme, practical politicians as well as stu-

dents of attitudes, opinions, and tensions maintain that the arguments men use are rationalizations of more basic conflicts, employed as instruments in manipulations of power, and that the oppositions of philosophic doctrines are so numerous, irreducible, and subtle that appeal to philosophic principles or recourse to philosophic definitions can have no effect except to increase the confusion and to enhance the possibility of trickery and deception. Between these two extremes there is a dense series of intermediate positions concerning the practical uses and applications of philosophy.

These complexities are immeasurably increased when questions are raised, not concerning a particular term or a concrete policy, but concerning basic philosophic methods and concerning the principles on which they depend. There is an obvious sense in which philosophic considerations are involved in the discussion of means of advancing "democracy," and it is not easy to avoid some reference to purposes, tinged with philosophic speculation, in justifying a program of "technical assistance" to underdeveloped regions or in considering the means by which to achieve its avowed objectives. A definition of democracy and a plan for technical assistance are affected by the

philosophic methods employed in conceiving them; yet the only available means by which to distinguish and compare these methods are colored by the technicalities and partisanship of philosophic disputes and seem far removed from the concrete problems of practical action. "Dialectic" is the one clear exception to this generalization. Despite the lack of agreement concerning what dialectic is and the long history in which the dialectical method has been put to many uses in many modes adapted to many objectives, the application of dialectic and the understanding of its implications have clear practical relevance to the world political situation.

One large bloc of nations professes to make use of a dialectical method, based on the Marxist dialectic, to enunciate its policies, to elaborate its programs of action, and to negotiate its differences with other nations. Among the opponents of Communistic Marxist dialectic and of dialectical materialism are groups of philosophers and statesmen who make use of dialectical methods or of ideas and ideals conceived in forms that reflect dialectical presuppositions and employ dialectical procedures. Other arguments and statements of policy directed against the evil effects of Communistic dialectic have their bases in philosophies which are nondialectical in principles and methods. An understanding of the nature of "dialectic" is important, whether the present impasse to understanding and co-operation between the Communist and the non-Communist parts of the world is thought to be a fundamental opposition of irreconcilable philosophies or merely a stage of mutual misunderstanding and suspicion which may be removed by discussion and peaceful negotiation. If the first alternative turns out to be in fact the case, it is important that those na-

tions and traditions which have constructed their ways of life and ideals by methods different from those of dialectic find some way of achieving a like agreement and consensus in statement and justification of purposes without sacrificing the freedoms and the differences which are destroyed in the operation of Communistic dialectic; to this end it is essential that they gain some insight into the dialectic which they oppose and also that they understand, and are understood by, their potential allies who conceive and state their differences from Communistic Marxism in dialectical terms. The second alternative, of peaceful resolution of differences by discussion, can be realized only if the dialectic of Communistic Marxism and the varieties of dialectics, including the Communistic Marxist dialectic of Yugoslavia and the dialectic of non-Communist Marxists, are understood in their relations to political programs based on nondialectical philosophies.

The purpose of this essay is to treat, not the nature of dialectic as such or its kinds or its efficacy, but the operation of dialectic in political theory and practical practice. Dialectical and nondialectical speculation and policy-making are sharply contrasted in three respects: (1) in the effort to apply scientific methods or scientific knowledge to social and political problems, since the "scientific" method is thought by dialecticians to be dialectical; (2) in the use of history and the analysis of concrete situations, since history, too, is dialectical and actuality consists of a texture of coexistent contradictions; and (3) in the nature and place of freedom, since freedom is involved in the very nature of man and his social relations conceived dialectically, and history is the dialectical story of the development of freedom. The essay contains

three parts: (1) a brief history of dialectic, designed to focus on these questions by tracing the evolution of various trends of dialectical method in the light of the development of alternative methods; (2) a statement of the nature and varieties of dialectic, designed to bring out differences of methods and to indicate the possibility of common conceptions and common aims; and (3) an examination of the problems of common understanding and common action posed by the difference of dialectical and nondialectical methods of thought today.

Since the purpose of the essay is to examine these differences of method and possibilities of agreement from the standpoint of a nondialectical tradition, the essay is itself involved at each of the three stages of its development in the problems of differences and agreements which it treats. There are many dialectical histories of dialectic in which dialectic evolves dialectically to the more perfect form employed by the last thinker in the history or by the historian himself; the history of dialectic which follows is nondialectical, and it yields distinctions among the philosophic methods that have been called dialectical as well as methods which purport to be philosophical and adequate but nondialectical. According to most dialecticians, dialectic is the method of philosophy and of science; methods mistakenly supposed to be scientific are partial or abstract when they are not fitted into the dialectical frame and method. The distinctions between the varieties of dialectical method and their alternatives which are set down in the second part of this essay are based on the supposition that there are philosophical methods which are not dialectical and that dialectic is not the unique scientific method, if indeed it is scientific in any sense. No effort is made to justify this

nondialectical supposition (apart from the illustrations it receives in nondialectical history), since the problem treated in the third part is precisely the problem of the practical effect of the application of two irreducibly opposed philosophic traditions on political thought and action and the possibility of practical agreement in action based on totally different conceptions of basic terms and on opposed principles.

I. A HISTORY OF DIALECTIC

The original meaning of "dialectic" is discourse or intercourse between two or more speakers expressing two or more positions or opinions. This conception of interpersonal thinking, or thinking based on a clash of opposition or paradox, is not only imbedded in the term (*diá + légein*) but is also reiterated in the early history of the method. Aristotle is said to have attributed the invention of dialectic to Zeno of Elea,² who defended the position of Parmenides by elaborating the contradictions in which the opposed position is involved, while Zenophon attributes to Socrates a definition of dialectical discussion which brings out the relation of "classifying" (*dialégein*) to "discussing" (*dialégesthai*): "'Discussion' is so named, according to him [*sc.* Socrates], from the practice of meeting together for common deliberation, sorting things after their kind; and therefore one should be ready and prepared for this and be zealous for it, for it makes for excellence, leadership, and skill in discussion."³ Even in these early stages of the history of dialectic, diverse and contradictory elements can be distinguished in dialectical accounts of the nature and development of dialectic, such as Plato's, and in nondialectical accounts, such as Aristotle's, for in the former tradition dialectic is scientific, earlier philosophers used

dialectic, and dialectic was developed by Socrates in his cross-questioning elenchus to an effective form which can be extended to all philosophy, while in the latter tradition dialectical proof is not scientific but treats of opinions, Socrates is no dialectician, and no tinge of dialectic is found in the early philosophers.

The term "dialectic" and the verb from which it is derived are used in the Platonic dialogues in a range of meanings which extends from discussion and conversation as it was practiced by Socrates, through refinements which distinguish it from the verbal deceptions of eristic and specify its employment in the clarification of thought and the classification of things, to the status of the science of reality. The terms are used in their broad sense frequently in the dialogues. Socrates characterizes his own activity as conversing, that is, asking questions and speaking.⁴ He intimates that his accusers have confused him with the Sophists, and more than an intimation can be found that the teaching and the method of the older Sophists—Protagoras, Prodicus, Gorgias, and Hippias—contain much that can be adapted to his own dialectical uses; but he objects repeatedly, both humorously and indignantly, to the trickery of the eristic method. He sets dialectic in opposition to the unfair questioning of disputation, in which the purpose is simply to make a point,⁵ for the method of cross-questioning, which has some analogies to the sophistic method, frees the mind of error, contradiction, and the effects of verbal ingenuity and quibbling.⁶ Dialectic avoids the confusions and verbalisms of disputation by its attention to the nature of things: it consists of the processes of dividing and collecting, cutting things into classes where the natural joints are;⁷ it plants living words in fitting souls;⁸ it is the greatest of sciences, the science of free

men and philosophers, who recognize in their classifications that classes are like the letters of the alphabet in that some can be combined and some cannot;⁹ it is the method of discovering by reason the truth about realities.¹⁰ Dialectic, finally, yields the truest kind of knowledge, which has to do with being, reality, and eternal immutability;¹¹ it treats the assumptions of the other sciences not as absolute beginnings but literally as hypotheses and traces them back to a starting point that requires no assumptions;¹² it provides an account of the essence of each thing;¹³ and it is a synoptic art which views things in their interconnections.¹⁴ These characterizations of dialectic are not mutually inconsistent or successive stages of Plato's view of dialectic; they are, rather, dialectical phases of the use of a single method. Dialectic simultaneously defines terms, clarifies minds, and discovers truths about things: it occurs in ordinary discussion; it is the method of any science that treats of the nature of things; it is the supreme science which lays the foundations of arts and sciences in being. Other methods fall in one of three possible relations to it: sophistic is a spurious method, in so far as it departs from dialectic, and an imitation of the refutative art; other forms of dialectic—Eleatic, Heraclitean, and Pythagorean—are easily assimilated to it; materialists are difficult to deal with by means of any argument.¹⁵

According to Aristotle, on the other hand, dialectic is not the unique method of philosophy. Far from being the science of sciences, it treats of probability and opinions rather than of certainty and the nature of things (although it is also the only method by which first principles can be tested and examined indirectly). It is not identical with scientific demonstration, although it may serve to clarify issues and define terms in the absence of

scientific proof. Demonstration, or apodictic argumentation, is contrasted to dialectical and contentious argumentation as well as to misreasoning by the premises on which they depend: demonstration is a syllogism in which the premises are "true and primary" because they "are believed not on the strength of something else but of themselves"; the premises of dialectical argument or syllogism are opinions which are "commonly held"; contentious syllogisms either start from opinions which seem to be generally accepted but are not or seem to follow from common opinions but do not; and misreasoning is a syllogism which uses the premises of special sciences in applications to which they are not appropriate.¹⁶ Scientific *demonstration* is not two-person-thinking or a dialogue. It is inference based so far as possible on causes and the nature of things. Two-person-reasoning, based on the clash of opinion, the balance of opposed theories, and the extension of trial and error, does, however, serve a variety of propaedeutic, didactic, and refutative functions in the larger field of scientific inquiry and method. Aristotle distinguishes four kinds of arguments of the dialogue (*dialégesthai*) variety: didactic arguments (*didaskalikós*), which reason or syllogize from principles appropriate to the subject and not the opinions of the learner; dialectical arguments (*dialektikós*), which syllogize from premises generally accepted to the contradictory of a given thesis and which are useful in examining scientific principles; testing arguments (*peirastikós*), which syllogize from premises accepted by the answerer; and contentious arguments (*eristikós*), which syllogize or appear to syllogize from premises that appear to be, but are not, generally accepted.¹⁷

Dialectic is never philosophy and never investigates the truth as it is

sought or established in the theoretic sciences.

Dialecticians and sophists assume the same guise as the philosopher, for sophistic is philosophy which exists only in semblance, and dialecticians embrace all things in their dialectic, and being is common to all things; but evidently their dialectic embraces these subjects because they are proper to philosophy.—For sophistic and dialectic turn on the same class of things as philosophy, but philosophy differs from dialectic in the nature of the faculty required and from sophistic in respect of the purpose of the philosophic life. Dialectic is merely critical where philosophy claims to know, and sophistic is what appears to be philosophy but is not.¹⁸

The mark of the dialectical philosopher is that he seeks definitions and relates arguments to pairs of contraries like One and the indeterminate dyad. By these criteria philosophers earlier than Plato, like the Pythagoreans, "had no tincture of dialectic"¹⁹ because they did not inquire concerning definitions, while Socrates, who first fixed attention on definitions, came before the development of dialectic because his arguments were based on "essence," whereas dialectic provides means by which to speculate about contraries without knowledge of essence.²⁰

Aristotle's restatement of the nature of dialectic as a kind of argument (based on opinion and probability) in contrast to scientific argument (based on principles which state causes and define natures univocally) leads not only to a different view of the relation of dialectic to the methods of philosophy and science but also to a different enumeration of philosophers who were dialecticians and a different judgment of the relations among the philosophers. Sophistic is a mere semblance of philosophy and tends to treat probabilities which are not genuine and to be cultivated as an art of making the worse argument seem the better.²¹ It therefore does not enter directly into the

schematism of philosophies. Aristotle conceives his own philosophic and scientific method to lie midway between the dialectical method, which is concerned exclusively with form and argument but neglects facts even to the extent of inventing separated forms or Ideas to provide existential ground for its arguments, and the physical method, which is faithful to the facts and to matter at the expense of definition and form. The true scientific and philosophic method would provide means for combining form and matter in its treatment of natures, processes, and powers.²²

Two sets of distinctions appear in these first accounts of dialectic and its relations to philosophy and science, which are to have a long history of variegated use—separately, in opposition, or in combination—in later interpretations of the development of dialectic. When dialectic is conceived as a scientific method, some form of equivalence or parallelism is found between being and knowledge, real processes and scientific thought; argumentation is by “collection” and “division” and depends on “synoptic” or “transcendent” principles to reduce contraries to a “comprehensive” unity. Dialectical arguments are then involved in three kinds of opposition: (1) to sophistic or skeptical arguments which separate words from thoughts and things; (2) to materialistic and mechanistic principles which base arguments in things and in their relation with no consideration of “rational” grounds; and (3) to other forms of dialectical argument which are subject to mutual dialectical reduction and inversion. When scientific proof is conceived as an argument or syllogism whose principles are established by inquiry into the facts of nature, dialectical proof (since it is a syllogism whose premises are based on

opinion and therefore contrasted to scientific proof) may have legitimate or illegitimate uses—legitimate as a method of treating probabilities and opinions preliminary or subsidiary to scientific demonstration, illegitimate as alleged grounds for a metaphysics, ideal or material, constructed with insufficient regard for the evidence of fact or the consequences of inference. Dialectic, in the first set of senses, employs terms which change their meanings in the course of the argument (or are “analogical” or “ambiguous”); contradictions are resolved by preserving what is essential to both of the contradictories (or contraries or opposites or distinctions); and principles serve the function of providing an ontologically higher or a historically later truth or status for that resolution. Dialectic, in the second set of senses, employs “commonplaces” or “topics” to relate meanings attached to words and arguments applied to things as a step toward defining terms univocally and verifying propositions that apply them to the state of things; contradictions are resolved by retaining a true (or probable), and discarding a false, proposition from the pair of contradictories; and principles serve the function of relating species in genera and providing premises for arguments which proceed, in general, by inclusion and exclusion.

These varieties of dialectics continued, in somewhat simplified and therefore more easily recognizable form, during the Hellenistic period. Moreover, the relation of dialectic to political thought and action, which is flexible and complex in the subtleties of the Platonic and Aristotelian philosophies, becomes more schematic. For three hundred years (and more) after the death of Aristotle, the various schools seem to have agreed that philosophy consists of three parts—

physics, logic, and ethics—and indeed that Plato and Aristotle had originated and shared that conviction. Stoics and Academics engaged in a long controversy concerning the proper interpretation of the Platonic dialectic. According to the Stoics, logic is divided into two parts—dialectic and rhetoric. Dialectic in turn has two parts—the study of what is signified in discourse (*sēmainōmenon*) and language or sound (*phōnē*). What is signified includes both presentations or imaginations (*phantasia*) and the significates (*lektōn*) which are constructed from them—propositions, complete and deficient, predicates and similar terms, genera, species, arguments, moods, syllogisms, and fallacies. The study of language includes written language, the parts of speech, syntax, the varieties of diction (including poetic), ambiguities, and style.²³ This dialectic is adapted to the Stoic conviction, in physics, that the world is a living being, rational, animate, and intelligent,²⁴ and to Stoic political doctrines which discovered the brotherhood of man in a universe conceived as a commonwealth of Gods and men, distinguished the city of God from the city of man, and found the best political form in the mixed constitution. In opposition to the speculative extravagances of the Stoics, the Academics used a dialectic which balanced opposed doctrines without commitment in the development of their skepticism and based choice on consideration of likely outcomes in the development of their probabilism. They argued that there is no natural basis for the state or for justice, but the wise man is satisfied to be guided by probability in action. The Epicureans stood outside this debate of dialecticians and were subjected to harsh criticisms by both sides. In “logic” they developed in their “canonic” a method of inquiry and proof based

on sensations, feelings, and “anticipations,” and they rejected “dialectic” as superfluous.²⁵ They held that there is no absolute justice, but laws are simple compacts and agreements. Justice is the same for all in the sense of what is found to be expedient in mutual intercourse, but it varies in application according to circumstances and local conditions.²⁶ The Peripatetics, finally, were treated as variants of Platonic dialecticians, somewhat limited and literal-minded, and Aristotle’s enterprise to base politics on four distinct criteria of what is best in political institutions and actions as discovered from the study of actual constitutions seems to have been transformed by his disciples into historical and technical studies.

Plato applies his dialectic to becoming as well as to being, to opinion as well as to knowledge, and to the indeterminate and infinite as well as to the determinate and one; and he was fond of supplementing the doctrines established by dialectic by “myths” which he called “true histories.” Opposition to, and adaptation of, that dialectic proceeded along two lines suggested by these distinctions: a practical direction in which being is treated as becoming, philosophy is united to history, and the variety of schools are thought to differ only verbally in the expression of a single truth; and a theoretic direction in which the opposition of the schools is used to discredit dogmatism, certainty is reduced to opinion, and science is grounded in skepticism. In that opposition dialectic itself becomes explicitly transcendental and literally dogmatic unless it is corrected by a dialectic based in materialism and history or by a dialectic of suspension of judgment and probability. Both tendencies of opposition to transcendental dialectic are prominent in Roman dialectic, and Neo-

platonism provided an eventual answer or transcendental completion to both. Cicero thought his function was to bring philosophy down from the skies and to give it a place in the habitations and the cities of men. He used the dialectic of the New Academy to reconcile the doctrines of philosophers, and he proposed to return "wisdom" to the close connections with "eloquence," and therefore to its influence on the lives of men, which had been interrupted by the teaching of Socrates. Cicero divided logic or the *ars disserendi* into the art of discovery, which is called *topic*, and the art of judgment or proof, which is called *dialectic*; in his opinion Aristotle contributed to both branches, the Stoics only to the second. He used what he refers to as a "new method" in the political philosophy of the *De re publica*, combining the virtues and avoiding the errors of the Greeks. His method is based, neither on speculation concerning a nonexistent ideal state, nor on the diversities of actual states, but on the history of the Roman Republic which provides empirical tests for political institutions and practices developed not by the genius of one man or of one generation but by the work of many men and of many generations.²⁷ Cicero adopted, finally, the Stoic doctrine that freedom consists not in indeterminacy of choice between alternatives but in necessary choice of the better, based on knowledge and wisdom. Sextus Empiricus used the dialectic of the skeptics not to reconcile them in a single truth, but to exhibit contradictions in all the arts and sciences to the end of destroying dogmatism.

Christian thought in the West was profoundly influenced by Cicero, but the adaptation of his dialectic depended on discovering a dialectical counterbalance to his Academic skepticism. St. Ambrose found that counterbalance in the use, in

the interpretation of Scripture and in the theological controversy, of an analogical method, which he learned in his study of Philo, Origen, and the Greek ecclesiastical writers of his time, while he adapted to Christian ethics in his *De officiis ministrorum* Stoic moral distinctions which he found in Cicero's *De officiis*. St. Augustine was converted to philosophy by Cicero, and his conversion to Christianity was mediated by St. Ambrose's analogical exegesis of the Bible. The influence of Cicero's philosophic method is adjusted by the dialectic of Plotinus to a strenuous opposition to the Academics (Duns Scotus, nine hundred years later, was still arguing against the Academics) and to the refutation of Cicero's definition of the state in terms of justice (on the grounds that no actual or past state would satisfy that definition). Augustine was able to repeat and extend Cicero's account of the development of the New Academy from the dialectic of Plato and to give continuity to Academic concern with eternal truths. Arcesilas and Carneades had concealed the true meaning of the Platonic method from the Stoics. Skepticism and probabilism had been devices by which to prevent the degradation of the truth by reduction to Stoic materialism, while true initiates would recognize that the probability or "verisimilitude" of Carneades is meaningless without a "truth" to which it was "like." The completion of this history is found in Plotinus who reinstated the transcendental truth and even advanced beyond Plato in philosophic scope and power. The Platonic philosophy alone among the traditions of pagan thought was adaptable to Christianity, and Augustine used dialectic to find above experience a rational ground for things, thoughts, and arguments. The three traditional parts of philosophy reflect the distinction of the

persons of the Trinity, and the influence of the Son or the Word or Wisdom—Logos or Sophia—falls in the province of logic, which treats, therefore, the intelligibility of things and the illumination of the mind as well as construction of arguments. The political application of this conception of dialectic involves the employment of history to differentiate the temporal from the eternal: Augustine's *City of God* is a massive demonstration that the glory of Rome was not dependent on fidelity to the pagan gods nor its disasters on the spread of Christianity, joined to a detailed differentiation of terrestrial cities established for the achievement of human ends from the City of God which transcends the evolution of history and time. Augustine distinguished "free judgment" of the will (*liberum arbitrium*) from "freedom" (*libertas*), which is the right use of judgment determined to the Good, and the elaboration of that distinction transformed St. Paul's doctrine that the alternative to slavery to sin is freedom from sin and slavery to justice and God, into a basic philosophic distinction.

Dialectic developed during the Middle Ages in three interrelated strands: as a method of theology; as a method of interpreting Scripture and Canon Law, and thereby treating the concrete and the practical; and as one of the liberal arts of the trivium. As a theological method, dialectic was used to construct hierarchies of being, knowledge, and contemplation in the stages of natural and mystical theology; these hierarchic levels are sometimes opposed to dialectic and sometimes developed by explicit use of dialectical principles such as Nicholas of Cusa's coincidence of contraries. As a method of interpretation, dialectic was the source of rules of exegesis and hermeneutics which entered into the estab-

lishment of the legal method of adjudicating cases as well as the scholastic method of listing opposed solutions to a given question and refuting the solutions contradictory to the approved solution. Theological dialectic employs analogical terms to reconcile differences; legal pleading and scholastic method employ the principle of contradiction to refute and to establish literal propositions whose meanings have been established by methods of interpretation. The complexities of interrelations that grew up between the method of theology and the method of interpretation are reflected in the confusing history of dialectic as a liberal art during the Middle Ages: dialectic is sometimes identified with logic and treated as a rational or verbal art and one of the three parts of philosophy. Dialectic is sometimes the art of thinking by which knowledge of being is acquired, as contrasted to the verbal arts which sometimes include logic. Dialectic, finally, is sometimes a part of logic contrasted to scientific demonstration as argumentation concerning probabilities and opinions. Whether it is thought to be distinct from logic or identical with or a part of logic, dialectic is usually contrasted to rhetoric, which is more diffuse in argument, more concrete in application, and more practical in purpose.

Boethius made portions of the Aristotelian logic available in Latin by his translations, commentaries, and treatises, but he gave no hint of Aristotle's distinction between scientific and dialectical demonstration. In the place of a treatment of scientific principles, he elaborated a dialectical doctrine of "topics" or "commonplaces," which had the effect of reducing "logic" to "dialectic" in the Aristotelian sense. Cassiodorus uses "logic" and "dialectic" as synonymous terms.²⁸ He adds that some call dialectic

a discipline, some an art—a discipline when it is applied in apodictic and true disputations, an art when it treats probability and opinion, and he repeats (on Varro's authority) the Stoic distinction between dialectic and rhetoric, likening them respectively to a fist and an open palm. For Isidor of Seville, logic and dialectic are the same: dialectic is the discipline devised to express the causes of things; it is the rational part of philosophy, which provides means of defining, inquiring, and expressing. Isidor also adds that "logic" (which is derived from "logos" signifying both "word" and "reason") was divided by Plato into dialectic and rhetoric, and he too repeats the Stoic distinction between dialectic and rhetoric.²⁹ John Scotus Eriugena identifies dialectic with the part of philosophy which is concerned with the division of genera from most general to most special and their collection again from most special to most general.³⁰ It is "defined as the science of disputing well," and it is concerned first of all with substance as with its proper principle, from which all the divisions and multiplications of subjects of dispute begin and to which they return by collection and inference. Substance or nature is the principle and the end of dialectic and of the mathematical arts of the quadrivium, and Eriugena contrasts dialectic, which does treat the nature of things, to grammar and rhetoric, which are based on the rules of human speech established by custom rather than by nature, as Aristotle and his followers pointed out, or on special causes and persons far removed from nature in its generality.³¹

Dialectic is involved, in its theological applications, in problems of the relation of authority to reason, of faith to knowledge. Eriugena argued that authority and right reason could not be in contra-

dition and that they flowed from a common source in divine wisdom.³² Powerful opposition to dialectic—supported by arguments, which claimed the authority of St. Paul as interpreted by St. Ambrose and St. Gregory the Great, to prove that salvation is not achieved by dialectic and that faith for which human reason provides proof is without merit—was widespread during the eleventh century, and the suspicion of dialectic as well as the new translations from Aristotle influenced the considerable development of dialectic in the twelfth century. Peter Abailard continued to identify logic and dialectic,³³ and he engaged both in a violent attack on sophists and pseudo-dialecticians and in a desperate personal defense of dialectic as the one means by which truth can be distinguished from error.³⁴ In his *Sic et Non* he assembled contradictory positions on 158 important questions and provided, in the prologue to that work, rules for the resolution of those differences, similar to the rhetorical rules which he uses in the interpretation of Scripture; in his dialectical works he resolves the same differences, not by interpreting statements according to their circumstances and contexts, but by establishing true, and refuting false, arguments.³⁵ The Platonic realism of the school of Chartres depended on a dialectic that was more than an art of disputation, since it uncovered the rationality of things. On the other hand, the translations of the *Prior and Posterior Analytics* and the *Topics* of Aristotle gave explicit content to the Aristotelian conception (to which there had been vague adumbrations earlier) of dialectic as a part of logic and as the art of probable as distinguished from scientific proof. John of Salisbury repeats the statement, which had wide currency in the Middle Ages but is not supported by any text in Plato,

that Plato divided logic into dialectic and rhetoric; but he indicates a preference for the division into demonstrative, probable (which in turn is divided into dialectic and rhetoric), and sophistic.³⁶ He also divides logic into the sciences of discovery and judgment and into the arts of division, definition, and inference. Demonstrative arguments are based on necessary principles, dialectical on probable; but since few things are known certainly, the science of the probable prepares the way to all knowledge. The construction of probabilities out of elementary terms, however, involved philosophers in the problem of the universal (of which John recounts a detailed history for his time), and logicians of all tendencies were constrained to unite in opposition to the excesses of sophistical and verbal logic-chopping (of which John likewise sets forth a vivid account).

The Aristotelian distinction between demonstrative proof and dialectic was not widely used even after Aristotle's logical and scientific works became available in the thirteenth century. Thomas Aquinas treats dialectic as probable reasoning and as "Topics," one of the eight parts of logic. Bonaventura continues to follow the threefold division of philosophy into rational, natural, and moral; he does not discuss "dialectic," but rational philosophy is divided into grammar, "logic," and rhetoric, and comes to its proper consummation in rhetoric. Roger Bacon says that "logic" and "dialectic" are synonymous. He defines logic as the art of distinguishing, or the science of disputing and explaining; and dialectic, from its etymology, as two-person reasoning. Dialectic itself is threefold, according to Bacon: in one sense, it is the whole of logic, the art of arts, the science of sciences, by which alone all sciences are constructed; in a second sense, it is the sci-

ence of disputing and distinguishing concerning probability by means of the dialectical syllogism as expounded in the *Topics*; in a third sense, it is the art of testing (*temptativa* = *peirastiké*) which proceeds either from probabilities or against an opponent.³⁷ According to Scotus, logic is a science neither of things nor of words but of concepts or second intentions; like logic, dialectic assumes two forms, theoretic (*dialectics docens*, which treats intentions which reason may discover in things and may use to establish lines of inference from principles to things, which are demonstrative) and practical (*dialectics utens*, which treats common intentions as they are applied in various sciences and which is testing [*tentativa*] and based on probabilities). The new logic of the *parva logicalia* is indifferent to the distinction between logic and dialectic: sometimes they are identified, sometimes they are distinguished;³⁸ but, in either case, questions of truth of statement or proof center on the examination of propositional connectives or syncategorematic terms—conditional, disjunctive, or conjunctive—and not on the difference between premises based on inquiry into the nature of things and premises based on opinion. The development of logic in the fourteenth century was dialectical in the Stoic, rather than in the original Platonic, sense, borrowing materials for the analysis of "consequences," "insolubilia," and "sophismata" (which have a close connection with the problems which led to the beginnings of modern physics) from Aristotle's *Topics* and *On Sophistical Refutations*. Renaissance reactions against the logic of the late Middle Ages were dialectic reactions against this dialectic of verbal forms: they took several directions—(1) an ontological dialectic in which levels of being correspond to levels of

knowledge, as in Nicholas of Cusa's differentiation of sense, reason, and understanding, by the union at each higher stage of the distinctions and contradictions of the lower stage, or in a revised Platonism merged with Neoplatonism, as in Ficino or Pico della Mirandola, or in an elaboration of mystical theology; (2) a skeptical dialectic by which to combat dogmatism, as in Montaigne, Charon, Sanchez, le Vayer; and (3) a dialectic of discovery, either set in opposition to rhetorical discovery, as by Rudolf Agricola and Ramus, or found in rhetoric and made the source of true principles of philosophy, as in Nizolius.

The development of logic and dialectic during the Middle Ages took place within the framework of a dialectical conception of the organization and history of the universe: dialectic as science of sciences uncovered a structure of being and of thought; dialectic as an art of disputation or refutation was a method of avoiding dogmatism and unsupported commitment; dialectic was also an art of discovery and a calculation of probabilities and opinions. The two traditions of logic which had sought univocal terms, literal propositions, and proper principles of science in antiquity had little influence during the entire period of the first fifteen centuries of the Christian era. The Epicurean Canon was all but forgotten until it was returned to some prominence and vogue by Gassendi in the seventeenth century, and the Aristotelian logic, shorn of the demonstrative syllogism expounded in the *Posterior Analytics*, was reduced to dialectic by Porphyry's *Isagoge* (which was an "introduction" to logic by means of the "predicables" or "five words" which Aristotle had used in dialectic) and by the use of the *Topics* as a source of scientific principles without the *Posterior*

Analytics (or with a dialectical transformation of the *Posterior Analytics*, such as it received in Robert Grosseteste's Commentary in the thirteenth century). In the seventeenth century, on the other hand, dialectic was abandoned in its basic metaphysical and epistemological sense, and for two centuries the foundations of philosophic method were sought in canons of induction, in tracing ideas to the impressions from which they originated, and in isolating and combining clear, distinct, and adequate ideas. Dialectical devices appropriate to the secondary sense of "dialectic" continued to be used within this framework, and their elaboration prepared the way for the emergence of the great dialectical philosophies of the nineteenth century.

Dialectic was criticized by the philosophers who sought a new philosophic method comparable to that of the sciences because it was abstract and unrelated to the nature and order of things, because it depended on the fictitious invention of occult qualities and substantial forms, and, in general, because its syllogistic, deductive arguments did not contribute to, and often impeded, the art of inquiry and discovery. Descartes found it useless in drawing up his *Rules for the Direction of the Mind*,³⁹ except in rule 13 concerning the clear statement of a question, for questions should be abstracted from all superfluous concepts, and in this one should "imitate" the dialecticians in their treatment of the forms of the syllogism.⁴⁰ Bacon, whose division of logic into the arts of inquiry or invention, of judging, of retaining, and of transmitting knowledge is reminiscent of the traditional parts of rhetoric, thought dialectic useless for the advancement of knowledge, the discovery of principles or arts, or the processes of induction.⁴¹ Spinoza, who called his method "reflex-

ive knowledge” and who sought to deduce all ideas from physical things or real entities, proceeding as far as possible according to the series of causes from one real entity to another and avoiding alike the abstractions of universals and the particularities of individual mutable things, aligned himself with Epicurus, Democritus, and Lucretius as contrasted to Plato, Aristotle, and Socrates, because atomism required no occult qualities, intentional species, or substantial forms.⁴² Leibniz used “dialectic” as a synonym for both logic and metaphysics and professed great admiration for the art, but he devoted his effort and ingenuity in logic to creating a new analytic, a new art of discovery, and a new logic of probability, for which he found Aristotle’s *Topics* inadequate. The philosophy of Locke and Newton and Bacon’s organization of the sciences, as they were adapted and developed in France in the eighteenth century, seemed to the Encyclopaedists consistent with the Epicurean philosophy, since Locke’s “history” of ideas exemplified the working of Epicurus’ Canons, while in England Locke’s method of ideas led to Hume’s return to the skepticism of the Academy.

So long as philosophers sought a method of analysis and synthesis by the establishment of criteria for the recognition of simple ideas and rules for their combination, philosophic principles are found in the “adequacy” of ideas, the “causes” and “relations” among ideas, and the sequence of ideas in discovery and proof. No dialectic is needed to relate such ideas and principles to things. Kant’s revolution in philosophy required the distinction of form from content and the use of dialectic in its skeptical version to prevent a metaphysical misuse of that distinction. He distinguished two uses of understanding and reason—formal or

logical and real—and he divided “general logic” into “analytic” and “dialectic.” An analytic of the forms of understanding and of reason is the logic of truth, while dialectic is the use of this theoretical and general doctrine as a practical art or organon, and dialectic becomes, therefore, a logic of semblance (*ars sophistica disputatoria*).

In former times dialectic was studied with great diligence. This art presented false principles in the semblance of truth, and sought, in accordance with these, to maintain things in semblance. Amongst the Greeks the dialecticians were advocates and rhetoricians who could lead the populace wherever they chose, because the populace lets itself be deluded with semblance. Dialectic was therefore at that time the art of semblance. In Logic, also, it was for a long time treated under the name of the *Art of Disputation*, and for so long all logic and philosophy was the cultivation by certain chatter-heads of the art of semblance. But nothing can be more unworthy of a philosopher than the cultivation of such an art. It must therefore be altogether dropped in this aspect of it, and instead of it there must be introduced into Logic a critical examination of this semblance.

We should therefore have two parts of Logic: the *Analytic*, which should treat of the formal criteria of truth, and the *Dialectic*, which should contain the marks and rules by which we should be able to know that something does not agree with the formal criteria of truth, although it seems to agree with them. Dialectic in this aspect would have its use as a *Cathartic* of the understanding.⁴³

The skeptics had constructed their dialectic as a method of attack on the dogmatism of the “dialecticians”; Kant’s revival of the skeptical variety of dialectic, after he had been awakened from his dogmatic slumbers by the skepticism of Hume, operated in reverse fashion to awaken in turn a century of dialecticians.

German dialecticians criticized Kant for separating form and content, and they undertook to relate knowledge and its method once more both to the thinking subject and to the content thought.

Fichte first tried to make formal logic coordinate with transcendental logic and then abandoned the attempt on the ground that it was involved in circular reasoning. Schelling defined dialectic as logic in so far as it is the form and the pure art of philosophy. Hegel likewise labored to avoid the separation of form and content and, agreeing with Schelling that the necessary thoughts of the human spirit correspond absolutely to the essence and forms of the development of things, took as a postulate of method the principle that the creative advance of pure thought in its dialectical self-development by negation and identity is identical with the self-production of existence and that the subjective necessity of thought therefore must also be the criterion of objective truth. Schleiermacher, building on Plato and Schelling, argued for a parallelism, not an identity, between the forms of thinking and knowing and the forms of real existence, and divided dialectic into a transcendental and a technical or formal part. Looking back on this development in 1857, Ueberweg places Schleiermacher in a middle position between the subjectively-formal logic of Kant and Herbart and the metaphysical logic of Hegel which he finds comparable to the middle position of Aristotle's logic.⁴⁴ Of the vast number of varieties of dialectic constructed and examined in Germany during the nineteenth century, three forms were to have particular influence on the continent of Europe during the twentieth century—Hegel's systematic elaboration of a dialectical method and its application in phenomenology, in history, and in the history of philosophy, together with two strenuous reactions to Hegel. One was a reaction with historical roots in the skeptical tradition, designed to save philosophy from dogmatism and the individual

from absorption into undifferentiated wholes like spirit or the universe or history or the masses; it took a variety of individual forms, such as Feuerbach's conviction that the truth is neither in materialism nor idealism, in physiology nor psychology, but in anthropology, which is nothing but the point of view of perception which provides totality and individuality; or Kierkegaard's opposition to rationalism and irrationalism in a dialectic of either-or, of self and other, of equivocation; and Nietzsche's opposition to collectivism and individualism in his transvaluation of values. The second was a reaction by inversion, employing dialectic on matter rather than spirit for scientific rather than utopian purposes, which likewise has its prototype in the ancient history of dialectic. Marx considered his method to be the direct opposite of Hegel's, because for him the ideal is nothing else than the material world reflected by the human mind and translated into forms of thought, while the Hegelian dialectic was a mystification; and Engels, tracing dialectic back to the Greeks and finding the readoption of dialectic the greatest merit of recent German philosophy which culminated in Hegel, went to nature for the test of dialectic, since natural processes in their sequence, movement, birth and death are dialectical, not metaphysical.

Ueberweg could find little influence of German dialectic or logic on English logicians.⁴⁵ This is true enough in logic, and many nineteenth-century British philosophers, like Hamilton, thought of the Scottish Common-sense philosophy as a reaction to skepticism consistent with Kant's critical philosophy. Coleridge developed a dialectic in which he found a use for both Kant and Schelling, and the British idealists of the nineteenth and twentieth centuries acknowl-

edged the influence of Hegel, often protesting, like Ferrier, that they were unable to understand him or, like Bradley, that they could not call themselves Hegelians, partly because they could not say that they had mastered the system, partly because they could not accept what seemed its main principle. That main principle is the identity of the real and the rational, of reality and thought, and in the last pages of *The Principles of Logic* Bradley returns to his basic objection:

Unless thought stands for something that falls beyond mere intelligence, if "thinking" is not used with some strange implication that never was part of the meaning of the word, a lingering scruple still forbids us to believe that reality can ever be purely rational. It may come from a failure in my metaphysics, or from a weakness of the flesh which continues to blind me, but the notion that existence could be the same as understanding strikes me as cold and ghost-like as the dreariest materialism. That the glory of this world in the end is appearance leaves the world more glorious, if we feel it as a show of some fuller splendour; but the sensuous curtain is a deception and a cheat, if it hides some colourless movement of atoms, some spectral woof or impalpable abstractions, or unearthly ballet of bloodless categories. Though dragged to such conclusions, we can not embrace them. Our principles may be true, but they are not reality. They no more make that Whole which commands our devotion, than some shredded dissection of human tatters is that warm and breathing beauty of flesh which our hearts found delightful.⁴⁶

Collingwood, who defends Bradley, once again, from the imputation of Hegelianism and who sees him as a disillusioned and cynical follower rather than as an opponent of Mill, goes back to Plato for a definition of dialectic: it is a method of thinking by question and answer for the purpose of bringing hypotheses to light;⁴⁷ it is not so much an alternation of question and answer as a perpetual restatement of the question, which is identical

with a perpetual revision of the answer.⁴⁸ This Platonic dialectic, "the interplay of question and answer in the soul's dialogue with itself," is continuous with Bacon's interrogation of nature, with Kant's test of the intelligent man by his knowledge of what questions to ask, and, finally, with the pragmatic criterion.⁴⁹ All art, religion, and science rest on perception or history, as the earlier terms of any dialectical series on the later,⁵⁰ but the dialectic has returned from the "abstract positivism" for which Hegel was responsible, to the insight of Kant.⁵¹

American philosophy followed much the same course of development. The philosophic positions that were represented by the framers of the Constitution had no tinge of dialectic. Jefferson found Plato full of "whimsies, puerilities, and unintelligible jargon," of "sophisms, futilities, and incomprehensibilities," foggy,⁵² dealing out mysticisms incomprehensible to the human mind. He counted himself an Epicurean (quoting the doctrines of Epicurus from Gassendi's *Syntagma*),⁵³ and he considered Destutt de Tracy's *Elements of Ideology* "a production of the first order in the science of our thinking faculty, or the understanding."⁵⁴ Madison sought to embody in the Constitution means to increase faction in order to prevent the domination of one party, arguing that the rights of property originate from the diversity in the faculties of men, and that the possession of different degrees and kinds of property results in different interests and parties. The Transcendentalists employed forms of the dialectical method as did the St. Louis Hegelians, but Idealism in the United States, as in England, was usually mixed with a touch of Scottish Common-sense or of Kantian philosophy and usually paused at the point from which Bradley too had

turned back. John Dewey, who was encouraged to undertake philosophy as a career by W. T. Harris, the Hegelian, draws a vivid picture of the ferment of reaction against "atomistic individualism and sensationalistic empiricism" in the 'eighties and 'nineties. He was himself attracted to Hegel by the Hegelian reduction of divisions and separations, by Hegel's synthesis of subject and object, matter and spirit, divine and human, and by his treatment of human culture, institutions, and arts.⁵⁵ Dewey drifted away from Hegelianism because the schematism seemed to him artificial, but he continued to recognize the depth of some of Hegel's ideas and the acuteness of some of his analyses when taken out of their dialectical setting. Nothing could be more helpful to present philosophizing, Dewey remarks, giving body to this distinction of dialectic from the simplifications it had suffered, than to free Plato from the two distortions to which he has been subjected in interpretation—skepticism and overriding dogmatic system.

Dialectic, in the sense of a method based on an identity or a strict parallelism of thought and being, of the processes of thinking and those of historical development, never gained a foothold in English or American thought. Even in the broader sense of a method employed by idealists in which dialectic was widespread during the last decades of the nineteenth and the first decades of the twentieth century, it has been on the wane for the last thirty years. Hegelianism has not had a revival in Great Britain or the United States in the twentieth century, and there have been few Marxist philosophers in Great Britain and fewer in the United States, where there have been no dialectical materialists of the stature of Haldane or Bernal. In

spite of pilgrimages of students and lectures of displaced professors, there has been little spread of phenomenology or existentialism, although there is some indication that the influx of returning students after the Second World War may have more influence. On the continent of Europe, on the other hand, the dialectical method continues to flourish: there are Marxist philosophers in Western Europe; there has been a revival of Hegelianism in France and Germany, and the Italians still pose their philosophic questions in a framework derived from Hegel by Gentile and Croce; various forms of phenomenology, existentialism, and the philosophy of the Spirit have spread dialectic far and wide from the Scandinavian countries to Latin America, Spain, Italy, and Egypt. Among the many ways in which the world may be said to be divided today, there is one which is a source of the dialectics which determine all other divisions of mankind by fears, interest, and goods: the world is divided into dialecticians and nondialecticians, and the resulting differences affect issues and modes of thought far removed from the distinctions and speculations of philosophers.

II. THE NATURE AND VARIETIES OF DIALECTIC

The history of dialectic leaves little doubt concerning the possibility of defining dialectic unambiguously or of distinguishing clearly between dialectical and nondialectical methods. In a true sense, there is no history of dialectic—there are dialectical histories of dialectic which treat all method of thought, action, and expression as dialectical or as deviations from dialectic; there are nondialectical histories of logic and scientific method which treat dialectic as meta-

physical or mystical transformations of logic. Some order can be introduced into this rich diversity of histories and of facts about scientific and philosophic methods by using the two extremes of these shifting oppositions of methods and interpretations which remain fixed. From antiquity to the present, there have been philosophers who have rejected dialectic totally, as the Epicureans did in antiquity and again in the seventeenth century, substituting in the place of its verbal distinctions and fictitious entities hypostatized to serve as subjects for those distinctions a few canons or rules, which depend for their criteria on sense, anticipations, and passions;⁵⁶ such logicians usually fare badly in dialectical histories, even when the dialectic of history is moderated by skepticism as it was in Cicero's accounts of dialectic. At the other extreme, there have been dialecticians who have based philosophy on "being" rather than "becoming" and who have ordered the perceptions of sense and the categories of discursive understanding according to the intuitions of reason; the accounts of these philosophies are brief in the histories of logic, consisting usually, when they are mentioned, of a refutation of separated Ideas or transcendent entities or a demonstration that dialectics depart from the principles of logical proof in the degree that they depart from empirically based distinctions. The advancement of science and the investigations of cultures have vastly increased the knowledge, the data, and the insights available to logicians and dialecticians, but the pattern of opposition of methods has been little altered by the vastly increased content in which they are employed. Alternative methods have been grouped about the two extremes, and the intermediate methods are interpreted and used both as dialectical and as nondialectical.

The common basis which joins the two extremes is the obvious fact that differences, oppositions, and contradictions are encountered in the phenomena of experience and in the processes of thought. The two extremes differ basically on the question, whether science and knowledge depend on establishing principles and demonstrating propositions which avoid contradictions or whether the method of philosophy and science depends on reproducing or rediscovering in thought the contradictions and resolutions discovered in things. The basic laws of dialectic, which go back to Plato and are discussed by Proclus, are developed explicitly by Hegelians and Marxists—the unity of opposites, the transformation of quantity into quality and vice versa, and the negation of the negation. The basic laws of logic have had a history of interpretation and use which goes back at least to Aristotle—the principles of identity, of contradiction, and of excluded middle. Both assumptions have been used to construct philosophic systems and to interpret the methods and problems of science and of practical action, and the applications and meanings of both sets of principles have been variously elaborated. The difference between the resulting methods and systems cannot be found simply in the difference between a logic which employs terms literally and a dialectic in which terms are used analogically and without fixed meanings, for the logic of univocal definitions and formal proofs frequently depends on a prior exploration of the varieties of possible or actually employed meanings and of probable or plausible hypotheses; and even the dialectics which dispense with, or transcend, the principle of contradiction can be made to yield, if desired, literal statements and definitions, static distinctions and combinations, and specific

exemplifications and formal proofs. Nor can the difference be found simply in different developments of commonly conceived procedures proper to logical or dialectical method—inquiry and proof, induction and deduction, analysis and synthesis, construction and interpretation. The differences between the many dialectics and the many systems of logic (including the instances in which logic is identical with dialectic, those in which dialectic is a part of logic, and those in which logic is a part of dialectic) can, however, be arranged under main headings as they are seen in the perspective of the two extremes: a *dialectic* of identity of thought and being in which language is adapted to reflect a truth which is found only in system and which cannot be expressed literally, and a *logic* which seeks literal precision in the designation, description, and prediction of specific facts and events.

Three fundamental possibilities are found for the development of a dialectic of identity, or strict parallelism, of knowledge and being, of the processes of thought and the developments of things. The relations of these dialectics to each other and their characteristics are determined by the dialectical pattern of the basic terms “knowledge” and “being,” “knowledge” and “opinion,” and “being” and “becoming” (or their numerous equivalents and synonyms), and the three varieties of dialectic recur repeatedly in the dialectical successions and oppositions of history and thought. A dialectic of identity of thought and being may, in the first place, be constructed on the supposition that the real is rational and that the underlying structure of existence is found in ideas which are truly and which are reflected in events, thoughts, and arguments: idealistic, transcendental, and mystical dialectics,

which are based on this assumption, tend to hierarchies culminating in a single principle, like Being, or the One, or Reason, or the Good. An inverted dialectic may, in the second place, be constructed on the opposite supposition that reason finds its basis in the processes of nature and history and that ideas are material or determined by material structures, relations, and sequences: materialistic dialectics, like those developed by the Stoics and the Marxists, are presented as true developments of the dialectical method freed from mystifications and brought into scientific relation with reality and history; and the necessary principles disclosed by the dialectic therefore reflect the reason, providence, or necessity governing the universe. A dialectic of experience, of opinion, or of the self may, finally, be constructed in opposition to the dogmatisms of systematic idealisms and materialisms: pragmatic, suspensive, and constructive dialectics, like those developed by the sophists, the skeptics, and the existentialists, use the balances of doctrines and attitudes to dissolve the metaphysical fixities and unities of matter and mind and to counteract the force of social, political, or theological uniformities which degrade values, prevent insights, and enslave action and thought; they find their principles in the individual, his attitude and actions, his situation in the world and in relation to other selves, and the transcendent appears, if at all, in the form of the Comprehensive, *das Umgreifende, tò periéchon*. The minimum requirement which all three of these forms of dialectic (as well as the numerous variants of each) satisfy, in this dialectical perspective, is found in the common meaning of the name they share, which Jaspers recently expressed when he restated the ancient insight in scarcely altered form: “The truth begins

with two,⁵⁷ that is, thought is *dialéges-thai* and its basis is opposition. In this perspective nondialectical philosophies are incomplete and defective because they are abstract, that is, they separate knowledge from knower and known; or mechanistic, that is, they relate knowledge to statically conceived material elements; or dogmatic, that is, they reduce knowledge to a set of unanalyzed beliefs about reality. These errors are treated differently in the different forms of dialectic: the abstractions of formal logic have a proper and limited use in an idealistic dialectic; the static distinctions of a mechanistic materialism have at least a historical and preparatory value in a materialistic dialectic; the varieties of dialectics, freed from dogmatism, may be viewed as different approaches to an identical truth in a suspensive or existentialist dialectic.

Three fundamental possibilities are found for the development of a nondialectical logic of univocal statements and grounded inferences. All three are based on the assumption that there is no precise parallel between the processes of thought and the processes followed in the development of the object of thought. The distinctions between the forms of logic are determined by fundamental assumptions concerning distinctions and relations among things, thoughts, and language. From the perspective of such logics, or at least of some of them, dialectic may have justifiable propaedeutic or supplementary uses, but when dialectic depends on metaphysical assumptions concerning the rational or material structure of reality or history, it is useless or deceptive as method and erroneous as doctrine. A univocal logic may, in the first place, be constructed as a system of rules of operation and criteria of empirical evidence and prediction: the Epicure-

an Canon, Locke's semiotic or logic, which is designed to avoid the confounding of the signification of words prevalent in the traditional logic and the art of disputing, and Bridgman's operationalism establish meanings wholly on the empirical elements of which they are composed and on the operations by which they are defined; dialectic from the point of view of such a logic is a verbal art which commits the error of confounding words and things and which should be wholly avoided. A univocal logic may, in the second place, be constructed by distinguishing the forms of argument which are general from their material and concrete uses: Aristotle's *Organon*, Kant's general logic, and Dewey's theory of inquiry in varying ways differentiate the forms of inquiry and proof from their applications, warranted and unwarranted. Aristotle, in the *Prior Analytics*, analyzes the syllogism, which is employed in all inquiry and proof, and then, in the *Posterior Analytics* and *Topics*, differentiates scientific or apodictic from dialectical syllogisms by their principles, the former being based on things and causes, the latter on opinions and questions; dialectic has a use for such a logic in clarifying our ideas and testing our principles. Kant likewise differentiates analytic and dialectic, but dialectic is the logic of semblance and illusion in the critical philosophy, and its use is cathartic. Dewey explores the two-way connection between logic and philosophical systems: every system of philosophy develops its own interpretation of logical forms and relations, but it is also dependent on logical methods to establish dialectical consistency internally and also plausibility of application to external things.

In order to gain adherents and to endure, a philosophical system must not only maintain a reasonable degree of internal dialectical con-

sistency but must square itself with some phases and conditions of the *methods* by which the beliefs that are entertained about the world have been reached. It does not suffice that a system have a consistent logic of discourse. It must also have a considerable measure of plausibility in application to things of the world if it is to gain and hold adherents. It follows that every main philosophical theory of knowledge must not merely avoid fallacies from its own standpoint, but must borrow its leading principles from some phase of the logical pattern of inquiry in order to avoid *material* fallacies.⁵⁸

A univocal logic may, finally, be constructed by examining languages and what they signify or by constructing languages and interpreting them or by inquiring concerning what might be said and the grounds for assent: the version of the Stoic logic preserved by the Sceptics, the late medieval *parva logicalia*, and the linguistic analyses of logical empiricism in varying ways differentiate meanings and truths based on the applications of language from meanings and truths based on the structure of language: dialectic from the point of view of such a logic may have a legitimate use (when it avoids meaningless or dogmatic statements) in those regions of decision which precede or transcend a given language and which fall in the scope of pragmatic considerations determining the characteristics of a language. The minimum requirement which all three forms of logic (and their variants) satisfy, in this nondialectical perspective, is found in their common effort to establish inferential relations among empirically ascertainable and univocally stateable facts. In this perspective, dialectical philosophies are in error because they transcend experience, create fictitious entities, and construct meaningless sentences and invalid inferences. For logics based wholly on experience and experiment, there is no use for dialectic in any form; for a logic of inquiry, dialectic can yield no scientific

proofs, but it is useful to clarify minds and to test principles; for a logic of signs and symbols, dialectic may provide a trial and error process antecedent to the determination of a language and the expression of warranted meanings.

The identification of dialecticians and the description of dialectic change with changes in these perspectives. From a nondialectical perspective Bacon's and Descartes's disavowals of dialectic are convincing, and their methods can be described nondialectically; nonetheless, they figure in histories of dialectic, and dialectical devices can be found in their methods. According to Kant dialectic is the logic of semblance, but a dialectician would properly go to Kant's *Idea of a Universal Cosmopolitical History*, which is not dialectical in Kant's sense, for examples of his anticipation of dialectical history. The fact that there are many meanings of "dialectic," that the meanings and the applications of the term shift, and that there are like differences concerning the nature and scope of logic—whether it is restricted to deduction, or whether it includes inquiry and discovery, theory-construction and interpretation—does not present a problem to be resolved by determining what dialectic in fact is or should be, but rather sets the problem of the relation of dialectic to political theory and action. To treat the nature of dialectic it would be necessary to take a stand on method and treat logic and dialectic from one perspective.⁵⁹ But the problem of the bearing of dialectic on political theory and action today arises precisely from the fact that many varieties of dialectic as well as alternatives to dialectic are used in technical and ordinary discussion of action. If, as we have assumed, it is improbable that dialectic will be abandoned and unproved that dialectic leads necessarily or uniquely to

antidemocratic institutions and policies, and if, as we have tried to show, dialectic is a mode of thought little practiced and therefore uncongenial in recent Anglo-American traditions, the problem centers precisely in the possibility of communication and agreement between modes of thought which present totally opposed conceptions of how reason, or intelligence, or science can be applied in action—for the conceptions of what constitutes science or knowledge, of how facts are ascertained and history is interpreted, and of the nature of freedom and the means by which it is secured differ in dialectical and nondialectical modes of thought.

III. DIALECTIC AND ACTION

The use of intelligence, reason, or science is far less simple than the compilation of precepts by which men may be made or may become intelligent, reasonable, or scientific, for prescriptions embody a conception of reason, and few bodies of men, unless associated on grounds of doctrinal agreement, are in accord concerning what reason is or concerning what is reasonable. The differences between dialectical and nondialectical thought are even sharper in application to action, for two related reasons: (1) science and proof depend, from a nondialectical point of view, on making distinctions which seem unwarranted and stultifying to the dialectician, and (2) all the terms by which the distinctions or the identifications are made assume different meanings in the statement of the issue. In theoretical questions this continued opposition of multiple meanings and methods has an advantage in presenting a variety of hypotheses and, even from the perspective of literal theories of logic, the advance of knowledge can be shown to owe much to dialectic and dia-

lecticians. In any case, the opposition has been continuous enough in Western thought to justify Coleridge's dialectical judgment that all men are born Platonists or Aristotelians. The opposition of hypotheses in action, however, takes the form of opposition of irreconcilable courses of action: intelligence is used not only in forming the policy but also in securing its success; the success of a policy in fact or in history is a test not only of its wisdom but of the force, tenacity, and often the survival of its proponents; and truth or error in action has a moral dimension which affects freedom and future decisions. The differences between the statements of each of these problems which are acceptable on dialectical and on nondialectical grounds are so sharp that they leave little basis for discussion, and they make decisions concerning action, as well as concerning discussion and the use of reason, arbitrary, inevitable, and dependent on persuasion or a show or use of force.

The three questions in which the relation of dialectic to action come to focus are intimately connected, and indeed inseparable, in any dialectical analysis. (1) The application of thought, science, or philosophy in action is dialectical: it involves the development of man relative to himself and to other selves and in the context of society and of the world; to treat those relations requires a transcendental logic (in which morality, science, society, and the state are interrelated aspects or stages), or a science of the history of society (which has the certainty of natural science and in which the social superstructure of laws, governments, arts, sciences, religions, and philosophies are ideologies expressive of the interests of those who hold them), or a science of man (in which man creates himself, his society, and his environment). (2) In any

such organic universe of things and thoughts, the nature of things is inseparable from their development, and proof becomes in some sense identical with history: Hegel sought the dynamism of the concrete in phenomenology which traces the same basic structure as is revealed in logic, in the philosophy of history, and in the history of philosophy; Marx and Engels conceived the history of society as basic not only to development of society but of all forms of action, association, and thought, and as identical with the science of nature; Croce reduced philosophy to historiography; and *Gestgeschichte* and the sociology of knowledge borrow like dialectical devices from Hegel and Marx. (3) In such a relation of thought and being, freedom is, in some sense, the very essence of man, and history traces the realization of that essence and the progressive extension of freedom to more men and to more aspects of their activities; but freedom consists, not in the possibility of choosing according to one's own preference between alternative courses of action, but in the choice of the right course as it is dialectically determined.

Nondialecticians—both those who develop their positions with explicit reference to logic and those who sense an unanalyzed danger in englobing transcendentals, material forces, historical necessities, societies, and states—react in many ways to these three problems, and it is not easy to reduce their positions to agreement except in their common opposition to the dialectical reductions. (1) In general, the nondialectician finds at the center of the problem of employing reason and science in action problems of the influence of noncognitive elements and problems of communication. His conviction may lead to the development of a science of man and of society comparable

to the natural sciences or to the use of methods comparable to those of the sciences to establish communication and community; but these efforts are accompanied by awareness that the use of behavioral and social sciences is involved in moral and political problems and that the methods of communication are not identical with the methods of the physical sciences. (2) The relation of the sciences of nature and the sciences of man to action, far from providing grounds for identifying history and truth, suggests to the nondialectician a radical distinction between the history of the development of science and of the accumulation of knowledge, which has been progressive, and the history of social and political communities as well as the histories of the arts, religion, and philosophy. Such progress as the latter have shown has been spasmodic and intermittent, resulting more or less indirectly from the progress of knowledge; and, as Mill pointed out, the dictum that truth always triumphs over persecution is a pleasant falsehood which has become a commonplace by repetition in spite of the evidence against it.⁶⁰ (3) Finally, history has not been the story of the progressive acquisition of freedom. That it has been may be made to seem the case, as Dewey points out, by proper selection and arrangement; but a more sober view of history discloses that the victory of democracy in the nineteenth century resulted from fortunate conjunctions of events and suggests that further progress can be made only by deliberate and intelligent endeavor.⁶¹ Freedom, moreover, although its possibility is advanced by increased knowledge, is not an embodiment of truth but a consequence of establishing by political means a region in which the right to differ is protected, for to be free does not exclude the possibility of

erring and, indeed, truth itself is advanced by the free intercourse of ideas.

When action is thought to depend on resolving issues such as these, oppositions of policy become fixed, and to yield a position is often to endanger science, society, and freedom. Yet in theoretic problems there is a place for such oppositions, both on dialectical grounds, because truth depends on oppositions, and on nondialectical grounds, because progress in knowledge depends on the examination of alternative hypotheses. But if practical problems are treated as if they were theoretic oppositions, reason enters in their resolution only as it is used to destroy an opposed position concerning policy, science, or society. The use of theories has practical consequences that affect in turn the possibility of further developing theories; and the practical context has consequences in the development of theory and knowledge for use in practice. The oppositions of philosophies and ways of thought take two distinct forms: an opposition in which the issue is philosophic and in which the resolution depends on establishing the truth of statements, inferences, and interpretations; and a second-order opposition, in which philosophies and methods are encountered as facts, indistinguishable so far as they are used from other expressions of attitude, character, and preference, and in which the resolution depends on concrete action rather than on consensus of principle and of fundamental attitude.

The practical use of knowledge—philosophic, scientific, or any of the forms of insight or wisdom that result from arts, religion, history, or experience—must take the accumulations and contradictions of professed knowledge brought into play in a situation as facts and instruments. The issues that separate dia-

lectical and nondialectical modes of thought and that set them in radical opposition, which is tempered only by ambiguity, result from oppositions of philosophic doctrines or systems, not from the use of methods: (1) the possibility of using reason and knowledge to come to agreement concerning common action for common ends or goods does not depend on agreement concerning the reasons or the principles on which the action is based; (2) the interpretation of a present situation and its antecedents requires understanding of what other agents mean, intend, and value, but not necessarily agreement with their justification of meanings or interpretation of fact and history; and (3) common action and mutual understanding at once depend on mutual confidence and at the same time prepare a basis for it, but they do not require expression of agreement in doctrines (which may nonetheless be found to be coherent in their practical consequences) or in values (which may nonetheless be found to be identical despite the differences of their specific expressions). It is characteristic of ideological conflicts that each of the opposed positions finds ground to argue that the other depends on an enforced uniformity of doctrine, of social and political structure, and of principles and values—philosophic principles, religious convictions, scientific presuppositions, social and cultural values, economic objectives, and political rights. Since actions are not determined exclusively by what is said or by what is intended, it is important that each of the parties to a practical dispute protect itself against the possibility that it is correct in this impression that its own values may be in danger and that the opposed arguments may be deceitful.

The history and formal analysis of dialectic from a nondialectical perspective

set a context for the statement of the practical problem, if *historically* dialectic (in the extreme form based on a supposed identity of thought and reality) has never been influential in the Anglo-American traditions and has seldom had less influence than in recent thought and action, and if *essentially* other modes of thought entail the possibility of negotiating action without agreement concerning reasons and the hypothetical entertainment of ideas and theories in free interplay to advance knowledge. The advantages of the opposed methods—dialectical and nondialectical—and the dangers of their conflict as they appear in nondialectical analysis should be subject to acceptable restatement in dialectical terms. In this perspective, dialectic undertakes to establish, by rational analysis, a common ground for understanding (of nature and of community), for confidence, and for action, but the dialectical use of reason encounters limits in the transcendent, the unknowable, or the necessary and, ultimately, encourages the use of force to achieve consensus and common action. The nondialectical use of reason seeks to advance understanding by exploring the varieties of possible hypotheses, to achieve confidence by discussion, and to institute common action by processes of coming to agreement; but it encounters dangers of relativism in different conditions, opportunism in action, and pious fraud in applying truths which have their force and cogency from other sanctions than proof or agreement. The lack of understanding; of confidence, and of bases for action between dialectical and nondialectical modes of thought is reinforced, if it is not founded on, the tendency of each to lose its peculiar value in the degraded form it assumes in ideological dispute. The dialectical invocation of truth as guide in action and in use

of power is easily transformed into the assumption that those in power possess wisdom and defend truth (totalitarianism) or into the use of power (as in the dictatorship of the proletariat) to establish conditions of “freedom” which have no clear connection with the common good; the nondialectical invocation of inquiry and proof is easily transformed into the treatment of values as noncognitive and expressions of preferences, or the formulation of a science of values that is not translatable into action, or the reduction of values and culture to relativism to actual conditions.

Despite their polar differences, when these oppositions are viewed, not as oppositions of principles and methods, but as directions and tendencies in the formulation of doctrines and policies, basic agreements are apparent among contemporary philosophers which have a bearing on the practical problems. Most philosophers share a concern with science, with its applications as well as its system, and with the organic interrelations of things and interdependences of knowledge, with concrete, dynamic situations of existence to which knowledge and action are relevant, and with freedom as it bears on the conditions of action, community, and advancing knowledge. When these agreements are turned to specific problems of practical action, it is apparent that the dialectical conceptions of science, history, and freedom have an immediate advantage in the struggles of parties and the alignments of power politics: they provide a common method and principles which afford a facility of argument and a clarity of exposition, even though the argument and policy are easily altered as expediency requires and are little affected by facts or rules of evidence and inferences; they give access to a ready storehouse of historical corroborations.

tion and illustration in an organized philosophy of history; and they afford attractive promises and ideals to uncommitted minds and victims of inequality and injustice. The dangers of using doctrinal agreement as basis for action and political association are no less apparent than these advantages of statement and formulation, and even apart from these dangers which make "persuasion" a form of force, the doctrinal agreement afforded by dialectic has proved historically to be an illusory ideal in thought and in action. The practical problem, as viewed in this nondialectical perspective, requires the exploration of the implications and conditions of agreement on the basis of different principles and reasons, and this problem also has dialectical grounds once the existence of a variety of dialectics is recognized.

The characteristic use of reason in practical application is in forming and undertaking a common course of action. This use of reason has clear analogies to the scientific method in the treatment of alternative hypotheses which take into account the varieties of meanings that are attached to all crucial terms in theory, history, and practice, as well as relevant data. Some meanings and assumptions are mutually compatible; some are incompatible; some, which seemed incompatible, are found on fuller examination not to be contradictory. Such an examination of alternative policies and interpretations may be undertaken in dialectical or in nondialectical terms. In science the process takes the form of using hypotheses to guide inquiry: the significance of the hypothesis is found in the consequences shown to follow from it, and the choice among hypotheses is a choice based on comparison of observed and inferred consequences. Agreement is dependent not only on establishing a

single agreed-on set of meanings but also on recognizing a compendium of actual and tried meanings that suggest further observation and inquiry. The common truth is not uniquely expressed in any statement or system, and structures of meanings, principles, and methods are brought to constant tests in the subject matter to which they are applied. The similar use of reason in action focuses on the course of action proposed rather than on the possibly contradictory reasons advanced in defense of it. If provision can be made in political institutions to insure the performance of promised actions and the occurrence of anticipated consequences and to provide penalties for their nonperformance and nonoccurrence, there is no need for consensus on the reasons for which they seem desirable or on the fundamental nature of the world or the community in which they are desirable or possible. The discussion in the United Nations of the Universal Bill of Human Rights and the proposed covenants illustrates this relation of principles and consequences. The representatives of the various nations defended human rights on grounds that are basically philosophical, yet no common ground, in the sense either of a single philosophy or an identical structure of human relations to determine their significance, emerged in the discussion or the documents. Principles were important in securing agreement since they provided the motivation leading to the action of the member states, but the rights enumerated will receive their definition when comparable or identical institutions have been established or have evolved to translate their statement as accepted ideals with congruent and comparable concrete courses of action in all parts of the world. The test of this use of reason is found in no statement but in concrete action and this

“consequence” follows, not from abstract principles, but from institutions and customs.

Reason has a second use closely related to its function in deciding on courses of action. Like the use of reason in the natural sciences, its use in practical affairs is an inference. The observation of concrete fact, experience, and experiment are important in science precisely because they provide the means by which to check conclusions derived by inference. The propositions or principles from which these “predictions” or “anticipations” or “applications” follow are not themselves demonstrated but are examined and chosen by a dialectic of trial and error. This dialectical character is more apparent in practical negotiation than in theoretic inquiry, for in political discussion the two-voiced conversation, the opposition of doctrine, attitude, and opinion, is discernible even in the operation of strong and centralized political organizations. The inference is not from a proposition to a prediction, however, except in an analogical sense. Principles, theories, and statements are only one ingredient in the premises from which a practical inference proceeds. They are defined and made precise, in so far as they enter serious consideration, not by their truth but by their reliability as statements of intention, granted the circumstances, history, and character of their proponents. The actions that follow from them are not predictions of what under the circumstances invariably or usually happens but proposals of what is possible and desirable. They are tested not by observation of facts but by comparison with proposals which follow from the basic assumptions held by proponents of other and often opposed positions. Reason in application to practical questions therefore has, in addition to its direct in-

ferential function of relating assumptions to conclusions, an inverse inferential or imputative function of relating proposals to the character and attitude from which they flow. If agreement on a course of action should properly focus on specifying the action unambiguously and on providing reliable instrumentalities to guarantee its execution, its negotiation depends on a minimum success in process of making one’s self understood and understanding the attitudes of others, which translate questions of truth into questions of confidence. This is a dialectical problem of opinions, appearances, and probabilities. Fuller recognition of the nature of this problem is particularly important in traditions in which the influence of dialectic has been slight. There has been a growing tendency to attribute the evils of totalitarianism as a direct consequence to “dialectic” as such, and to trace the suppressions and compulsions that we have come upon in political negotiations and institutions to Plato, Hegel, Marx, Nietzsche, and even to Augustine, Machiavelli, Herder, and Kant. Understanding and negotiation with potential allies who employ a dialectical mode of expression has as a result become difficult or impossible. This loss of confidence in reason has had the effect of impeding and sometimes totally blocking that form of dialectic which is implicit in logical thought—the recognition of the possibility of viewing situations differently, of emphasizing different aspects of problems, and of seeking solutions from different points of view—and to that extent it has weakened the rational means by which to guard against deception by the misuse of doctrine and party in order to achieve the ends of action.

The uses of reason to define action and to establish confidence, in turn, depend

on a third and ultimate use of reason in the establishment of communication, association, and community. Agreement concerning concrete courses of action and plausible presentation of one's own character or imputation of a character to others are means of applying or realizing values in concrete form. Apart from speculations found in philosophic treatises, values are subject to rational analysis primarily to relate actions to the beliefs men hold and the associations they form. Values find a vast variety of forms of expression in art, religion, philosophy, and theoretic speculation as well as in the associations by which men seek to satisfy their felt needs and to achieve their further aspirations. Whatever else it may be thought to be, the history of mankind has been a development of larger and larger groups, bringing more and more distant peoples into contact and associating them in more and more ways, step by step, for purposes which have become necessary, and for ends that have become practicable. The emerging world community has been the result of many mutually supplementary influences—the advance of science, technology, and industry, the emergence of interdependent economic needs and opportunities, the recognition of comparable social and religious ideals, comparable artistic expressions, and comparable philosophic tendencies. The common situation and common ideals have been interpreted in many doctrines—dialectical and nondialectical—which are often opposed in their philosophic assumptions and political implications; and they have been related to courses of action which, although proposed to preserve traditional values or to move on to values not previously available, are often mutually exclusive. The uses of reason to achieve confidence and to lead to agreement in action are funda-

mentally uses of reason to interpret values and to make them concrete. Common values are expressed in a variety of ways, and they tend to be degraded or destroyed in all fields and in all forms of action by reduction to imposed uniformity. It is both undesirable and improbable that there will ever be agreement on a single expression or system of values—in philosophy, religion, art, or any other mode of expression—and it is no less undesirable and improbable that a single monolithic community will emerge to embrace all men and all aspects of their lives in a single structure. The forms which values take are conditioned by circumstances, but communication is possible because the recognition of values in particular expressions does not depend on experience of the conditions or convictions that entered into those divergent formulations. This adjustment of values to statement and action enters into all conscious human activity, and it is the primary function in the use of reason in political action.

Although it is easy to underestimate or neglect the philosophic or intellectual or ideological basis of political action, philosophy is unavoidably implicated in the practical problems men face today. All men are called on to philosophize, not in the sense of facing abstract philosophic issues or producing philosophic systems, but in the sense of recognizing those issues in the decisions they take. To assist them to recognize the philosophic aspects of the problems in which they are involved, philosophic issues need to be restated so that the man of affairs may have an access to them similar to the access which the layman has to what an artist expresses: he should be able to participate in the work of philosophers and take a stand about what they say. The

opposition of dialectical and nondialectical modes of thought should make it clear that the importance of philosophy, in theory and in practice, does not depend on doctrinal agreement, but that the advance of discussion depends on discovering good and mutually consistent grounds on which to avoid the evil effects of faction, controversy, and "persuasion" or force. This lesson is implicit in the history of both traditions. The purpose of discussion is to secure agreement, and the contribution of philosophy to practical discussion is to reinforce the possibility of coming to agreement as the single alternative to the use of power to secure objectives and protect values. In its necessary opposition to the misuses to which dialectic has been put, the formation of policy in traditions that reflect nondialectical attitudes faces the danger of a like degradation by departing from the tradition of tolerance of differences which is at once the strength of the community of mutual respect in which it developed and the source of the knowledge on which it depends. The inherent pluralism of the democratic tradition, which

was developed as a means rather than an obstacle to human co-operation, as a foundation for social and political association, and as a methodological principle in the scientific discovery of truth, cannot survive in fearful, impatient, and forced sectarian universalism. It is obviously the case that one cannot discuss with those who do not wish to discuss and that the institutions of free discussion which provide means for coming to agreement may be betrayed. But to refuse to discuss is to anticipate that subversion and to deliberately destroy at once the essential form of democratic institutions and their one means of protection, and to prejudge the possibility, illustrated in many dialectics, of returning dialecticians to the recognition of a like pluralism which is obscured by the facility with which dialectic, once it has identified thought and being, can reduce all philosophy to its own terms, explain the history of the development of all things, and provide justification for the use of power to secure consensus, community, and co-operation.

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NOTES

1. This article was prepared in co-operation with the project of a "Dictionary of Fundamental Terms of Philosophy and Political Thought" sponsored by the International Council for Philosophy and Humanistic Studies and planned and carried out with the assistance of UNESCO. A plan for such a dictionary was discussed and approved at the Inter-American Congress of Philosophy held in Mexico City, January, 1950. A Central Committee—consisting of Professors A. J. Ayer (Great Britain), Hans Barth (Switzerland), G. Calogero (Italy), R. Klibansky (Canada), A. Koyré (France), E. García Maynez (Mexico), R. McKeon (United States), H. J. Pos (Netherlands), and J. Wahl (France)—was chosen to explore methods that might be employed in furthering the project. Professors Klibansky, McKeon, and Pos were elected members of an Executive Committee empowered to supervise these activities. The Central Committee met in Paris in

1951 and again in Brussels in 1953. At the latter meeting the inquiries that had been made in various countries during the preceding two years concerning interest in the project, methods of collaboration, and sources of financial support were reviewed, and a plan of work was adopted.

It had been agreed in Mexico City that the purpose of the Dictionary should be to contribute to the clarification of the meanings attached to terms of political and moral thought which are subject to ambiguity and misinterpretation in political debate, national and international, and which are therefore a source of danger to international understanding and peace. It was to be a dictionary of *opinions* grounded on philosophic traditions, as expounded by philosophic schools, as held by national and cultural groups, and as reflected in political discussion and propaganda, rather than a dictionary of *truths* grounded in the nature of things and established by

demonstration, experience, or history. The Central Committee was convinced that the purpose of the dictionary would be accomplished best if the various meanings of terms were expounded by thinkers representing the groups who hold those meanings. The preparation of the Dictionary will therefore proceed in two stages: first, the study of the fundamental terms of philosophy and political thought in the principal linguistic and cultural groups of the world; second, the preparation of comprehensive articles based on these studies.

In view of the magnitude of the task and the modesty of the means at its disposal (a budget of \$2,000 for the year 1954, and \$1,000 a year for 1955 and 1956), the Central Committee has decided to make a virtue of its limitations by proceeding experimentally and expanding gradually. No final decision has been made concerning the list of terms to be included. It is agreed, in the first place, that the list should be short (of the order of 150 terms), and that it should include methodological and metaphysical terms (like "dialectic," "history," "order," and "unity") as well as properly political terms (like "freedom," "peace," "democracy," "law," "property"). Four terms were chosen for study in 1954: "freedom," "right," "democracy," "dialectic." In the second place, the project will begin with the linguistic and cultural traditions of Western Europe and the Americas. Five articles will be written on *each* of the four terms chosen, setting forth its meanings in English, French, German, Italian, and Spanish. Each article will contain a brief statement of the historical origins of the discussion of the term (in the case of Europe and the Americas this will consist of a version of the common origin of philosophic discussions of political concepts in Greece and Rome and in medieval Europe) and of the ramifications of meaning resulting from the different evolution which these common meanings underwent in each of the national traditions and in each of the languages. On this historical basis the particular meanings attached to the term in current discussion and their concordances and differences will be stated. The Central Committee has discussed the urgent need to include as soon as possible other languages and cultures. Arabic, Hindu, and Japanese philosophers and experts in political thought have been consulted and have assured the Central Committee that such a Dictionary would serve an important function in the Near and Middle East and in the Far East and that there will be no difficulty in finding collaborators to contribute to it. The problem of treating terms in the meanings they have assumed in Communist countries is more difficult, since the principle of a first step in which the meanings of the terms are stated by scholars of the national or linguistic group is apparently impracticable (with the exception of Yugoslav scholars), and yet the chief problem of contemporary misunderstanding, misinterpretation, and misrepresentation lies precisely in the relation of the meanings which terms assume in the confrontation of the traditions

which are now opposed in propaganda statement as the Free World and Mass Democracy. Finally, the Committee has invited twenty philosophers to write twenty articles on "freedom," "right," "democracy," and "dialectic." These articles will be published under the authors' names, as their own statements and reflecting in no way the position of the Central Committee, in learned journals published in the respective languages and countries represented by the authors. It is hoped that these articles, together with such discussion as they may arouse, will serve as basis for later composite articles concerning the interrelations of all traditions of the fundamental meanings of basic political terms. At the end of the three years for which the Central Committee has laid its present plans, the Committee hopes to have published, in this way, sets of articles concerning from eight to sixteen terms. At that time it will review its plans with a view to extending them from their present restricted and experimental basis. Three major problems must be considered then or in the interim: (1) the establishment of a basic list of terms; (2) the extension of the project to cultural and linguistic groups beyond Western Europe and the Americas; and (3) the construction of comprehensive articles from those representative of the various traditions as well as the possible eventual publication of a Dictionary, which it is hoped will be published in all the major languages that engaged in the enlarged project. The present plan has the merit of accomplishing something toward the purpose of the Dictionary in the publication of from forty to eighty articles on terms involved in political dispute, even if the more ambitious form of the project proves to be impracticable.

The present article on "Dialectic" is one of five related articles, which will appear in five different philosophical journals in the course of the next twelve months, concerning the meaning of that term in five languages and cultural traditions.

2. Diogenes Laertius *Lives of Eminent Philosophers* viii. 57 and ix. 125.

3. Xenophon *Memorabilia* iv. 5. 12.

4. Plato *Apology* 33A-B; cf. *Meno* 99E where the term is used to refer to the discussion of the problems treated in the dialogue.

5. Plato *Theaetetus* 167E; *Republic* vii. 539B-C.

6. Plato *Sophist* 230B-231B, 259C-D.

7. Plato *Phaedrus* 265E-266C.

8. *Ibid.* 276E.

9. *Sophist* 253A-D.

10. Plato *Statesman* 285D-287C.

11. Plato *Philebus* 57E-58A.

12. *Republic* vi. 511B-C; vii. 533C-D.

13. *Ibid.* 534B.

14. *Ibid.* 537C.

15. After treating the fundamental principles of the Eleatics, the Ionians, Heraclitus, and Empedocles (*Sophist* 242D-243C) as instances of philosophers who have discussed being and nonbeing accurately (*ibid.* 245E), the Eleatic Stranger turns to

the examination of the less precise doctrines of unnamed materialists who define existence and body, or matter, as identical, and who can be handled only if it is assumed that they will accede to better rules of argumentation (*ibid.* 246D). One ancient explanation of Plato's silence concerning Democritus was his realization that he would be no match against "the wise Democritus, the guardian of discourse, the keen witted disputant" (Diogenes Laertius ix. 40).

16. Aristotle *Topics* i. 1. 100^a25–101^a17.

17. Aristotle *On Sophistical Refutations* 2. 165^a38–^b8.

18. Aristotle *Metaphysics* iv. 2. 1004^b17–26. For a supplementary distinction of dialectic from rhetoric and sophistic by "moral purpose" and "faculty," cf. *Rhetoric* i. 1. 1355^b7–21.

19. Aristotle *Metaphysics* i. 6. 987^b29–988^a1.

20. *Ibid.* xiii. 4. 1078^b24–27; cf. *ibid.* iii. 1. 995^b18–25.

21. Aristotle *Rhetoric* ii. 24. 1402^a2–29.

22. Aristotle *De Anima* i. 1. 403^a29–^b9: "Hence the physicist would define a passion of the soul, such as anger, differently from a dialectician. The latter would define it as a craving for retaliation, or something like that, while the former would define it as a surging of the blood about the heart and a form of heat. The one presents the matter, the other the form and argument, for the argument is the form of the thing, but if it exists it must appear in matter of such a kind. Thus, one definition of a house is such a formula or argument as 'a shelter against destruction by wind, rain, and heat'; another describes it as 'stones, bricks, and timber'; and a third defines it by the form in these materials for the sake of those objectives. Which of these is really the physicist? The man who ignores the argument and is concerned only with the matter, or the man who is concerned only with the argument? Is it not rather the man who forms his definition from both?" Cf. also *On Generation and Corruption* i. 2. 316^a5–14: "Lack of experience diminishes our power of taking a comprehensive view of the admitted facts. Hence those who dwell in intimate association with nature and its phenomena grow more and more able to formulate, as the foundations of their theories, principles such as admit of wide and coherent development: while those whom devotion to abstract discussion has rendered unobservant of the facts are too ready to dogmatize on the basis of a few observations. The rival treatment of the subject now before us will serve to illustrate how great is the difference between a 'physical' and a 'logical' method of inquiry. For, whereas the Platonists argue that there must be atomic magnitudes 'because otherwise The Triangle would be more than one,' Democritus would appear to have been convinced by appropriate and physical arguments."

23. Diogenes Laertius vii. 43. The first of these parts of dialectic has been the subject of renewed historical study which brings out remarkable anticipations of distinctions and devices rediscovered

and reinstated in modern symbolic logic; little attention is paid in these studies to the nature and function of *phantasia* as conceived by the Stoics.

24. *Ibid.* 142.

25. *Ibid.* x. 30.

26. *Ibid.* 150–152.

27. For the dialectic of Cicero, cf. R. McKeon, "Introduction to the Philosophy of Cicero," Marcus Tullius Cicero, *Brutus, On the Nature of the Gods, On Divination, On Duties* (Chicago: University of Chicago Press, 1950). Cicero treats dialectic as the greatest of all the arts (*ars omnium artium maxima*) and as essential to oratory and the knowledge of the law. He defines dialectic (*Brutus* 41. 152–153) as the "art which teaches how to distribute all things into parts, to make explicit the implicit by defining, to explain the obscure by interpreting, first to see the ambiguous, then to distinguish, and finally to judge true and false and what conclusions follow from [sc. are "consequences"] given premises and what do not." It is the art and science of reasoning (*disserendi ratio et scientia*), the part of philosophy (*Tusculan Disputations* v. 25. 72) "which flows and spreads through the other parts of wisdom, which defines a thing, distinguishes kinds, links up sequences, draws perfect conclusions, and judges true and false." The Stoic logic, however, was of little use to the orator because it provided no precepts for discovering the truth, but only for testing it, whereas the Aristotelian dialectic remedied this defect and provided a method of invention or discovery in the "topics" (*De Oratore* ii. 38–39. 157–163; *Brutus* 31. 119–121).

28. Cassiodorus, *Institutiones* ii. Praef. 4 and ii. 2. 17, ed. R. A. B. Mynors (Oxford: Clarendon Press, 1937), pp. 91 and 108.

29. Isidor of Seville *Etymologies* ii. 22–24.

30. Johannes Scotus Eriugena *De divisione naturae* i. 27.

31. *Ibid.* v. 4.

32. *Ibid.* i. 66.

33. Peter Abailard *Glossulae super Porphyrium* ed. B. Geyer, *Beiträge zur Geschichte der Philosophie des Mittelalters* (Münster i.W., 1933), XXI, 506: "But we call logic the same part of philosophy as dialectic and we use the two words indifferently in designating the same science."

34. Peter Abailard *Theologia Christiana* iii (*Patrologia Latina* CLXXVIII), 1215–18.

35. For the relation of dialectic and rhetoric in Abailard, cf. R. McKeon, "Rhetoric in the Middle Ages," *Speculum*, XVII (1942), 20–22.

36. John of Salisbury *Metalogicon* ii. 3, ed. C. J. Webb (Oxford: Clarendon Press, 1929), pp. 64–65.

37. Roger Bacon *Sumule dialectices*, ed. R. Steele (Oxford: Clarendon Press, 1940), p. 195.

38. Petrus Hispanus begins his *Summulae* with a definition of "dialectic"; cf. *Summulae logicales*, ed. I. M. Bochenski (Rome: Marietti, 1947), p. 1: "Dialectic is the art of arts and the science of sciences, possessing the way to the principles of all

methods. For dialectic alone disputes probably concerning the principles of all other arts and therefore dialectic ought to be prior in the acquisition of the sciences." William of Shyreswood begins with a distinction between nature and soul and treats logic, with grammar and rhetoric, as a verbal (*sermocinalis*) science as contrasted to the natural sciences and ethics (*Introductiones in logicam*, ed. M. Grabmann [*Sitzungsberichte der Bayerischen Akademie der Wissenschaften*, Philosophisch-historische Abteilung, 1937, heft 10], p. 30), while he uses the term "dialectical" to distinguish the probable from the demonstrative and the sophistical syllogism (*ibid.*, p. 56). He remarks that he proposes to omit the other two and to treat dialectical syllogisms by examining probability as derived from "places." At the beginning of his treatment of fallacies, William quotes Aristotle's differentiation in the *De sophisticis elenchis* of four kinds of disputation: doctrinal or demonstrative, dialectical, testing (*temptative*), and contentious or sophistical (*ibid.*, pp. 85-86). Petrus Hispanus makes no reference to the distinction of kinds of proof in his treatment of "places," but he opens his analysis of fallacies with the distinction between demonstrative, dialectical, and sophistical or contentious syllogisms; dialectical syllogisms argue from probabilities (*op. cit.*, p. 65). Lambert of Auxerre defines both "logic" ("the science of distinguishing the true from the false by argumentation") and "dialectic" ("the art of arts possessing the way to the principles of all methods, for dialectic alone disputes probably concerning the principles of all arts"), and treats the question of their relation to each other: logic as a science and as an art is surer than dialectic, for logic is the science of all syllogisms, whereas dialectic investigates only the dialectical and the apparently dialectical syllogism. Logic is treated in all six books of Aristotle's logic, dialectic only in the *Topics* and *On sophistical refutations* (C. Prantl, *Geschichte der Logik im Abendlande* [Leipzig: Fock, 1927], III, 26).

39. *Regulae ad directionem ingenii* (*Œuvres de Descartes*, ed. C. Adam and P. Tannery [Paris: Cerf, 1908], X, 265 [where he refers to "those chains of the Dialecticians by which they think the human reason is ruled"], 372-73 [where he argues that the operations of the mind with which Dialectic is concerned are useless or impediments because nothing can be superadded to the pure light of reason], and 404-6 [where he says, after explaining rule 10, that all the things which have already been discovered by the arts of man should be examined methodically, that the precepts of the dialecticians are useless for knowledge of the truth and for the discovery of truth, but serve rather to expound to others reasons already known, and they should therefore be transposed from philosophy to rhetoric]).

40. *Ibid.*, p. 430.

41. Francis Bacon, *Instauratio magna, Praefatio* (*The Works of Francis Bacon*, ed. J. Spedding, R. L. Ellis, and D. D. Heath [London: Longman, 1858],

I, 129): "For the dialectic which is received, although it is very properly applied to civil affairs and to those arts which are concerned with discourse and opinion, is not nearly subtle enough to deal with nature, and by grasping at what it does not seize it has contributed more to establishing and perpetuating errors than to opening the way to truth." Cf. *Novum Organum* 1. 82 (*Works*, I, 189): "For dialectical invention is not the discovery of principles and chief axioms of which the arts consist, but only of those things which are consistent with them." Cf. also *De dignitate et augmentis scientiarum* V. 2 (*Works*, I, 617, 620-21).

42. B. Spinoza, *Epistola XVI Hugoni Boxel* (*Spinoza Opera*, ed. C. Gebhardt [Heidelberg, Winter, 1924], IV, 261).

43. I. Kant, *Introduction to Logic*, ii, trans. T. K. Abbot (London: Longmans, Green, 1885), p. 7. Cf. *Critique of Pure Reason*, A 60-62, B 84-86. In the "Transcendental Dialectic" of the *Critique of Pure Reason*, Kant calls dialectic in general a logic of illusion or appearance, and in the "Dialectic of Pure Practical Reason" of the *Critique of Practical Reason* he finds a natural dialectic based on an unavoidable and natural illusion in the speculative use of pure reason in application to appearances. Scholars have asserted, apparently on the basis of examination of text books of logic contemporary with Kant, that there is no historical basis for this use of the term (cf. N. K. Smith, *A Commentary to Kant's 'Critique of Pure Reason'* [London: Macmillan, 1919], p. 441. Smith quotes the authority of Adickes and Meier and concludes, "All historical considerations may therefore be swept aside"). Kant's distinction of analytic and dialectic goes back to Aristotle, but his conception of dialectic is based on the skeptical dialectic. His reference, both at the beginning of his division of general logic into analytic and dialectic in the *Critique of Pure Reason* and again in the *Introduction to Logic*, to the *diállelos*, the circular mode of reasoning to which logicians are driven when they seek a criterion of truth, is an unmistakable indication of this derivation. The circular argument was one of the tropes or arguments by which the later skeptics refuted the "dialecticians," particularly the Stoics, and it recurs again and again in the arguments preserved by Sextus Empiricus (*Outlines of Pyrrhonism* i. 164 and *passim*). The dialecticians were dogmatists, and Kant's opposition of skepticism to dogmatism, and his use of skeptical arguments, reflects the relation as Sextus presents it: those who follow a "scientific" method, according to Kant, may proceed dogmatically, skeptically, or critically. The skeptical arguments or tropes were intended to show that the devices of dialectic are sophistical and to justify the "suspensive" philosophy or skepticism; and since dialectic was employed to refute sophisms, Sextus gives particular attention to sophistical refutations (*ibid.* ii. 229): "It will not, perhaps, be amiss to give our attention for a moment to the subject of

sophisms, seeing that those who glorify Dialectic declare that it is indispensable for exposing sophisms. For, they say, if Dialectic is capable of distinguishing true and false arguments, and sophisms are false arguments, it will also be capable of discerning these, which distort the truth by apparent plausibilities. Hence the Dialecticians, by way of assisting life when it totters, strive earnestly to teach us the conception of sophisms, their differences, and solutions." The article on "Dialele" (*sic*) in the French *Encyclopédie*, which appears on the page opposite "Dialectique," cites Bayle as authority for the statement that the circle was the most formidable of the arguments employed by the skeptics against the dogmatists, and it gives as example the same one as Kant uses of a man who supports his own testimony by a witness for whose trustworthiness he vouches. The article on "dialectique" distinguishes six varieties (following the distinctions and using the language of Gassendi), and a disputatious variety of dialectic is discussed in expounding the Eleatic and the Megarian dialectics. Zeno's dialectic was divided into three kinds, concerned, respectively, with consequences, with conversations, and with disputes (*eristike* = *contensieuse*), although the origin of the last variety was also attributed to Protagoras. The Megarian dialectic had two characteristics: (1) it attacked the demonstrations of others not by the assertions made but by the conclusions arrived at, and (2) it made no use of arguments based on comparisons or resemblances, holding them to be of no value. These descriptions of the contentious dialectic are supported by Diogenes Laertius, who says that the Megarians were called "Eristics" and later "Dialecticians," the latter because they "put their arguments into the form of question and answer" (*op. cit.* ii. 106), and that Protagoras was the first to maintain "that there are two sides to every question, opposed to each other, and he even argued in this fashion, being the first to do so. . . . Furthermore, in his dialectic he neglected the meaning in favor of verbal quibbling, and he was the father of the whole tribe of eristical disputants now so much in evidence. . . . He too first introduced the method of discussion which is called Socratic" (*ibid.* ix. 51-53). The word *Diallele* was changed to *Dialexe* in the second edition of the *Critique of Pure Reason: Dialéxis* and *dialégesthai* are the words which Philostratus puts to two related uses: (1) to describe the method of the ancient sophists (*Lives of the Sophists* 480) by which they treated philosophic "themes," for the sophist differed from the philosopher in that philosophers used a method of questioning to set snares for knowledge and advanced step by step as they confirmed minor points of their investigations, asserting that they had no sure knowledge, whereas sophists of the old school assumed a knowledge of their subject, and (2) to describe one of the forms employed by later rhetoricians, the philosophical dissertation, a popular discourse on an abstract theme as contrasted to

discourses in the forensic style (*ibid.* 568 and *passim*). This style of oratory derived from philosophy "themes" or "indefinite questions" (*hypóthesis, thetikè hypothésis*), like courage, justice, heroes and Gods, the constitution of the universe, as contrasted to the "definite questions" discussed in forensic oratory. This distinction seems to have been commonplace at the time that Cicero wrote his youthful *De inventione*.

There is abundant historical evidence that Kant was aware both of the skeptical character of dialectic as he conceived it and of the historical origins of the skeptical dialectic. In the *Critique of Pure Reason* (B423-424) he calls it the skeptical method and limits its use to dialectic: "This method of watching or even provoking such a conflict of assertions, not in order to decide in favor of one or the other side, but which everybody tries to grasp in vain, and which never can be of any use to any one, even if no resistance were made to him, this method, I say, may be called the *skeptical method*. It is totally different from *skepticism*, or that artificial and scientific agnosticism which undermines the foundations of all knowledge, in order if possible to leave nothing trustworthy and certain anywhere. The skeptical method, on the contrary, aims at certainty, because, while watching a contest which on both sides is carried on honestly and intelligently, it tries to discover the point where the misunderstanding arises, in order to do what is done by wise legislators, namely, to derive from the embarrassments of judges in law-suits information as to what is imperfectly, or not quite accurately, determined in their laws. . . . This skeptical method is essential in transcendental philosophy only, while it may be dispensed with in other fields of investigation." In the *Introduction to Logic* (p. 21) he traces a history of Academic philosophy and relies for its final stages on Sextus Empiricus: "Plato's Academy was succeeded by three other academies, which were founded by his disciples. The first was founded by Speusippus, the second by Arcesilaus, and the third by Carneades. These academies inclined to scepticism. The tone of thought in both Speusippus and Arcesilaus was sceptical, and Carneades went still further in this direction. On this account the sceptics, those subtle, dialectical philosophers, were also called Academics. Accordingly, the Academics followed the first great doubter Pyrrho and his successors. Their teacher Plato had himself given occasion to this, inasmuch as he treated many of his doctrines in the form of *dialogue*, so that reasons *pro* and *contra* were adduced without his giving a decision on them himself, although he was himself very dogmatical. If we take the epoch of scepticism as beginning with Pyrrho, we find a whole school of sceptics who were essentially distinguished from the dogmatical philosophers in their mode of thought and their philosophical method; inasmuch as they adopted as the first maximum of all philosophical reasoning, this—to reserve one's judgment

even where there is the greatest appearance of truth; and propounded the principle that philosophy consists in an equilibrium of judgment, and teaches us to detect false appearance. Of these sceptics, however, nothing remains to use except two works of Sextus Empiricus, in which he has collected all doubts." In his notes on the *Critique of Pure Reason* he underlines both the propaedeutic and the skeptical character of dialectic; cf. *Reflexionen Kants zur Kritik der reinen Vernunft: Aus Kants handschriftlichen Aufzeichnungen*, ed. Benno Erdmann (Leipzig: Fues, 1884), p. 347, #1223: "Die sophistische Dialectik ist eine Kunst des Scheins, die philosophische eine Wissenschaft der Auflösung des Scheins und hat einen propädeutischen Teil, der das Kriterium der Wahrheit enthält, und einen Skeptischen, der die Quellen des Scheins anzeigt und die Wahrheit gegen ihn sichert." Moreover he makes use of the traditional term "thetisch" to characterize the propositions and method of this method (*ibid.*, p. 348, #1225). In his enumeration of the history of logic (*Kant's handschriftlicher Nachlass* [Berlin: Reimer, 1914], Vol. III: *Logik*, p. 58, #1636) he characterizes Aristotle by Dialectic and Canonic and included Sextus Empiricus, Vayer, and Bayle among the Academics. The note "What is Truth" is followed by "Dialele" (*ibid.*, p. 253, #2151), and he returns again and again to specific developments or problems of the skeptics, ancient and modern; cf. *ibid.*, p. 234, #2101; pp. 455–57, #2660; and pp. 766–67, #3305.

44. F. Ueberweg, *System of Logic and History of Logical Doctrines*, Preface, trans. T. M. Indsay (1st ed.; London: Longmans, Green, 1871), p. xi.

45. *Ibid.*, pp. 74–76.

46. F. H. Bradley, *The Principles of Logic* (2d ed.; London: Oxford University Press, 1922), II, 590–91.

47. R. G. Collingwood, *An Essay on Metaphysics* (Oxford: Clarendon Press, 1940), pp. 153–61.

48. R. G. Collingwood, *Speculum Mentis* (Oxford: Clarendon Press, 1924), p. 80.

49. *Ibid.*, pp. 77–78.

50. *Ibid.*, pp. 207–8.

51. *Ibid.*, pp. 285–87.

52. "Letter to John Adams, July 5, 1814," *The Complete Thomas Jefferson*, ed. S. K. Padover (New York: Tudor, 1943), pp. 1034–35.

53. "Letter to John Adams, November 5, 1819," *ibid.*, pp. 1036–37.

54. "Prospectus on Political Economy," *ibid.*, p. 370.

55. John Dewey, "From Absolutism to Experimentalism," *Contemporary American Philosophers*, ed. G. P. Adams and W. P. Montague (New York: Macmillan, 1930), II, 18–19.

56. Gassendi recommends the Canons of Epicurus in his *Philosophiae Epicuri syntagma (Petri Gassendi Opera Omnia* [Florence, 1727], III, 4), not only because they make unnecessary dialectic which is inane loquacity and sophistry and is totally superfluous to understanding and judging the analyses and proofs of physics, but also because they are brief, as opposed to the prolixity of dialectic, and can be viewed either as part of philosophy, that is, logic, or as a short introduction to physics.

57. K. Jaspers, *The Way to Wisdom: An Introduction to Philosophy*, trans. R. Mannheim (New Haven: Yale University Press, 1951), p. 124.

58. John Dewey, *Logic: The Theory of Inquiry* (New York: Henry Holt, 1938), pp. 513–14. Cf. also *ibid.*, p. 534, where he says of the discussion and conclusions concerning the relations of logic and philosophical systems: "They are undertaken in order to provide an indirect confirmation of the position taken in the book. I shall not repeat what has been said to the effect that selective emphases from the actual pattern of inquiry are fallacious because their material is extracted from their context, and thereby made structural instead of functional, ontological instead of logical."

59. Karl Popper, thus, demonstrates that "dialectic" has a meaning as a method of trial and error which is understandable, and in that meaning dialectic has limited use, but in its more usual form, particularly as developed by Hegel, it is exaggerated and dangerously misleading. To effect this demonstration Popper must of course take his stand for one of the univocal logics; cf. "What is Dialectic?" *Mind* XLIX (1940), p. 411: "At present, I only want to mention that our analysis does not lead us to assume that dialectic has any sort of similarity to logic. For logic can be described—roughly, but well enough for our present purposes—as a theory of deduction. We have no reason to believe that dialectic has anything to do with deduction."

60. J. S. Mill, *On Liberty*, chap. ii, "On the Liberty of Thought and Expression."

61. John Dewey, *Freedom and Culture* (New York: G. P. Putnam's Sons, 1939), p. 173.