participation

A PLATONIC INQUIRY

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To My Mother

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PREFACE

The great problem of modern philosophy, that which indeed constitutes its unique and all-pervading form, is *how* mind relates to nature. It arises through Descartes' "discovery" that mind and the complex of natural fact require different descriptions or, more technically, different predicates,[1] such that what is characteristic of the one is not characteristic of the other; and so they appear to be ontologically distinct. The unity of lived experience discloses the real togetherness of mind and its primary fact, the human body; but the *how* of this connection has been the subject of seemingly endless controversy. The secondary consequence of this bifurcation has been epistemological, for the disjunction of mind and nature raises the problem as to how thought can be about the world.[2]

Put so broadly, the issue is over-simplified and rendered almost trivial; but it does disclose that almost unavoidable chasm which separates mind—the instrument of feeling, valuation, and knowledge—from the dynamics of extensive natural process to which that mind is supposed to respond, which it is to order, and which

[1] See Fred Sommers, "Predicability," in Max Black (ed.), *Philosophy in America* (Ithaca, 1965), 262–81. Sommers offers a most interesting set of instruments for detecting both nonunivocal predication and dualism within the logical subject. I have availed myself of many of his insights in this study.

[2] "Thus there would be two natures, one the conjecture and the other the dream." A. N. Whitehead, *Concept of Nature* (Cambridge, England, 1920), 30. The point of Whitehead's remark has its analogue in Plato's separationist doctrine of form, criticized in *Parmenides* (especially, 132B–C, 133A–134E).

it is to move to higher levels of ideal achievement. How can this purely private world relate to common, public fact? How we shape nature in the large, as in technology, and in ourselves, as in ethical decision, remains a mystery.

Sometimes we understand ourselves best when in self-forgetfulness we respond to the lure of strange and foreign things; and in the odd distortions of our common view these novel concerns provide, we truly grasp ourselves and first discover what we are. The Greeks have been just such a magic mirror for the civilization of the West, giving us back ourselves whole and somehow free to grasp larger and more important things. Can we hope here, too, to find in Greek philosophy a way out of the dreary dualistic ritual, with its fetishes of physical, phenomenal, and ordinary languages, its "magic" substances? Perhaps the real answer to ontological and epistemological dualism may be found in the pursuit of an analogous problem raised in classical philosophy by Plato, that of participation. But we shall hear that he did not solve it either, that in fact he is responsible for all the pseudo-philosophy that an analytic and scientific age is just learning to cast aside. And in the springtime of cartesianism others went to Plato for counsel and advice; no one is apt to see in their theories the happy issue of our perplexity. Can we do better? Can we indeed talk sense?

This study is another attempt to realize such a hope. It is animated by the belief that a way of coherently thinking about diverse ontological constituents can be found within the context of the hoary problem of participation. Perhaps no problem in all of philosophy has received the closer attention of abler minds, nor does any seem more remote from "solution." The effort to come to grips with it precipitated Aristotle, just as its analogues, nature and grace, precipitated scholasticism, and dualism, post-cartesian philosophy. The scope that Plato's explicit problem has received in the recent journals is rather overwhelming. And so if we go back from our world to that of Plato, are we not substituting one perplexity for another? What gain does this transformation promise? I believe that I can bring Plato's problem to a partial solution which will have contemporary relevance.

Plato was by temperament, by training, by historic situation, and by native genius most lavishly endowed to do philosophy. He was ruthlessly honest, both with himself and his readers. Inspired by the heroic and martyred Socrates, he undertook to construct in theory a cosmos, a polis, and a type of individual character which he understood to image his magnificent master. All of us know the story of how this involved the postulation of a realm of ideas to which the things of this world stood as mere shadowy images and that in this realm, that of the "really real," what Socrates was and meant would receive eternal embodiment. But somewhere in the middle of this journey the aging Plato awoke as in a dark wood, having lost the way; for all metaphor aside, the manner in which form relates to nature had become obscure. The easy simplicities of the idea realm became irrelevant to the comprehension of fact (*Parmenides*, 133B–135A), and one had to begin again. Participation, which related the two realms, had become a problem.

This new beginning, which marks the so-called later phase of Plato's thought, is the immediate subject of this study. We hope to show what is not always granted, that in *Parmenides* Plato faced that disruption of unity which is ontological bifurcation and pointed to a solution which is implicit in the remaining dialogues. These dialogues contain suggestions for a new doctrine of nature, man, and the cognitive and valuational structure of the cosmos and provide us with a more adequate and applicable model than those theories which have dominated our philosophy since Descartes. Thus we believe Plato a speculative philosopher of important contemporary consequences:[3] that is to say, we shall try to do him on the American, rather than the English, model. This means that our concern for language and philology will be impoverished and that there will be more than a comfortable amount of metaphysics and speculative cosmology. Our masters will be Aristotle, Augustine, Aquinas, Leibniz, Kant, Hume, and Whitehead and not Russell, Moore, Wittgenstein, Austin, and

[3] Robert S. Brumbaugh, *Plato on the One* (New Haven, 1961), 12.

Ryle.[4] Insofar as our concern will be with a given text, we would like to think that we have learned more from Strauss, Klein, and Rosen than from Owen or Vlastos; though except for an analysis of the first half of *Meno*, our theme has led us away from a concern with the dramatic form of the dialogues into speculative philosophy and no doubt to a trivialization of Plato's real insights. This, then, is a platonic study, not a study in Plato. So much by way of promise. The road to realization is long and hard, and we shall no doubt end up among those who really lost the way. But that is a happy and spirited company, and to join with them is enough for any man.

Participation concerns the fit of the forms to the world; but since *what* the forms are and *how* we are to take the world are issues upon which students of Plato strongly disagree, we must get clear about the nature of these relata before we can consider the structure of participation which is supposed to join them. We shall give in the first chapter an analysis of relevant sections of *Meno* and, using certain logico-mathematical methods as diagnostic, show that the initial version of the idea theory requires that we treat ideas as both thing-like constituents of fact and norms or measures. The second chapter will be concerned with the several tendencies, personal and philosophical, in the middle dialogues which led Plato to a separationist ontology, one wherein ideas were sublimed and the world Heracliteanized, a complex of fleeting images. The following chapter presents an extended analysis of the several arguments concerning participation in the first part of *Parmenides*. If our previous discussion and characterization of the developing idea theory is correct, then the critical attention which these arguments in *Parmenides* has received in recent decades is largely misinformed. Plato's concern was rather different from what it has been taken to be; and thus contemporary scholarship has without exception failed to see the point of

[4] This is not meant to disparage the work of these excellent men, many of whom made noteworthy contributions to the study of Plato and one of whom, Ludwig Wittgenstein, may well be closer to Socrates than any other; but rather this is to suggest another and equally living tradition from which this inquiry takes its departure.

his arguments concerning participation and has neglected as a consequence the positive grounds for a solution to the problem which is implicit therein. The purposes of these first three chapters is to arrive at what Plato said and meant; but the final two chapters, speculative in spirit, offer a solution to this Platonic problem, the themes for which are freely drawn from *Theaetetus*, *Sophist*, and *Timaeus*. As Professor Stanley Rosen says, Plato himself tells us that no one can know the authentic teaching of Plato.[5] A genuinely Platonic problem is not to be solved by scholarship, however helpful that may be, but by doing philosophy itself. In its primary signification, "participation" refers to the way in which an instance of Becoming, which we shall call an "image," is grounded in entities of various ontological types. Usually one thinks of this ground as lying in the eternal ideas. One assumes that the image itself is a mere reflection of an idea and, as such, has no being for itself, no integral act. But the ideas are likely to seem equally unsubstantial; for if we seriously reflect upon them, ideas appear to be little more than sublimed versions of images, rescued by virtue of their presumed eternity from the ravages of time and incompleteness, the fate of the world of images which Becomes and never wholly is. One then can conjoin to this dreamworld of ideas and images the preposterous fable of recollection whereby, to twist the figure of the aviary (*Theaetetus*, 198D ff), nous becomes a sort of etherialized Noah's ark possessing the exemplary form of every natural type and kind. That something like this should prevail as "Plato's philosophy" is difficult to comprehend in view of his mighty efforts to disabuse us. *Parmenides* demonstrates the absurdity in treating ideas as isolated, thing-like entities, while *Sophist* at-

[5] Since they reflect the spirit of this inquiry, Dr. Rosen's remarks are worth quoting in further detail: ". . . I am not engaged in an interpretation of Plato's dialogues, at least in the normal, scholarly sense. It seems obvious to me that the dialogues are impossible to understand if we take them by themselves as an object for analysis, without attempting to think through their fundamental themes on the basis of our total experience. This is surely the direction towards which the dialogues themselves are pointing." Stanley Rosen, "Ideas," *Review of Metaphysics*, XVI (1963), 408.

tempts to show us that images and ideas are modes of power, acting and being acted upon. Using the account of perception in *Theaetetus* as our model, we shall try to show that the ideas are the intelligible forms or structures of Becoming, the formal specifications of the way things actively relate to one another. Since Becoming is an interactive community of real existences, an image has its ground, or participates, in other images in its extensive environment; and an idea as such is the form of this interaction. The "subject" image participates in the "object" image in a formally determinate manner. Ideas are the potentials for facts of relatedness within Becoming itself. As constituting the form of a given real relation, an idea is immanent; as a possible for reenactment it transcends nature. The fundamental real relation in Becoming is that whereby a given image participates in its own past and thus achieves in the atomic other and other of time continuity and self-identity. The receptacle is the condition defining the possibility of such temporal, as well as spatial, facts of connectedness. God is the locus of ideal values expressive of the way an image should constitute its route in space and time, the lure to the realization of maximal value. If the idea is the *what* of the mutual participation of images, the *how* belongs to psyche. Soul is the discriminatory and selective agency in each image through which that image erotically shapes its historic route. The way an image Becomes is through the response of psyche to the necessities of the receptacle, the pure possibilities (ideas) not implicated in its physical environment, and the suasive agency of the ideal grounded in God. The full account of participation must therefore express the mutual relevance of God, psyche, ideas, and receptacle. These are the grand themes of *Timaeus*.

Except where otherwise noted, the quotations from Plato in the text are from Jowett's translation of the *Dialogues of Plato* (4th ed., Rev.; Oxford, 1953), and are used with the kind permission of the Clarendon Press. There are many excellent translations of individual dialogues, and most have been consulted; but Jowett offers the English reader the advantages of a uniform style and

rendering of technical terms, and the present revision by D. J. Allen and H. E. Dale brings it up to the level of recent scholarship.

Portions of Appendix A appeared in my article, "Speculative Demonstration," *Journal of Philosophy*, LVIII (1961); while several paragraphs in the final chapter are taken from "The World Soul in Plato's *Timaeus*," in *Southern Journal of Philosophy*, V (1967).

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CONTENTS

I	The Early Theory of Ideas	3
II	Plato's Metaphysical Dualism	41
III	The Broken Bond: *Parmenides*	69
IV	Participation	116
V	The Soul and the World	157
	Appendices	197
	Index	219

I THE EARLY THEORY OF IDEAS

IF Western philosophy did not derive from Plato in quite the way Whitehead maintained, nevertheless it is apparent that every school (and virtually every individual thinker), has "rationalized" its beliefs and doctrines through the discovery of some presumed ground in the dialogues of Plato. Since philosophy everywhere disagrees with itself, one might imagine that some sort of order and agreement could be found for philosophy in Plato himself; and thus we might suppose a great task set for sheer scholarship, that of hermeneutics, that of communicating to philosophy the truth about its own ground. Surely this would be welcome, for everyone knows the situation to be a positive scandal. Philosophers seem to agree on nothing, not even on what philosophy is; and yet they insist on teaching it and inform entire curricula, perhaps even historic epochs, with their confusion. They prate of unity and order and everywhere produce chaos. Perhaps Socrates' fate was ironically a measure of the integrity of the Athenean polis, and the prevalence of philosophers today a condemnation of our own.

We turn to scholarship in the hope that it will uncover the truth and rescue us from ourselves.[1] Modern scholarship was a

[1] In his indispensable bibliography, *Plato (1950–57)*, Harold Cherniss lists over two thousand items for the brief period in question. A recent bibliography on the genetics of fruit flies covering six years records over three thousand items; Plato is at least as interesting.

discovery of nineteenth century German culture which sought to do for ancient texts and humanistic learning what science did for nature; and Plato, who figured so strongly in the romantic culture of that era, was given almost as much attention as that other great shibboleth of truth, the Bible. To the scholar, every document became a vast fund of diverse sources, the unknown (generally) but conveniently postulated atoms of scholarship; and to understand the text was to understand how the sources were put together. For example, *Genesis* became an unwieldy mixture of J, L, and Y sources, while poor Homer emerged as an entire folk. Plato fared no better, but with him the problem was especially acute. Not only did he seem to echo every known fragment from Aeschylus to Zeno, but there was also the rather embarrassing fact that the discoverer of logical argumentation (or was that Parmenides?) seemed everywhere to contradict himself. Nor did he seem to say what his greatest student and contemporary, Aristotle, reported him to have said.[2] What a delight he provided scholars!

The first thing the scholar does when he encounters textual discrepancy is to order the text. Things which do not fit in, on such grounds as style, doctrine, or ancient authority, are cast aside as spurious. Indeed Plato himself seems to have invented this method in his etymological investigations in *Cratylus*: words which did not fit into some preassigned schema were said to be of foreign, rather than Greek, origin. This is a very useful tool for the scholar, for it will enable him to preserve his most cherished opinions in the face of the most stubborn facts. Plato, who gave us this admittedly useful tool, invoked it in the spirit of comedy, something which we in the high seriousness of *philodoxia* are unable to appreciate. And so vast segments of the canon received from antiquity (which, by the way, could not agree on what Plato wrote either) were cast aside. But what to preserve? Fortunately

[2] One of the more distressing features of scholarship is to ignore the text and consult the authorities. In Plato's case this involved consulting the Alexandrians, who had the mentality of *True Confession* addicts and who were mostly under degenerate cynic, stoic, epicurean, or neo-platonic influences.

there was some common core remaining, but even here there was a wide variety of style and doctrine. Given this confusion, scholarship invokes its second tool, the genetic arrangement of material. Some temporal order in composition is assumed, and changes are explained through psychological, economic, historic, sociological and every known variety of analysis. Out of this come "periods," in Plato's case three, largely supported through questionable sources, in this case the *Seventh Epistle*. An examination of the work of those who have ordered Plato, such as Arnim, Lutoshawski, Raeder, Wilamowitz–Mollendorff, Ross, Cherniss, Owen, Ryle, and the present author, will disclose that no one agrees with anyone else as to which dialogues are to go where or with their arrangement within a given period. Perhaps one can order the dialogues in such a manner as to support virtually any doctrine.

If the task the whole presents is too great, perhaps we might center on a minute segment and come to the truth about that. It is not without malice that I would direct attention to *Parmenides* 132A–B which occupies some dozen lines of text. Since the argument is "logical," the machinery of modern logic can be linked up with the techniques of philology, and the truth will show. But it has not come out that way. No single text has produced a wider and more extended range of dispute. The ancients discussed it extensively, and no issue in modern philosophy has provoked greater interest. The bibliography is as the stars, and this study will itself join the lesser luminaries. It proposes yet another solution.

Had we taken our Plato seriously, he could have helped us avoid so much futile, wasted effort. After all, was not he in *Ion* extremely contemptuous of those who would justify their statements upon the inspired authority of another? He who had disdain for every tradition as a tradition, as unthinking routine, would have found it absurd that others should ground themselves on him and that his philosophy, as *philodoxia*, should be the main source of the Western idiom of thought. And to those who would interpret the real meaning of what he said, he offers the

interlude on poetic interpretation, which has become the form of humanistic learning, in *Protagoras* (342B–347B) and concludes, after a prodigious display of "critical" acumen, with the following:

> The talk about the poets seems to me like a commonplace entertainment to which a vulgar company have recourse; who by reason of their stupidity are not able to converse or amuse one another, while they are drinking, with the sound of their own voices and conversation . . . hiring for a great sum the voice of a flute instead of their own breath, to be the medium of intercourse among them; but where the company are real gentlemen and men of education, you will see no flute girls, nor dancing girls, nor harp girls; and they have no nonsense or silly games, but are contented with one another's conversation. . . . And a company like this of ours, and men such as we profess to be, do not require the help of another's voice, or that of the poets whom you cannot interrogate about the meaning of what they are saying; people who cite them declaring, some that the poet has one meaning, and others that he has another, and the point which is in dispute can never be decided. This sort of entertainment they decline, and in social intercourse prefer to rely on their own resources, and to put one another to the proof in conversation. . . . Leaving the poets, let us discourse with one another from our own resources, and make proof of the truth and of ourselves in conversation. (347C–348A.)

He knew the nature of "scholarship" even before it existed and passed what must be a kind of final judgment upon it.

But Plato's most serious judgment is passed on scholar, teacher, and philosopher alike. In spite of the fact that he could rise to a height of style beyond that reached by any writer, transforming doctrine into myth and a kind of poetry, he maintained that his philosophy had never been written (*Seventh Epistle*, 344C) and that writing was a poor substitute for the *logos* which can dwell only in the living soul, in those engaged in the act of discourse and dialectic (*Phaedrus*, 277D–278B). Though a poet and the source of one of the great thematic currents of Western poetry, he thought of it as degenerate and unworthy of the concern of men who are lovers of truth and beauty. Though the founder of the first university and one of the greatest of teachers, he taught

nothing and believed, except in mathematics and the arts, teaching to be impossible.

How then does one deal with such a man? He who would have no followers except in the pursuit of truth has for centuries charmed, like a pied piper, virtually the entire tribe of philosophers into following him. Emerson said: "Philosophy is Plato, and Plato philosophy." Surely that would have revolted him. Yet in spite of his efforts to turn us aside, and in spite of the different situation and genius of each of us, we continue to write about him, to seek to ground ourselves in his remarkable vision, and to teach others to do likewise. We cannot ignore him. Any man who can inspire the piety of an Augustine, the mathematics of a Leibniz, the poetry of a Dante, or the science of a Heisenberg is a man to be taken seriously. Taking him seriously is, oddly enough, to do all the things he protested against—scholarship, teaching, poetry, philosophy—but to do them with something of his sense of irony, a recognition of the essentially comic character of the highest and noblest callings and of man's final and inescapable ignorance.

Our task is to take up again the problem of "participation." This is perhaps the greatest problem in Plato. As José Benardete reminds us, Plato was the only philosopher who raised problems as such; and though the rest of us like to think of ourselves as opening up issues, the problems we really raise lie in the generally unacceptable character of our conclusions.[3] The best we can hope is that what we considered final and settled may be of interest to others.

"Participation" is the name of the "relation" which accounts for the togetherness of elements of diverse ontological type in the essential unity of a single instance. In this sense, it is a real relation, one constitutive of the nexus qua nexus which arises from it. That we are everywhere confronted by instances of analogous unities is evident, e.g. in biology, where "life" is present in physical-chemical systems, or in psychology, wherein conscious-

[3] José A. Benardete, *Infinity: An Essay in Metaphysics* (Oxford, 1964), vii.

ness seems to inform the behavior of an organism.[4] Now the evident may be only apparent, for it is frequently the case that we can successfully resort to reductionism, defining the higher elements in terms of the lower, of which they may be considered specializations. Materialism is an example of this tendency. Sometimes it may be possible to define the lower functions in terms of those of some higher order, a tendency evidenced in idealism. Platonism itself faced similar reductionistic claims, neo-Platonism assimilating the things of the world to the ideas and Aristotle and the later nominalists illustrating stages in the opposite direction. But at times it seems that both ontological orders can make exceedingly strong claims to their necessary inclusion in the analysis of the presumed whole. How they are together as a single unity then becomes a problem.

Plato confronted this problem in a radical way. It is customary to conceive of his philosophy as emerging from Parmenideanism on the one hand and from Heracliteanism on the other. The flux of Heraclitus was by him transformed into Becoming, and the timeless One of Parmenides became the unitary ideas, the realm of Being. In the early fourth century, however, both of these traditions had degenerated into Sophistry. Protagoras had informed his relativism with Heraclitus, and Parmenides had become the basis for the eristic and paradoxical logic of Antisthenes and the Megaric school. It was above all a concern for Sophistic that constituted the real unity of Plato's thought, and this was of course the model Socrates himself had given him. This indeed accounts for the Pythagorean or mathematical strand in his philosophy: it was Socrates' search for the measure (*Protagoras,* 357B; *Euthyphro,* 6E; *Politicus,* 383C–387A; *Republic,* 472C–473B) which led Plato to Pythagoreanism; for in Plato's view mathematics measures us and not we it. Mathematics is a timeless truth which lies

[4] If we choose to call Plato's problem a "type" difference, then it is of a different order from those given in the examples. Thus, consciousness shares some predicates with the body, for example "temporal," but an idea does not share character with its instance: it is these characteristics but is neither spatial, temporal, etc.

beyond the apparent look of things and is a critic of our fleeting opinions.[5] These are the "atoms" with which scholarship must work.

In the next section we will see that the initial synthesis Plato effected yields an ontological bifurcation between Being and Becoming; but it now behooves us to state certain assumptions which will guide our inquiry. Perhaps these in some measure distort Plato's intentions, and we should honor these before we inflict our own bias.

It was probably Plato's primary aim to track down the Sophist and, once having caught and overthrown him, establish philosophy. His interest in Parmenides and Heraclitus was to deny to those who would seek cover in their doctrines the defense these might offer. In so doing, he effected a purgation of these philosophies, making them available to his own metaphysics. In purging Heracliteanism of Protagorean motifs, he arrived at Becoming; and having rid Parmenideanism of Megaric corruption, he was free to use it as a guide to an adequate account of Being. Even here we encounter an ambiguity. Plato, with almost incredible integrity, always gave his intended victim a day in court; and so what sometimes appears to be a purely Platonic doctrine or dialectical exercise may well be his effort to give adequate expression to a rival position.[6] Thus what is first seen as a Platonic position may be part of his concern to be a philosopher, one who loves truth more than his own opinions. Sophistry is the real enemy; yet philosophy bids us stop and ponder the possible truth of those who would deny its possibility. That may be the greatest charm of philosophy; for it is perhaps the only serious undertaking of

[5] The most moving statement of this side of Platonism may be found in St. Augustine's *De Musica* and *Freedom of the Will,* especially Book I.

[6] Obvious instances are the defense of Protagoras in *Theatetus* and the provision of a hedonism commensurate with Protagoras' relativism in *Protagoras.* Arthur Peck in "Plato versus Parmenides," *Philosophical Review,* LXXI (1962), 159 ff and A. E. Taylor in *The Parmenides of Plato* (Oxford, 1934), 9 have seen *Parmenides* in a similar light. A position we intend to attribute to Plato, the theory of perception in *Theaetetus,* may be an effort to do justice to Protagoras and Heraclitus.

man which includes, indeed honors, those who deny its relevance and possibility. It is this bias against Sophistry which colors all of Plato's interests: is he concerned with politics, or is it with ferreting out Thrasymachus, Callicles, and Gorgias; with poetry, or with Ion; with rhetoric, or with Isocrates and Lysias; with language, or with Prodicus and Cratylus? Plato's approach is not Aristotle's, not wonder and speculative detachment, the pursuit of the problem for its own sake. It is a moral, even a religious, concern to free men from Sophistry—wherein private opinion founded on the immediately sensed is the measure and the rule of truth—for philosophy, the art of ignorance and the rule of him who alone is truly wise, God. Thus we run a risk when we develop a doctrine out of our own metaphysical or cosmological interests in the belief that it is Plato's own, when for him these concerns were hardly primary.[7]

I am prepared to assume that Plato was, in his later phase, a philosopher of process and that Whitehead was fully justified in attributing many of his own insights to Plato. This is surely debatable.[8] It is reasonable to associate this interest in Plato with his teacher Cratylus; though here it must be admitted that Aristotle, our source for this information, never really came to recognize the centrality of a flux doctrine in his own teacher.[9] His criticism of Plato is that of a philosopher of substance, not of process, who did not quite succeed in bringing it off. But Aristotle is notorious for reading the history of philosophy as if each of his

7 J. S. Mill's belief that his utilitarianism had its origins in Plato should serve as a humorous warning to all of us.

8 The most sustained protest against reading Plato as a proto-Whiteheadean has been made by F. M. Cornford in *Plato's Theory of Knowledge* (London, 1946), VII–IX, and *Plato's Cosmology* (London, 1956), XI–XII. A. E. Taylor, a better philosopher though a poorer classicist, has found a closer agreement; and his occasional remarks on Whitehead's relation to Plato in *A Commentary on Plato's Timaeus* (Oxford, 1928) are important. Like Taylor, R. G. Collingwood sees considerable compatibility between Plato and Whitehead in *The Idea of Nature* (Oxford, 1945), *passim*.

9 Aristotle, *Metaphysics*, 987a 32–b1. The most useful remarks on Plato's relation to Cratylus are found in Collingwood, *Idea of Nature*, 65–68. For the influence of Parmenides, see also 68–70.

great predecessors were seeking for what he himself found. We know him to be frequently inaccurate, never more so than when he is dealing with Plato.[10] But if we do assume that Plato had an interest in giving an account of nature which was in part a reformulation of Heracliteanism, this entails a certain reading of the text and an ordering of Plato's methods and insights. The only final justification would be that of Aristotle for his analogous treatment of other philosophers: his way of reading them was such as to lead more closely to what he thought was the truth. This is *hybris* but it is the only way to do philosophy. This process thesis shall inform my approach to Plato, and I believe it to be mostly true.

If we do make this stipulation, it entails that participation be understood, not as the relation between particulars and forms or universals, but between events and their determinate structures. We shall see that this approach is radically different from that found in previous treatments of the problem.

In our first characterization of participation[11] we held that it

10 All concerned to understand the relations between Plato and Aristotle owe an immeasurable debt to Harold Cherniss, *The Riddle of the Early Academy* (Berkeley, 1945), and *Aristotle's Criticism of Plato and the Academy* (Baltimore, 1944). The most amusing account of this relation, and indeed of Platonic chronology and biography as a whole, is to be found in Gilbert Ryle's brilliant tour de force, *Plato's Progress* (Cambridge, England, 1966). Parodying "meta-physicians" who seek for explanation for the given fact in the occult and unknown, rather than in "the at hand" of common language and experience, Ryle postulates a mythical history of Plato and his school and then explains away the evident on its basis. For instance, rather than looking for a philosophical or internal reason for the virtual disappearance of Socrates from the later dialogues, he assumes that Plato used to take the "Socrates" role in acting out the dialogues but that a speech impairment c.357 B.C. prevented him from continuing this part and changed his relations to students and colleagues. The evidence for this long and elaborate argument is a remark by Seneca, who lived several hundred years later, that Plato suffered from an unknown illness after his second journey to Sicily. Thus, on the basis of literally no evidence, Ryle concludes that this led to a speech impairment. Never has the philosophy of ordinary language had quite so much fun at the expense of more traditional modes of philosophy. As to Aristotle's relation to the pre-Socratics, see Harold Cherniss, *Aristotle's Criticism of the Pre-Socratic Philosophers* (Baltimore, 1935).

11 *Supra*, 7.

was confronted by Plato as involving a radical type distinction. Just how radical this was should now be apparent. If Being and Becoming are the elements involved in a synthesis,[12] a synthesis which issues in a concrete unity, then they are of the greatest possible type diversity. How Being can be incarnate in Becoming and Becoming be an epiphany of Being are said by Christians to be mysteries of the faith. Mysteries are said to defy finite understanding. In this case the theologians may be partially mistaken. We hope to show that a generalization of incarnation or, its converse, epiphany, presents no special mystery, that the two realms can be together in the unity of one whole, preserving indeed an analogue to the Christological theory in the creed of St. Athanasius which can be formulated within the limits of "natural" reason. This brings us to our second assumption, that in his later dialogues Plato had an overriding concern for unity.

The third assumption is that there is an order in the development of Plato's doctrines which is reflected in the order in which the dialogues were written. The obvious danger in this assumption is that one's evaluation of the relative importance of the various phases of a doctrine will determine how chronology is to be assigned. In this study we shall attack the doctrine of transcendent or separated form which is advanced in the middle dialogues, the acknowledged representatives of which are *Phaedo*, *Symposium*, and most of *Republic*. It is generally agreed that this period is brought to a close with *Parmenides* and with what appears to be a refutation of the "transcendency" thesis. What happens thereafter to the form theory is an open question. The minority view, first advanced by the neo-Kantians and Jowett and recently revived by Xenakis and G. E. L. Owen,[13] is that hence-

[12] This statement is not accurate, since it is not Becoming itself which is the element, but rather the receptacle (*Timaeus*, 48A ff); but it has a heuristic value which would be lacking in a more precise statement at this stage of the argument.

[13] G. E. L. Owen, "The Place of the *Timaeus* in Plato's Dialogues," in R. E. Allen (ed.), *Studies in Plato's Metaphysics* (London, 1965) 313–38; and Jason Xenakis, "Plato on Statement and Truth-Value," *Mind*, LXVI (new series, 1957), 165–72.

forth the form or idea theory disappears from Plato. The majority opinion is that Plato continued to hold to his theory, but there is no general agreement as to the status he assigned to form. Most scholars seem to hold that form remains transcendent, either because the arguments in *Parmenides* are invalid, are not intended as refutations, or because Plato was unwilling or unable to offer an alternative to his earlier views. On the other hand, some hold that form becomes wholly immanent, or (as in the case of this study) at least partly so.[14] Each of the above versions will suggest a different chronology. If one takes the position of this present enquiry, then one will want to put every suggestion of immanence quite at the end of Plato's productive period; but then *Meno* would come very late indeed. This is plainly silly. One of the few unmistakable internal references in the dialogues refers us back from *Phaedo* (72E–74A) to the incident of the slave boy in *Meno* (81B–85C). We want, with Whitehead, to say that Plato found form in the facts, and that the period of extreme transcendency was an unfortunate digression.[15] But if Plato's concern is to put a net around Sophistry, then the clearly separated form as the real measure of human opinion must remain his most powerful weapon, and any effort towards immanentization must be taken as a digression.

I have tried to state the case against our general thesis that Plato made ideas ingredient in nature. I believe that it reflects Plato's intention and that it can be justified from the text; but the final justification is the adequacy of the resulting doctrine and not skill with the text (which can result only in *philodoxia*, not philosophy). So we assume a certain order and a certain theme; but since the statement and the defense of the theme will occupy

[14] The position on Plato which most closely resembles that found herein is that of Collingwood, *Idea of Nature*, 55–79. His remark that imitation implies transcendence and participation immanence is especially important (see page 61), as is his contention that immanence and transcendence mutually entail one another.

[15] A. N. Whitehead, *Process and Reality* (New York, 1949), 30. Sir David Ross, *Plato's Theory of Ideas* (Oxford, 1951), 18–21, holds that in the earlier dialectic Plato assigns an "immanent status to ideas and that it is only with *Phaedo* and, perhaps, *Symposium* that they come to transcend their instances."

the remainder of this essay, a few remarks on the order we give to the dialogues will be appropriate.

There is rather substantial agreement concerning the productions of Plato's last phase. Except for *Phaedrus, Timaeus, Cratylus,* and *Theaetetus,* there is virtually no disagreement as to which dialogues should follow *Parmenides.* The *Parmenides* obviously celebrates a crisis in the idea theory, real or apparent, and the task thereafter is one of taking account of the import of this critique. Those who argue that Plato thereafter abandoned the idea theory, or at least considerably weakened his stand with respect to it, must somehow make *Timaeus* (and its apparent successor, *Critias)* belong to the middle period; it seems to pick up the conversation of the *Republic.* If this can be accomplished, then one can include in this same group *Cratylus* and *Phaedrus,* since stylistically they are closer to the Socratic dialogues or the *Republic* than to *Philebus* and *Sophist,* admittedly late. One has then only to assume that the *Seventh Epistle* is spurious, and one is free to assume that Plato thereafter became a logical analyst, an ordinary language philosopher, or a positivist. But H. F. Cherniss, in a brilliant reply to Owen's effort to place the *Timaeus* in the middle period, has shown beyond reasonable doubt that the tradition which since Plutarch has placed *Timaeus* towards the end of Plato's life is correct.[16] Since *Phaedrus* offers a rationale for and expresses a concern with the methods of collection and division, the subject of much discussion in *Politicus* and *Sophist,* we will, following Stenzel, place it in the final period.[17] Stenzel also presents good reasons for placing the *Cratylus* among these later dialogues. Its special concern for Heraclitus links it with *Theaetetus;* and, as we shall later seek to show, its view of form has very strong affinities with *Timaeus.* That leaves us with *Theaetetus,* which appears, at least in part, to be Plato's

[16] Owen, "The Place of the *Timaeus,*" and Harold Cherniss, "The Relation of the *Timaeus* to Plato's Later Dialogues," in Allen, *Studies in Plato's Metaphysics,* 339–78.

[17] Appropriate references to the complex problem of dating the dialogues may be found in Ross, *Plato's Theory of Ideas,* 1–10.

effort to go as far as one can in epistemology without recourse to the form theory. If we can assume that *Parmenides* was a well-intentioned effort by Plato to show that his previous view of form was inadequate, then *Theaetetus* may be assumed to follow in logic, if not in fact, that critique. Plato may have been aware of the problems he raised in *Parmenides* before he wrote it, and so the actual order of composition may be quite irrelevant. That the idea theory continues to show itself in *Theaetetus* (172B, 184B–186D) has been argued by Ballard and Cornford, and that it is necessitated by the perpetual model (153D–157C) will be argued later.[18] We shall therefore conclude that the following dialogues make up the final set: *Parmenides, Theaetetus, Sophist, Politicus, Cratylus, Phaedrus, Timaeus, Critias, Epinomis, Seventh Epistle, Philebus, Laws.* This arrangement is based on what I take to be the logic of the developing dialectic and is not intended to be strictly chronological. Certainly no conclusions should be drawn from it per se.

The Early Idea Theory

It is generally agreed that by the end of the period marked by the "middle" dialogues, Plato encountered a major difficulty which threatened to wreck the entire structure he had erected out of the moral and political concern of his master Socrates. That structure rested on a theory which held that ideas are the true causes and explanations of phenomena and that they are related to their instances by "participation." In *Parmenides* this relation is called into question. In order that we can understand the theory and the difficulty which he encountered, it is necessary to begin with the first emergence of *idea* (or *eidos*) as a technical term in Plato's philosophic vocabulary. *Idea* apparently occurs for the first time in *Meno,* and an analysis of that dialogue will carry us into the "middle" period and the problems raised by participation.

An ancient legend has it that before he met and fell under the

[18] Edward G. Ballard, *Socratic Ignorance* (The Hague, 1965), 129; Cornford, *Plato's Theory of Knowledge, passim.*

charm of Socrates, Plato was a comic poet. If not literally true, it is what should have been the case and, indeed, should be the case with all philosophers. As for comedy, one could on meeting Socrates, that ridiculous and ironic master, hardly abandon that. A sense of the comic, laughter, is a moral virtue, a mark of one's proper estimate of oneself and a fitting reflection of Socratic ignorance. Such at least is the character of Plato's comic sense. Poetry requires an extraordinary attention to the inexhaustible detail of immediate experience and to the way in which that fleeting fragment signifies what lies beyond itself.[19] To the poet, each momentary occasion images other experiences, indeed the whole of nature or even eternity.[20] It also requires a delight in language and in the single word, a feeling for subtle shades of sound and meaning, for the nexus of structure and syntax, and for the vast historic associations which lie in any developed language whereby even the most trivial instance or mode of Being can be made ostentatious, can be made to demand of us that we ponder it deeply. It requires that in some sense one make oneself translucent to one's own experience, that one know oneself. And, finally, some poets seem privy to the gods. All these are facets of the great Greek theme of the *logos*. But when he met Socrates, Plato gave the *logos* theme a new dimension, that of discursive proof, and science and dialectic were born.

The neglect of these motifs is apt to impede our understanding Plato, for they do a great deal more than decorate his opinions. Perhaps we can show how this is so through the manner in which he introduces his "theory of ideas" in *Meno*.[21]

Let us begin by noting previous usages of *eidos* or *idea* as determined by H. C. Baldry. We will subsequently show their role within the developing argument of *Meno*.[22] The root meaning of *idea*, *id*, means "to see." It refers primarily to the "looks" or appearance of something. What one sees is primarily the shape or form (*schema*), but *idea* can also denote inner structure. But since we can also see qualities, it can also mean, for instance, the color of one's eyes. Though appropriate references may be later than Baldry recognized, *idea* was employed by the Pythagoreans to denote the shape of numbers.[23] Pythagorean mathematics was the opposite of that deriving from Descartes, and number theoretic statements were expressed geometrically. For example, a square number was expressed as a square collection of dots and "root" referred to the side of such a square. From the use of *idea* to designate concrete qualities, it came to denote abstract characteristics, such as values. The connections between shape and virtue were more evident in Plato's Greece than they would be to us, since virtue had to do with symmetry and balance, concepts having analogues in Pythagorean number lore. The connection was perhaps established for Plato during a trip to southern Italy and Sicily undertaken shortly after the death of Socrates. Finally *idea* can mean type or kind, not as classifications in the ordinary sense, but as divisions within some prevailing unity. Courage and temperance are types or kinds of virtue. This meaning suggests the method of division of the *Politicus* and *Sophist*.

While it might seem odd that a philosopher should announce his highest and most serious theme through a play on words, it

19 For this sense of "significance" one should consult Whitehead, *Concept of Nature* and *Enquiry Concerning the Principles of Natural Knowledge* (Cambridge, England, 1919), *passim*. The Platonic theory of recollection may belong to the theory of significance; see Appendix A, *infra*.

20 Through analogy, or partial isomorphism of form presumed to inhere in the indicated regions.

21 No Platonic dialogue has so suffered from the neglect of serious study as *Meno*: it has been cited for centuries as the primary source for the "curious" recollection doctrine, but no one has shown how its structure is related to the idea theory or how the form of the dialogue is essential to the correct understanding of that theory. Happily, with Jacob Klein's *A Commentary on Plato's Meno* (Chapel Hill, 1965) the situation shows considerable improvement. Had Klein not neglected the important work of W. S. Weedon on the early dialectic, "A Theory of Pointing," *Southern Journal of Philosophy*, I (1963), 20–35, his version of the idea theory would have been less archaic, less committed to the view that ideas are known by acquaintance. My own interest in *Meno* was inspired by a lecture Professor Klein gave to the graduate philosophy club at the University of Virginia in 1950.

22 H. C. Baldry, "Plato's Technical Terms," *Classical Quarterly*, XXXI (1937), 144–50. For the early medical usage, see C. M. Gillespie, "The Use of *Eidos* and *Idea* in Hippocrates," *Classical Quarterly*, VI (1912), 179–203. For a further extension of the metaphor of vision, see my "Speculative Language and Theological Vision," *Anglican Theological Review*, XLIV (1962), 365–80.

23 The "late" view is held by Ross, *Plato's Theory of Ideas*, 14.

is not uncommon among poets and theologians who are thereby enabled to write on several "levels."[24] *Idea* seems to have been introduced into philosophy as a technical term through a word play involving those several meanings we discerned above: certainly *Meno*, the title, announces (at least to Plato's contemporaries) the theme of the dialogue. Who was Meno?

We are familiar with the theme of self-ignorance and knowledge in Greek tragedy; and Socrates, often compared to a kind of tragic pattern (moving the argument from *hybris* and self-ignorance through a kind of suffering to knowledge and purgation, perhaps essentially comic in nature), does indeed employ this device of asking *who*. In *Protagoras* the question, "Who is Protagoras?" shows that wily sophist, claiming to be the wisest of men, to be too blind and lacking in integrity to recognize his own ignorance of who and what he is. Plato frequently employs this form in asking the chief character this question; and we discover, even if that character remains blind, that though most generally a Sophist and making claims to vast and cosmic knowledge, he finally stands convicted out of his own mouth of his essential ignorance. Socrates shows men to themselves in their naked reality,[25] and of course they reward him with death.

And who was Meno, who startles us in the beginning (70A) with his blunt demand that Socrates tell him the origin of virtue? The play on the word "meno" opens up the magnitude of this encounter. All of his contemporaries knew that Meno (*Menon*) was, in Klein's words, "a totally unscrupulous man, eager above all to accumulate wealth and subordinating everything else to that end, consciously putting aside all accepted norms and rules of conduct, perfidious and treacherous, and perfectly confident in his own cunning and ability to manage things to his own profit."[26] It was he who sought to "ride" Socrates (70B). Though the details are obscure, we know that he met his fate in treacherous dealings

[24] Dante and Joyce are notable among writers, Aquinas and Philo among theologians.

[25] Of special interest is the dialogue on the theme of "uncovering" *Charmides*.

[26] Klein, *Meno*, 36; also Xenophon, *Anabasis*, II, 6.

with the Persian king, Artaxerxes, known to the Greeks as *Mnemon*. Klein suggests that *menein* is the infinitive associated with "Meno," and means to "stay as before," "to stay put"; but the essential point "seems to be the combination of the letters *m* and *n*, the Indo-European stem of many words related to our power of remembering and recollecting (*anamnesis*) as in the words *mneme, memini, mens*, and *mind*."[27] The dialogue, in short, is about a notorious traitor who learned from Gorgias (70B) the habit or routine of answering and asking questions, who defined himself by and remained within this kind of memory (to be finally undone thereby), and who was shown by his own slave with the help of Socrates another kind of memory, that which breaks through custom and convention and habit and shows what is as it is. Of course Meno was too blind to see (86D). These are the themes contained in the name "Meno," a dialogue about different orders of memory and the sort of "uncovering" (truth) each shows forth. Recollection, whatever else it may be, is a part of the Platonic strategy against Sophistry. It is within this context that *idea* unfolds its meanings.

Socrates begins his dialectic when he, surely the most virtuous of men, proclaims that since he does not know what virtue is, he can hardly tell Meno how man comes by it (71D). Meno offers to give him a hand and defines it, as Socrates remarks, as a bee-like "swarm" of qualities (72A). Socrates asks, "What is the nature (*ousia*) of bee?", that which makes each different kind of bee a bee? What is required is one common entity (*ousia*) which when divided will show all of its several kinds or types to be one with respect to that entity. Though *idea* has not been formally introduced, we can already see two of its meanings, abstract quality and type or kind, rather elegantly articulated. Socrates then asks of Meno, "Tell me what is that quality (*eidos*) in which they do not differ?" (72C) We ask for the "one and the same" in the variety.

On the basis of this evidence, what are we to say about Plato's doctrine? First, let us admit that a certain ambiguity, enforced by the argument through 86D, does attach to the status of the idea theory. The *ousia* or *eidos* "bee" is in one important way

[27] Klein, *Meno*, 44–45.

quite unlike virtue, since it does not admit of more or less and may be thought to completely inhere in its instances. There is no trace of a "degree of reality" theory to be found here. "Bee" is clearly not a "separated" entity.[28] It may well be the case that in some sense virtue is separated, that it is not fully present in its instances, but that it is a norm or standard which these instances more or less express. Even Socrates, being wholly a man and the best among them, could hardly be said to *be* virtue. Is form present in, or does it transcend its instances?

Meno gives us in part an answer to this question; but like virtually all of Plato's "answers," we can only come by it speculatively. As I understand it, the next section (74B–77B) provides us with a technique whereby a decision can be made. That technique is subtle, quite in keeping with the poetic genius of Plato, for it involves signifying through things, not words.[29] In particular, what we wish to do is show how sense objects (qualities) and their shape can signify abstract shape and quality; and thus how Plato, playing on the ancient usages of *idea*, is able to show forth his own theory.[30] Turning from such "vague" abstractions as virtue, he directs us towards concrete particulars, to colors and shapes, and these become the route to higher and more abstract types of form.

Plato's method is not unlike Whitehead's method of extensive abstraction. Professor Weedon had shown the formal equivalence between the search for definitions (and notice that this means limiting, making definite, something or other which has the tendency to be "dispersed" in "regions") in the early Socratic dialectic and the procedure whereby Whitehead defines points and straight lines in terms of the extended and overlapping events

[28] On the testimony of Aristotle we can assume that Plato was following Socrates "who did not separate universals from particulars" (*Metaphysics*, 1087b 3).

[29] *Cratylus*, 440A–D. The sophist can twist words and thus the way we reflect the world in thought; but he cannot change the world, and it is with the giveness of fact that the dialectic begins.

[30] *Supra*, 17.

of perceptual experience.[31] In what follows we will make an informal application of this method.[32] Let us bear in mind that *idea* has the root "to see."[33] Speculative demonstration, or the early Socratic dialectic, is a method of vision. The *Meno* is a dialectic on the terms "Meno" and "idea."

The Sophist is a wordmonger, using language to produce conviction through rhetoric and eristic. His aim is not to exhibit form which measures men; it is rather to create the illusion of knowledge. The Sophist shapes the soul of the many to his own image, out of the many *making* one. If, therefore, Socrates is going to exhibit an idea, then this must be somehow outside language. With the examples of Gorgias, Polus, Euthydemus, Dionysodorus, Prodicus, and Cratylus before him, Socrates had an understandable suspicion of mere language and the games which clever and vulgar men play with it. We must show that common nature, "identical in all the particulars" (75A), which makes the many one in a nonarbitrary way. This is the object of definition and knowledge.

It is characteristic of the dialectic to begin with "premises which the person interrogated would be willing to admit" (75D). Treating these as hypotheses, it moves through these until it arrives at idea (*Republic*, 533D). This is a method resembling that of classical mathematical analysis,[34] a way of going "from the unknown,

[31] Weedon, "A Theory of Pointing." Whitehead's method is developed in *Concept of Nature* and *Enquiry*. The standard treatment of dialectic as a logical method of definition, and not as the making definite of regionally inherent character, may be found in Richard Robinson, *Plato's Earlier Dialectic* (2nd. ed.; Oxford, 1953).

[32] Applications of the Weedon–Whitehead method may be found in Edward G. Ballard, "On the Demonstration of Being," *Memorias del XIII Congreso de Filosofia* (Mexico, D.F., 1964), X, 45–48, and "On Being and the Meaning of Being," *Southern Journal of Philosophy*, VI (1966), 248–66; and Bowman Clarke, "Goodman on Quality Classes in the *Aufbau*," *Southern Journal of Philosophy*, I (1963), 15–19. For a more complete account of the method, see Appendix A, *infra*.

[33] Was it not intentional that the most important of Plato's myths about the ideas begins with an account of vision and the sun (*Republic*, 507A–509D)?

[34] Klein, *Meno*, 85–86.

through the unknown, to the known."[35] In mathematics the "known" is something admitted, either by "self-evidence," previous proof, or by assumption; in dialectic it must be something "recognized,"[36] something involving recollection. An hypothesis may be represented as a topographical "region," and the proper ordering of these can lead one to "see" the limit towards which they point; for instance, using Whitehead's technique, one can define a point as a set of circles such that every circle contains other circles, and there is no least circle. Dialectic uses hypotheses to point to something beyond hypothesis; but Socrates, who claimed to be able to recognize a possible wind egg (*Theaetetus*, 150C–151D), knew dialectic could be vacuous. Dialectic is the art of making definite that entity whose initial mode of inherence in the given regions may be vague.[37]

The issue begins when Socrates offers to help Meno, who is having extraordinary difficulty "remembering" what (Gorgias said) virtue is, find out by means of a paradigm argument. Socrates remarks that if to the question, "What is figure?" one were to answer, "Roundness," one would mistake part for whole. A similar example is given for color (74C). One will recall that these are among the pre-Socratic usages of *idea*. It is at this point that Socrates undertakes to define figure (*schema*). The definition, "Figure is the only thing that always accompanies color," (75C) strikes

35 Sir Thomas Heath, *Euclid, The Elements* (Annapolis, 1947), I, 137–39.

36 Whitehead has demonstrated the importance of "recognition" for congruence relations and for natural knowledge in general (see *Concept of Nature, passim*). This concept is analogous to Hume's relation of "resemblance." Resemblance entails a comparison dependent on mind and is ideal, while in recognition the emphasis is on the (recurrent) *it*. Mind may recognize recurrence, but the recurrent term transcends mind. In Hume resemblance is mind-dependent.

37 One would like to call to mind the somewhat analogous concepts *apeiron* and *peras* (*Philebus*, 23C ff). Ballard in *Socratic Ignorance*, 140–45, offers a useful interpretation; but since ideas form abstractive hierarchies, what is *peras* in one context will itself be a region for further demonstration and will thus function as *apeiron*. In this sense, except for certain exalted ideas such as Good, every idea will have within it both limit and unlimited. It would follow that there are no purely atomic ideas, though in a given context any idea might be atomic.

Meno as "artless." He had expected from Socrates what he had heard from Gorgias, an answer expressed in the technical language of mathematics, in learned jargon. To a pedant, Socrates' answer would indeed be quite artless, but to our vantage point it seems the greatest of Socratic ironies. Unless he were blind, Meno must admit that he "knew" what color was: he can point to it. This would be quite enough for Socrates.[38] Color is something seen and is always associated with shape.

A color, say *this* white, and a shape, *this* round, are clearly *in* perceived entities. This color is just the color it is, and so, too, this shape, but there seems to be no reason why each cannot be present at one and the same time in a variety of instances or at different times within the "life" of the given continuent.[39] Each is what is sometimes called a commutative universal.

So far our concern has been with a very concrete sense of shape (*schema*), with the shapedness of something; but shape also has that sense of "separatedness" which more traditional versions of the idea theory insist on reading into every Platonic text. Shape in the geometrical sense is different from shapedness; like virtue (*arete*), nothing is wholly an instance of such a form. Nothing is a line, for nothing in nature can have only one dimension; nor is anything straight or a plane, so nothing can be "a plane figure

38 An elaboration of these procedures in terms of abstractive hierarchies may be found in the Appendix A, where an attempt is made to define "red" by factoring regions. Assuming that other colors, "blue," "green," etc. could be defined, then these regions might be used to define "color." As in Plato's example, we could use color to define *schema*.

39 Unless one is an acrobat and wishes to hold to the odd nominalistic posture that all color instances are different and only resemble, making "color" is infinite and unknowable. Even followers of Plato have fallen into this trap. R. E. Allen, "Participation and Predication in Plato's Middle Dialogues," in Allen, *Studies in Plato's Metaphysics*, 50, holds that a given color and its mirror image cannot be the same color. This is an interesting attempt to save the "likeness" theory of participation, but one is inclined to think the tough old Plato would have balked: "Look and see." If it looks the same, it is the same. What other criterion can we have? Theory cannot create facts, only explain them. How it is same may be a problem; but if a color is a form (*Seventh Epistle*, 342D), then that is Plato's answer; for that is the sort of thing a form is supposed to do. To explain away the evident verges on sophistry.

closed by three straight lines." To say of some natural thing that it is a triangle is to predicate of it a form which it can never wholly image, and thus the separation between ideas and things seems to emerge. The question is how we can go from form (*idea*) in the sense of something visually seen to form in the sense of something known, or seen by the eye of the mind (*Republic*, 508C) without bifurcation. This problem is analogous to that posed by the passage from the lower to the upper reaches of the divided line, which before division was a continuum and continues thereafter to maintain continuous proportions (*Republic*, 509E–510C).

Meno, disturbed by Socrates' artlessness, demands a technical answer, one like those he vaguely remembers having heard about from Gorgias, for this is the region of his memory. For after all, Socrates has defined figure in terms of color, something he knows nothing about! Meno must have a purely verbal formula, commensurate with his verbal world, and Socrates has not "defined" color (75D). Socrates then begins to give him the kind of answers he wants to hear, defining figure to be "always that in which the solid has its limit; or, more concisely, the limit of solid" (76A).[40] While this definition did not satisfy Euclid since it still suggests shapedness (concrete shape), Plato's definition is still about the geometrical, not the perceptual, solid; and his limit has a mathematical, not a purely sensory, signification.[41] Indeed it may be philosophically superior to that proposed by Euclid since it suggests the concrete things through which the mathematical entity is abstractively defined. Be that as it may, "solid" and "limit" satisfy Meno's predilections for jargon: learning, even if it be about nothing except the manipulations of words, has a universal appeal, as ordinary language philosophy can testify.

[40] Heath, *Euclid*, I, 182–83: "A figure is that which is contained by any boundary or boundaries," definition 14, Book I. But note that in the preceding definition, "boundary" is defined as "that which is the extremity of anything." This is clearly an appeal to concrete experience and is presupposed in the subsequent definition of figure.

[41] R. C. Cross, "Logos and Forms in Plato," in Allen, *Studies in Plato's Metaphysics*, 20–21, exhibits a curious failure to grasp the sense of these passages. The definition of "color" is said to be vague, and he says that the definition "figure" by "solid" was the sort of thing Socrates desired of Meno. His thesis is that Plato desired statements or *logoi*, which he opposes to the common view that would involve "some kind of direct insight." Socrates rejects, however, the "solid" for the "color" definition and the dialogue can hardly be read otherwise than as an appeal to some sort of vision. This may raise problems of knowledge by "description" and "acquaintance," but that is quite another matter.

Meno then demands a definition of "color." Socrates' reply is a comic masterpiece; "Color is an effluence of figures, commensurate with sight and palpable to sense" (76D). Meno greets this gobbledygook with joy. Such is the character of his memory, informed by the flattery of Gorgias and the meanness of his own soul. He cannot see.

But these passages concern something more than a philosopher's joke. The definition of "color" and the second definition of "figure" are learned, "scientific" definitions and seem to deal with splendid things, things out of all relation to sense. Do not these definitions point to just the sort of higher things which our tradition of reading Plato has led us to understand the ideas to be, disjoined and separated from the world? In each case Socrates advances these definitions with evident irony, for each defines what we know, color or figure, in terms whose signification is quite unknown.

If Plato is to bring together all those usages cited by Baldry for *idea* in some unified manner, then that gap between sensation and knowledge must be overcome. Pythagorean mathematics will have to show itself in the domain of sense. This is the point of the episode with the slave boy through which "recollection" is speculatively demonstrated. Too often the myth with which it opens (81B–E) is taken for the doctrine, and the real doctrine, the demonstration itself, simply ignored. But the solemn and exalted language of the myth is the sort of thing that would appeal to the memory of Meno! The demonstration itself is an appeal to nous, not high language; and the slave, not Meno, is the one who sees.

The episode opens (82B) when the slave admits to knowing that the figure which Socrates has drawn in the sand is a square (or in terms of Greek practice, a square number). The problem which Socrates poses for the boy is to construct a square twice the size

(area) of the given square: "Tell me the length of the line which forms the side [root] of that double square" (82E). The normal routine, the habitual response to such a problem, would be to extend the side of the figure in the drawing. If the area of that square were four units, then one might double the side, which would now extend to four units in length. The slave does this but is shown that the square erected on this as a base has an area of sixteen units and not the desired eight (83C).[42] Following his memory as his guide, the slave recognizes that if four units is too long, then he must choose something less, say three units; but the square constructed on this base has an area of nine (83E).

The young slave is brought up short by these contradictions. His memory has proved an unreliable guide, and now he must look and see. He is led finally to the recognition that no extension of the given side will yield a length which will satisfy the requirements of the problem. He comes to recognize in the figure (*schema*) what he has never seen before (85B), namely, that the desired solution must employ the diagonal of the given square as its base. He sees not only the solution to *this* problem but also that to any such problem. An idea has been shown him when he breaks finally from custom and convention (from which philosophy is said by Socrates to be a supernatural release [*Phaedrus*, 265B]), and by nous apprehends in the concrete its structure, a structure one and the same for all squares. An abstract quality has been seen in *that* square; and so we have passed from thing and shape and quality to their analogues in the intelligible order.[43]

[42] It may be useful to consider these regions as "hypotheses," but this suggests a logical rather than a topological concept, and "region" has a certain freshness of connotation which "hypothesis" lacks, especially when it is associated with notions foreign to the intent of Plato. Dialectic is not a method of logical proof, for that belongs to synthesis, but it is a method of "seeing."

[43] Weedon has given in "A Theory of Pointing," 20–24, several examples of the application of speculative demonstration to mathematics; but he is careful not to confuse demonstration on the "lower" segment with that on the "upper" segment of the divided line. By the time of *Republic*, a separationistic ontology had colored the idea theory, which would make a clear distinction between "pure" and "applied" geometry possible. This distinction was not apparently evident to Plato at the time he wrote *Meno*; and so our account, with its denial of difference in ontological type, must be viewed with some suspicion. One would like to say that what mind knows and what sense apprehends are like the attributes of Spinoza, two aspects of the same thing; but reflection on the difference between a solid and its geometrical analogue will show them to have incompatible properties. One can infinitely bisect the geometrical element, preserving its shape; but were we to do this to our solid, it would be destroyed. Considerations of this order should make us doubt the easy assimilation of perceived nature and pure mathematics. In Appendix B, *infra*, an attempt is made at a solution in the light of the later metaphysics.

Now that we have reached the conclusion of the relevant material in *Meno*, some reflections will be in order. To begin with, one cannot help but be impressed by the relative sophistication of the problem which Socrates presents to the slave, for it involves an application of the theory of incommensurable magnitudes (or irrational numbers). The discovery of these entities by the Pythagoreans had come as a great blow, for they had thought to express all things as ratios (*logoi*) of integers, and there is no common measure of an incommensurable and a natural number. This meant that within the realm of rationality, mathematics itself, irrationality dwelt. It was rather as if the Christians were to discover that one of the persons of the Trinity was Satan. Yet notice how Plato boldly exploits this notion and uses this very discovery to bring out the meaning of reason itself. He seems to say, in an obvious play on words, that the customary and the routine, which common sense and G. E. Moore take to be reason itself, is really the way to irrationality. Only in pursuit of what the many take to be madness and unreason can one come to reason (*Phaedrus*, 245A–C; and somewhat ironically, *Symposium*, 173B–E). Reason is not disjoined from the world, but from that world seen as it really is as measured by number.

In our previously cited examples of color and shape, we saw them to be clearly in things. We also expressed concern over the relation between these and ideal objects. Following our procedure, we can now define ideal objects by means of regions, within which they will appear as limiting concepts.[44] This has indeed been

[44] The logical form of Dedekind's method for defining irrational numbers is analogous to that of speculative demonstration. If this does offer an adequate formalization of the early dialectic of Plato, then we may surmise that it had an influence on his colleague, Eudoxus, whose method of exhaustion is like that of dialectic.

carried out by Whitehead for certain mathematical entities. But a problem does remain: if any shape is just what it is, why then do we need to postulate ideal entities? One is reminded of a phrase so dear to the English since Butler: "Everything is what it is and not something else." This triangle is one thing, the ideal another, and the common name an equivocation.

At this point we are reminded that Socrates said to the slave on the completion of the demonstration that he now had right opinion and not knowledge (85D). What would count as knowledge? Not mere proof, for in a sense the slave had achieved that, but that sort of proof which begins with simples and arrives at complexes by way of synthesis.[45]

In the case of classical geometry, these simples may be alternatively either points or line segments and, together with the axioms, serve as the foundation for all that deductively follows. By this method a certain class of "ideal" entities are constructed and their properties (*propria*) demonstrated. The choice of simples is not arbitrary. The synthesis effected through them is a means to a knowledge of other things—the triangle, cubes, and the like of ordinary geometry. In virtue of the synthetic method, the properties of these mathematical entities is exhaustively known, and these in turn can be used to render intelligible all concrete figures. The method is one of approximation. Given some concrete, partially "deformed" shape—if it can be put into partial one-to-one correspondence with some subset of the ideal entities whose properties, i.e. area, can be exactly determined—then the area of the concrete entity can be ascertained by simple summation.[46] Circles may be defined by regular polygons, the number of whose sides approaches infinity. This was discovered by Plato's friend and colleague Eudoxus, and has analogies with Plato's method of demonstration. Given a circular shape, its area can be known through its approximation to the mathematical circle. It can be seen that within the limits of the principle of duality, simples are not arbitrary: through them the whole range of figure, mathematical and physical, can be made known.

The use of the method of speculative demonstration does not yield uniform results. In the context of *Meno* we have seen it lead to unseparated form; but Professor Ballard, applying it in the context of the later dialogues, has been led to see separated form as that to which individuals approach as a limit (*Socratic Ignorance*, 146). His approach has the advantage of conceptual economy, since it requires only a minimal set of normal forms to which all relevant individuals stand as partial isomorphs. In trying to avoid separationism, we have been forced to assume that any shape is normal, in the sense that any thing is wholly what it is. Norms can be established; but this depends on the logical structure of the form world, especially the notion of deducibility from certain forms taken as axioms. While our procedure requires considerable structure and logical detail, it can lead to a "resolution" of the problem of participation, a problem which Ballard admits is left unresolved by his procedure.

45 For this use of "synthesis," see Heath, *Euclid*, I, 138.

At this phase in the development of Plato's theory, it is difficult to stipulate the manner in which ideas are related to their instances; and one suspects that this was because the ontological issue had not been raised. The stage of development which the Greek language had reached by Plato's era did not permit a clear distinction between an instance of a quality, red, and its abstract nature, redness; nor did it indeed distinguish between substance and its attributes. Qualities were concrete things.[47] Now we know that a reformulation of language took place in Plato and Aristotle and that the logical and grammatical distinctions noted above then became possible. Plato, especially, was suspicious of using ordinary language as a guide to doing philosophy and was concerned to develop a kind of philosophic grammar (that of the transcendentals) which would be more adequate; but it seems es-

46 This is an obvious parallel with Descartes' method as given in the *Discourse on Method*. See the commentary in Robert S. Brumbaugh, *Plato's Mathematical Imagination* (Bloomington, 1954), 32–38, relative to *Meno* 89A ff; as well as Catsby Taliaferro, review of Robert Brumbaugh, *New Scholasticism*, XXXI (1957), 255–56, in which he argues the relevance of this passage to an understanding of recollection.

47 See Gillespie, "The Use of *Eidos*," 197; Baldry, "*Plato's Terms*," 145; and Peter Geach, "The Third Man Again," in Allen, *Studies in Plato's Metaphysics*, 266. How analogous is this position to that of Berkeley and Hume, or the ontology suggested by the combinatorial character of Chinese? Perhaps it is this metaphysical "atomism" which is the subject of Socrates' dream, *Theaetetus* 201E–208B.

pecially important to realize that his philosophy cannot always be measured by and expressed in Aristotle's logical grammar. Thus developments from Aristotle's logic, such as the modern predicate calculus, bring distortion into an attempt to formalize Plato's arguments.[48] We shall later be able to show how a neglect of these observations wrecks many contemporary accounts of Plato's ontology; for now, we are content to refer to them to show the difficulty of giving an account of Plato's intentions and metaphysical strategy which might satisfy contemporary canons of explanation. It is not until *Phaedo* that ideas become clearly separated; and in dealing with the status of the theory prior to that dialogue we must remember that it is never clearly defined. How ideas are related to things is *recognized* as a problem only in the light of the "separationist" necessities of the argument in *Phaedo*. That is not to say that it was not a real problem, if only implicitly, prior to that date; but rather to confess that we may well distort the issue with *immanent* and *transcendent* language.[49] The problem of participation is real throughout Plato to any reader informed by later speculation; but we must be careful to follow the actual argument and not be misled by our own distinctions through which separationism can be imported into or cast out of the text.[50]

[48] For an interesting suggestion as to how this might be accomplished, see Margaret Masterman, "Metaphysical and Ideographic Language," in C. A. Mace (ed.), *British Philosophy in the Mid-Century: A Cambridge Symposium* (New York, 1957), 283–357.

[49] To use "immanence" for the early idea theory, as does Ross in *Plato's Theory of Ideas*, 18, is to preempt it for later use to describe post-*Parmenides* developments in the idea theory. That Ross does not mean "immanent" is evident from the following: "It is still the immanence of ideas that is insisted on; all the virtues have an identical form." Immanence suggests a "living within," a strand of order whereby one temporal fact derives from another. Such a concern for the connexity of a nexus is not at all apparent in the early Plato; and thus in the context of the early theory we have used "separated" and "unseparated" for "transcendent" and "immanent" respectively.

[50] The most serious misreading of Plato's intentions is found in Aristotle. If we allow for the fact that he was trying to demonstrate his own great insights and may have been justified in overt misrepresentation, our historical judgments should take this into account and seek to exhibit what Plato was about that it may be judged on its own merits. Substance philosophy and its predicables is not process philosophy.

If our procedure is a correct formalization of Plato's own, then it shows us that there is no apparent difference in ontological type between a physical shape and its mathematical idealization.[51] A point may be defined by a class of circles such that every circle completely contains another circle as a part and there is no least circle. Or "the triangle itself" may be defined by physical objects through which it is arrived at as a route of approximation. So too, the special sense in which an idea is the object of knowledge and is also experienced as a form (*schema*) or quality does not require that one split things into ideas and particulars. No equivocation is involved in predicating "triangle" of the idea and of the concrete thing. At this stage of Plato's thought, which will change quite dramatically, we can say that ideas are present in the world, but that certain sets arrived at dialectically, by speculative demonstration, do have a privileged role in that they can serve as measures of that world. Plato's announced goal is to find the "saving art" of measurement (*Protagoras*, 357B). This will be his answer to Sophistry.

Plato's failure to bifurcate the world into things of mind and things of sense may have been a consequence of the state in which he found the Greek language; but as with many other linguistic items, as with "Meno" and "idea," the language itself provided him with the basis for a profound and relevant investigation and an attack on Sophistry. It was later to create great difficulties for him, for it entailed that he treat the idea as itself a thing. This would lead him into the paradoxes of apparent self-predication which we will have occasion to explore in the third chapter of this book.

Since the version of the idea theory which emerges from this analysis differs so radically from others, we might give it more cogency through an extension to another dialogue, the *Republic*. This will enable us to do for *arete* what we were able to do for *schema* in *Meno*. Though *Republic* is admittedly a "middle" dialogue, we can show the same methodology at work and the crisis

[51] This is obviously not a psychological idealization and has nothing to do with the route whereby Santayana arrived at his platonism.

it engenders. The limits of our concern require that we treat it in a rather summary manner.[52]

Our interest in *Republic* begins with Socrates' attempt to "purge" Polemarchus' definition of justice as the art of doing good to friends and evil to enemies (332D). We shall see that while not adequate as a limit, it does function as a premise "that the person interrogated would be willing to admit" (*Meno*, 75D), for it represents the region of Polemarchus' interests. As the son and heir of the commercial Cephalus, who thought of justice as a sort of payment only those who had inherited wealth could afford (330A–331D), Polemarchus perpetuates that pattern or routine (330B), as modified by his own military interests. He would repay good for good, and for evil, evil. This definition is top-heavy with abstractions: "art," "friend," "enemy," "good," and "evil." These play the role of "variables," the meaning of the whole expression in which they occur depending on the meaning assigned to each. Treating these as themselves subregions within the domain of "justice," Socrates must dialectically examine these in order to arrive at mutually consistent "values" and thus an hypothesis worth investigating. The extraordinary concreteness of this extended argument is worthy of mention; for dialectic moves from the very ordinary and common experiences of men, and not from sophistical jargon.

In summary form, the argument proceeds on the assumption that if justice is an art (*techne*),[53] then:

(1) Since justice is useful, and if it were one among many arts (justice or shoemaking, but not both) (332C–333E), then it would have no subject matter; though, it might be useful to the Sophist who could appear in its disguise to defraud others (334A–B). This is a *reductio ad absurdum* to Polemarchus, if not to Thrasymachus,

[52] The following interpretation owes much to Lewis Hammond, who led me somewhere in this direction in an introductory philosophy course for which *Republic* was the basic text.

[53] The form of the following interpretation would be disputed by R. G. Collingwood, *The Principles of Art* (Oxford, 1938), 18, who takes these arguments as a refutation of the initial premise that justice is a *techne* and not as a purgation of the initial definition.

and the inference we must draw is clear: if justice is an art it must be a one over many (*Euthydemus*, 291D) rather than a one among many. Such arts are ordering or architectonic arts, defining the role of all activities of individual and polis.[54]

(2) There is the real possibility that a false friend may be mistaken for a true one, especially since it is in the interest of the Sophist to create such illusions; so justice must be an art of measurement, able to distinguish realities from appearances on the basis of knowledge, not opinion (334B–335B).

(3) It can do no evil, for evil is the failure of a thing to fulfill its nature, and justice is admittedly good. It could do evil only so far as it was not good (335B–336E). Thus it must be the art of human good.

In summary, if justice is an art, it architectonically orders men on the basis of a nonarbitrary measure to their good. This hypothesis results from the purgation of Polemarchus' opinions, and though it may seem utterly remote from its original form, reflection will show, especially in the light of Thrasymachus' subsequent attack, that it emerges from the words of Polemarchus. The new hypothesis is to the old as Meno's slave's final vision (nous) is to his original routine sense experience, or as the point is related to the class of circles which define it. It appears to be another instance of "speculative demonstration."

How do we know that what we have seen is true? What is so privileged in the initial region from which demonstration began that we should be able to go from it to the truth about justice? Might we not equally begin elsewhere and arrive at an equally viable demonstration? If one began with physical triangles, one would come to "the triangle itself"; and if with physical squares, then to "the square itself." Could we not go from Polemarchus' justice to its idealization, and equally from Thrasymachus' to its ideal form? Of course "justice" would be equivocal between these two demonstrative sets. But this is just what the Sophist would hold, and so Plato has a job to do. We must go beyond hypothesis to ideas. Using the earlier example of mathematics, we know that

[54] Aristotle, *Ethica Nicomachea*, 1094a 1–b 10.

the way out of this dilemma would be to constitute nonarbitrary "axioms" from which one or the other of the competing hypotheses could be deduced as a theorem. Then we could use this hypothesis to measure the other, as the rectangles of geometry may be used by the surveyor to measure a field. And this is just what Plato undertakes to do. But first he must establish an alternative, conflicting hypothesis. It should be noted that alternative definitions can be given of the same entity, for a point may be defined by a nest of circles or a nest of squares; and thus Plato must choose an hypothesis which is noncongruent in its limit point with that introduced by Polemarchus.

This definition is produced by the Sophist, Thrasymachus. He is frankly appalled by the naiveté of Socrates, by his blindness; for he knows that the Socratic idealization has nothing to do with the real polis, the polis wherein the ruler orders all to his own private interests. His measure is his good (336B–345B). This is the point of his definition, "Justice is the interest [advantage] of the stronger" (338C). This is a reverse image, an inversion, of that definition elicited from Polemarchus. Justice is indeed an ordering art, but its criteria are the arbitrary interests of him who rules to whose good the activities of the citizens are ordered. This may involve their injury, even their lives.

The remainder of *Republic I* is concerned with a "formal" refutation of Thrasymachus; but as Socrates remarks at its conclusion, it has been verbal and perhaps itself sophistic. The refutation is based on a dialectic on the term *techne*; and though based on concrete examples, *techne* is made to apply to the special case of the tyrant's art by analogy and is therefore open to question: if the arts of the shepherd, physician, pilot, and the like are each for the good of their subject matter, so justice, being an art (as Thrasymachus admits), is for the good of the citizens whom the practitioner rules. The conviction carried by this sort of purely verbal argument is much less than that of *Meno* where "things" are made to signify.

It is dramatically just then, that the unconvinced Glaucon and

Adeimantus should take up the argument on behalf of Thrasymachus in the beginning of Book II (357B). One might say that they represent "scientific" sophistry, for they come to the argument equipped with elaborate theories concerning the nature of man and how that nature is related to the order of the polis. We are reminded of Socrates' lovely definition of "color" in *Meno*. They argue in the sophisticated manner of the verbal tradition. On their behalf it should be said that they do seem to inquire and invite investigation; but what they offer is the usual construing of fact in accordance with theory, a misplaced concreteness[55] which is beguiling in virtue of the very comprehensiveness of vision it permits. Like all pseudoscience, and one is especially reminded of Freud, it establishes itself on a myth, the story of Gyges' ring (359D–360D), and a theory about the origin of the state which, as Hume remarked,[56] argues to what we know—the state—from what we know nothing about—the original condition of man (364A–367E). The resulting view of man is remarkably like that produced by Thomas Hobbes, though in the later case the mythical foundations were provided by Galileo's new science of mechanics. There is something very "scientific" in self-interest and power and the utilitarian structure of the state and, above all, in the view that justice is arbitrary or conventional. Beside it, Socrates' vision seemed archaic in the fifth century, B.C., just as similar views are apt to seem old-fashioned, even religious, today. Plato was the greatest ironist in history.

Socrates' attempt to state the counterposition occupies the remainder of the *Republic*. What has struck so many over the years as illusionistic idealism beside the facts of Glaucon, Thrasymachus, Adeimantus, Machiavelli, Hobbes, and Freud is in the end a supreme achievement of realism.

The immediate task is that of setting up certain "simples" which, qua axioms, will enable us to account for more complex

[55] A. N. Whitehead, *Science and the Modern World* (New York, 1948), 52.
[56] David Hume, *An Enquiry Concerning the Principles of Morals*, Pt. III, sec. 1.

structures, which can then serve as the measure of existing fact in the manner set forth above.[57] What region can serve as that from which definition must start? From schematic descriptions of existing situations, of course, and not hypothetical or mythical "realities." Such a schema is provided by a functioning human community of interdependent needs and activities which aim to satisfy them (368A–376D), and not a myth about a "state of nature."[58] Man requires other men, and the welfare of each depends on how well each does the job he is supposed to do. But this is to say that each performs his characteristic *arete*—the builders that of building well, the warriors guarding well, etc. *Arete* is the excellence in a thing's performance of its proper function (352E–354B). But what are the functions of man in a state? Some rule, some administer, and some produce (415A–D). There are also functions which the individual psyche exhibits, activities associated with reason, will (spirit), and appetite (439D–440B). Thus if we assume the concept of function as a simple and *arete* as the characteristic excellence of that function,[59] we are able to find an isomorphism between the individual and the polis (369A).

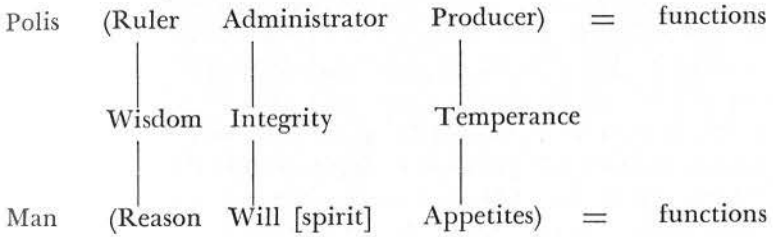
The nature and structure of this isomorphism between the functions of the state and those of the individual which is developed in *Republic IV* has been dealt with most fully by Scott

[57] *Supra*, 28–29.

[58] The following account is not intended to show that Plato possessed an adequate view of man or state, but rather to show the structure of his argument.

[59] Since Julius Stenzel first began to talk of simple or atomic ideas, considerable confusion has reigned over this notion. This has not been lessened by the discovery of a parallel between Socrates' dream of the letters (*Theaetetus*, 201E–202C) by Gilbert Ryle and Ludwig Wittgenstein. We wish to note that if something like a function is a simple, then it exhibits its potential for inclusion within complex wholes and is meaningless apart from such possible inclusion. Plato's developing metaphysics is, as we shall later see, founded on the ontological principle: to be is to be in a relation of power. Thus there can be no pure atoms to which everything can be reduced, for these atoms bear the "image" of their possible modes of inclusion within various types of wholes. It is this "relational essence" which renders an attempt to associate Plato with logical atomism suspect.

Buchanan, Lewis M. Hammond, and C. M. Sparrow.[60] They have shown how Plato, utilizing the Pythagorean discovery that it was possible to map the notes C, F, G, and C' into and onto the integers 6, 8, 9, and 12 by the simple analogy of measurement (which, by the way, was the first physical discovery), demonstrated that a similar correspondence can be set up between the state and the individual. This theory is based on the belief that the *arete* of corresponding functions is the same; that the excellence of the ruler and of reason is wisdom; of administrator and will, integrity; of appetitive and productive function, temperance; and that the well-ordered whole is the idea of justice. Polemarchus thought justice the art of doing good to friends and evil to enemies, and this has now been purged to read: justice is the art of giving to each that which is proper to it. What is proper to reason in man and in the polis is rule in accordance with an appropriate wisdom, etc. The following representation will express the idea of justice:



The procedure, as expressed within our methodological framework, involves the idealization of a tri-partite functional whole which is both polis and individual in accordance with *arete*. In *Republic VIII* this is employed as a measure of existing situations. From this definition one can immediately deduce several forms of the state, aristocracy, timocracy, oligarchy, democracy, and tyranny. For example, the timocratic form comes into being

[60] Scott Buchanan, *Symbolic Distance*, Psyche Miniatures, No. 39 (London, 1932); Lewis M. Hammond, "Plato on Scientific Measurement and the Social Sciences," *Philosophical Review*, XLIV (1935), 435 ff; C. M. Sparrow, *Voyages and Cargoes*, University of Virginia Studies, IV (Charlottesville, 1947).

through the deletion of reason as a ruling function. The "activist" elements usurp that role and rule state or individual by integrity, a form in which tradition and its honorable routines order the seething ambitions of men to service for the common good. This form is a partial image of the just state:

Polis	(Administrator	Producer)
	Integrity	Temperance
Man	(Will	Appetites)

The seeds of disharmony are present, and they become even more apparent when a more strictly personal ambition, checked by honesty (the oligarch's version of temperance) which is a sort of image of integrity, begins to rule. This is the condition of oligarchy, arrived at by a deletion of the administrative and spirited functions and their *arete,* the state wherein wealth is the primary aim and determiner of values. But the oligarch's attitude towards wealth, like Andrew Carnegie's, is restrained by some sense of public obligation, by habits of temperance; and this is seen as an unnatural restraint by the succeeding form democracy. The rule of wisdom is the truly free rule, for it articulates the "natural" demands of man and seeks expression for his nature as a whole. With timocracy rule comes to be associated with restraint and, to each succeeding lower phase, seems to become more and more unnatural. "Why should the timocrat serve the state, why should he cultivate so high a sense of honor," asks the oligarch, "when he would find a far deeper satisfaction in self-service." When finally we come to the democrat, all forms of *arete* are seen as a hindrance to freedom, and not at all as excellences in natural function. To be moral is a perversion and a weakness. The voice of Thrasymachus begins to be heard within the depths of the soul. The democrat is the Sophist, willing to accept the *appearance* of any

form of order insofar as it may be a means to the satisfaction of unrestrained desire. He is a master of images.[61] The step to the realization of Thrasymachus' ideal is a very short one; for the many who struggle one against the other in the pursuit of "freedom" (doing what one wants, as Hobbes would put it) find a one, a tyrant, who through his power promises satisfaction to his followers and makes them into one, a mere instrument of his purposes. This admittedly highly schematized version of *Republic VIII* should enable us to see how the several forms of the polis are related to the ideal form and how its deformation leads to the final inversion, tyranny. In its deformation, human nature may pass through several stages, each a distorted image of the one prior to it. This set of schema, like the figures of plane geometry whose properties are deductively demonstrated (synthesis), can now be used to measure existing situations, which are probably mixtures of all the "ideal" types. Depending on the predominant character, states and individuals can be defined as aristocratic, like the ideal form of justice; as timocratic, like timocracy. Every alternative value form is measured by a single norm, and its distance from this determines its relative value (587A–588A).

With this we conclude our investigation of the early theory of form. It is that which binds the many sensible things into an intelligible unity, and, in some cases, serves as a measure of those things which do not share fully in its character. Our procedure, that of speculative demonstration, has shown that though there is a difference between what is given for vision (and of course the other senses) and what is seen by mind, these do not differ in *kind;* and that in fact the mind sees its object in the thing through a dialectical break with the routine and the customary (physical memory) and comes to "recollect." What is seen qua recollection has never been seen (qua sense) before; but it is recognized and thus displays the same relation between mind and its object as exists between sense and its object (*Republic,* 508D). Granted that

[61] *Supra,* 32.

great difficulties are latent in this account,[62] we can see that it was apparently formulated without any sense of those difficulties which led Plato later to a critique of participation in *Parmenides*. Perhaps this was a consequence of the state of the language: it could have been a gift of the gods.

[62] If our account is adequate to *Meno*, it should be kept in mind that Plato's vision of the idea theory is constantly shifting and no single statement seems adequate to all forms of the theory. We shall see that with a deepening appreciation for the problems of Becoming that theory will have to face up to itself for the first time.

II PLATO'S METAPHYSICAL DUALISM

IN this chapter we wish to examine the motives which lead Plato to separate form from fact. We shall try to show that an increasing awareness of Becoming led to a functional, not a thing-like, theory of form; but that even so, other powerful and reasonable motives resulted in metaphysical incoherence, the division of the whole into the world of Becoming and the world of Being. One might imagine that a recognition of this bifurcation would have led to an immanentization of form in the later dialogues; but through an examination of certain logical and metaphysical problems associated with extreme immanence, we shall be led to see that some sort of transcendence remains desirable. Thus we hope to set the stage for a full-fledged inquiry into the meaning and truth of participation, which expresses the relevance of ideas to the world of fact.

The Separated Ideas

The *Republic* is admittedly a middle dialogue. We have been able to treat it after the manner of *Meno* only at the expense of other tendencies which are present in the dialogue, tendencies towards that ontological bifurcation which the learned tradition has had since Aristotle associated with Plato.[1] In some sense that tradition is surely correct.

[1] Aristotle's critique, mostly as restatement of the arguments in *Parmenides*, is found in *Metaphysics*, 990a 33–993a 10; 987a 28–988a 15; and Books 13 and

The universe of the middle dialogues, which certainly includes the *Republic*, *Symposium*, and *Phaedo*, contains at least two types of entity.[2] While Plato may at times lead one to think of bifurcation as an epistemological dualism, it is clearly rooted in metaphysics (*Republic*, 476B–480B). It derives from the obvious ontological realism of Plato, from the language of the objects of "vision," the language of forms. Human functions or faculties are defined by their proper objects (*Republic*, 477C–478B). The objects of mind are eternal; those of sense are always changing. Knowledge never changes; opinion, which is not tied down (*Meno*, 97D–E), is subject to change. What mind knows is Being, or that which is and is eternal; while the senses inform us concerning the "intermediate flux" (*Republic*, 479D) which lies between Being and non-Being. One may suppose this to be a synthesis of elements drawn from Heraclitus and Parmenides. The realm of Being is constituted by the ideas, that of Becoming by changing things.

> And he who, having a sense of beautiful things, has no sense of absolute beauty, or who, if another led him to that beauty, is unable to follow—of such a one I ask, Is he awake or in a dream only? Reflect: is not the dreamer, sleeping or waking, one who likens dissimilar things, who puts the copy in the place of the real object? . . . But he who, on the contrary, recognizes the existence of absolute beauty and is able to contemplate both the Idea and the objects which participate in it, neither putting the objects in place of the idea nor the idea in place of the objects—is he a dreamer or is he awake?
>
> (*Republic*, 476C–D)

14, *passim*. One of the most powerful arguments against separation, that it entails equivocal predication over form and instance, may be found at 1097a 19–1079b 2, and 991a 1–7. In our discussion of Plato's arguments we have cited mostly contemporary writers; but there is no doubt that most of these have analogues in Aristotle.

2 One might include also the intermediates, such as the "mathematicals," of *Phaedo* (101B ff). Though modern scholarship is undecided as to the status of these entities, they may be (a) like eros, derivate from both being and becoming and serve as intermediates; or, and this seems likely, (b) derived as mixed classes from other ideas. The thesis that intermediates may serve as a mean between being and becoming (*a*, above) will not stand against the argument at *Parmenides*, 132d–133a.

This is clearly separationism. But it does not seem on its face to entail the self-predication problem so dear to Plato's modern critics; in fact, it seems to count against it.[3] Certainly a very strong critique of self-predication is found in *Charmides* (167C–169C). Self-predication involves confounding the idea and the thing, so that we say of the event that it is *P* and of *P* itself that it is *P*. Are Plato's critics dreamers?

Further evidence of separationism is not difficult to find. The most obvious instances are, I suppose, the idea of the Good (*Republic*, 508E) and the extended passage on the idea theory in *Republic X*. There is no merit in dwelling on the obvious.

The question now arises as to the motives for this separationism. The first must be ontological, the second a consequence of the extraordinary success of the method of dialectic (speculative demonstration), and the third religious. We will take these up in order.

(1) We have seen that (within the context of *Meno*) equivocation does not hold between an idealized form and that form as "unseparated." Separationism can only come to be, or at least come to recognize itself, where a Heracliteanism begins to impinge upon Plato's thinking. It would be difficult to determine the precise point at which the flux thesis became a dominant factor; one might imagine it was fairly well established by *Euthydemus*. Certainly by the time we enter the domain of *Republic* it is clear that things are instances of "something going on." We intentionally neglected to notice in our earlier discussion of the *Republic* that the several forms of *arete* were modes of functioning, and not the object-like qualities of *Meno*. We must begin to reckon with the distinction between an activity and the pattern through which it is expressed. *Meno* could treat virtues as qualities which seemed to make up a thing, perhaps a consequence of the limitations in

3 The recent literature on participation, which begins with Gregory Vlastos, "The Third Man Argument in the *Parmenides*," in Allen, *Studies in Plato's Metaphysics*, 231–63, has seemingly confused the issue as we shall try to show in the sequel. The most helpful interpretation may be found in Allen, "Participation and Predication," 43–60, though he seems to have little sense of the role of becoming in entailing the separation.

Greek for expressing "abstract general ideas"; but by the time of the composition of *Republic* there is the clear distinction, applicable to the individual case, between an activity or going-onness and its structure.[4] Act is one thing, form another.[5]

In the earlier theory, idea was an entity present in things. To say of x that it is "red" is to say that among the things which go to make up x is the entity named by "red." We may think of predication as the set theoretic relation of membership: if the thing x is $(a_1, a_2, a_3, \ldots, a_n)$ where each a_i is a distinct quality, then to say that "x is a_j" is simply to say "$a_j \epsilon x$." By the time of *Republic*, ideas were not merely the qualitative characters of things, but were causes;[6] so that to say "x is a" is to say that x has the character it does in virtue of a transcendent entity a in which it participates. The character is no longer in the entity. In the earlier theory, a predicational model may be developed to account for the relation of form to a given fact, but this is hardly the case within the context of the middle dialogues. Form is not an object, a constituent; it is a pattern, a way of acting. Perhaps we might say that in the early theory the ascription of a to x is a naming relation; later it becomes constitutive. In the context of the early Plato, to say of some x that it is a is to name it, to pick it out and to identify it by "a" in virtue of the a within it; and this would be true whether the a be a triangular shape or the triangle itself, the quality considered apart from its ingredience in fact. In the context of the later theory, to say that "x is a" is to say that x is and is what it is because of a. Perhaps we may express this by saying that "x is an a-like thing," (because of a) where the "is" means "identity." In the case, therefore, of the formula, "x is a," x cannot take as one

[4] The relation of the individual event-thing to its form, of the dancer to the dance (W. B. Yeats) will concern us later. Had it not been for the second and the third motives, Plato could have avoided separationism, just as Aristotle avoided it, by making form integral to the thing. That he comes to this within a process thesis without at the same time making form wholly immanent will be one conclusion of this inquiry.

[5] Act is not intended to have the technical Aristotelian sense. The better Platonic word would be "motion," but at this point in the inquiry it would sound stilted.

[6] *Infra*, 66–68.

of its values a; while in the case of the early theory this would be quite legitimate. We must grant that Plato is not always consistent, and there are strong motives, especially in *Phaedo* and *Symposium*, for treating the idea as a super object and not mere pattern. We will reserve this discussion for the following section.

Still, things change and form does not; and to put form into things would seem to subject them to a bifurcation. Instead of destroying the unity of the thing, Plato was led to separate its presumed components into two distinct realms, Being and Becoming.[7] If the integrity of the individual was saved, it was at the expense of the integral relation of form to act, of the dance to the dancer.[8] He sought to save it by a doctrine of copies or images. Being : Becoming : : Actual Objects : Shadows : : Ideas : Hypotheses (*Republic*, 509E–511E). Such is the theme of the divided line, the myth of the cave, and the discussion of ideas in *Republic X*. As Plato was to discover, success was bought at the price of equivocation (*Parmenides*, 132D–133A).[9] The "bed itself" and the bed one builds and sleeps in have different predicates. Ideas are unchanging, ahistoric, not localizable, one, causes, and eternal; while their images are the many, spatial-temporal, derivative, historic events. Becoming and Being differ in ontological type. Thus *the bed itself* and a *bed* are "beds" by equivocation. Success in preserving the integrity of the thing was purchased at the price

[7] This view must be abandoned in the context of the theory of the soul in *Phaedo*. There the individual is bifurcated. Plato is exploring, not pronouncing, doctrine; and thus it is difficult to make general statements about an entire period or even a single dialogue. For an interesting apparatus within which these metaphysical issues may be stated, see Sommers, "Predicability," 268–71.

[8] This metaphor reflects the relation of *arete* to a given action, but put this way it discloses that Plato was hardly aware of its import. Were it not for other motives, process views alone would have hardly entailed a radical separationism.

[9] For a very strong defense of this view, see Ronald J. Butler, "The Measure and Weight of the Third Man," *Mind*, LXXII (new series, 1963), 62–78. An earlier article by Gilbert Ryle, "Plato's Parmenides," in Allen, *Studies in Plato's Metaphysics*, 100–11, lays the ground for a similar analysis. Both Butler and Ryle argue that the form theory is untenable, but we hope to show that these objections can be met and that the theory continues to possess as much value as any purely philosophical thesis can.

of metaphysical bankruptcy. Efforts to preserve the "image" language, at least in the sense of *Republic*, are ill-advised.[10] These points will be discussed more fully in the following chapter.

(2) The second motive for assuming a separationist ontology may have been a consequence of the "success" of the method of speculative demonstration. Though one might arrive at the "triangle itself" through a route of approximation, one is apt to neglect, in the vision of the absolute perfection of that which is thereby defined, that defining route from which the elicited entity is not in the least independent. One may thus come to consider the abstractive route, the concrete triangles, as dependent on the "triangle itself." The logical thesis that intension is prior to extension lends credence to this view. The form becomes the defining property in intension of the class. The intensional view of classes develops out of this admittedly attractive thesis, for it enables us to differentiate classes on some other basis than their members and avoids the apparent paradox that all null-classes are equal. It also suggests the universal-individual distinction but in a rather different form from that in Aristotle.

One can see this isolation of the form itself in the emergence of the idea of the Good in *Republic*. The notion of the Good is certainly implied in the functional and teleological view of form which Plato adopts early in the *Republic* (352E–354A). Function becomes the basic premise of the argument. A function either aims at some good beyond itself or is for its own sake (357A–358A).[11] In case the good transcends the process whereby it is achieved, the process is said to be utilitarian, and its value derives from the end. In the second case, the good may reside in the process whereby it is realized as an immanent end, and thus the process has terminal value in itself. The third case would be intermediate, being of both kinds, i.e. knowledge is both terminal and instrumental. The

[10] Interesting attempts to save this likeness theory may be found in Ballard, *Socratic Ignorance*; Cherniss, "Relation of the *Timaeus*," 349–78; and Allen, "Participation and Predication."

[11] Though these distinctions are implicit in Plato, they receive a clear and distinct form in Aristotle, especially in *Ethica Nicomachea* 1094a 1–1094b 10.

subsequent generalization of the Good in Book VI, as specifying all things (all becomings), would seem to follow immediately. But when perfection itself becomes the idea of ideas, the teleological view of the world whereby good came initially into view tends to disappear in favor of a world that lives in the shadowy image of the Good. In the context of *Republic* this is easier to conceive than it would be in *Meno*, which apparently does not recognize a difference in ontological type. There then must be some sense in which the world is derived from the Good, and thus Plato holds that it is the source of both Being and Becoming (509B). At this moment the hardheadedness of the early dialogues is threatened by something very much like neo-Platonism. The Good, in whose light all things are to be seen, i.e. understood teleologically, becomes the cause of all and lies behind its effects, transcendentally unknowable and unutterable.[12] This lends itself to a common religious attitude which seeks to go beyond the given world and man's cognitive powers to some higher Being and Power in virtue of whose superior Goodness the mundane world appears to be downright evil. Plato may have been the victim of such a psychosis. But perhaps religion and morals have more cogent grounds for separationism.

That separationism has an attractive ontological feature must not be overlooked and should be preserved in any reformulation of idea doctrine. If we admit the image theory of Becoming, then the idea is clearly independent of Becoming. Granted that this statement is bought at the price of equivocation, we now have a theory of *real* possibilities. In Aristotle and Kant possibility can only be defined through what is given substantially or in experience, but Plato provides a ground for novelty whereby Becoming

[12] As Professor Ballard has remarked (*Socratic Ignorance*, 87–88), there is no problem of separationism when ideas are understood as measures; the problem arises when they are given the role of *cause* (*Phaedo*, 199b–100e). It is at this point that we have the image-reality disjunction and the problem of participation. F. M. Cornford in *The Republic of Plato* (New York, 1950), 180, makes the usual mistake in assuming that only if they are separated can forms be absolutes and serve as a defense against Sophistry. We hope that our method of interpretation will eliminate this confusion.

may be conceived as creative (*Symposium*, 205C). What can be is not what potentially is in fact, but can be a novel advance on the previously given. This must be taken seriously.

(3) The role which a religious concern had in shaping Plato's thought is so well known that we need not linger over it. It is for others to ferret out the mystery cults that made their mark on this man; for us the ever present memory of Socrates is quite enough. One might well imagine that the trilogy *Apology*, *Crito*, and *Phaedo* is a sort of moral argument for the existence of God.

The divinely imposed mission of Socrates is that of gadfly to the Athenean polis, that of recalling man to his essential ignorance and to the recognition that God, who alone is wise, is the true measure of man. The life of philosophy is this purgative mission, to the polis and to oneself. But the pursuit of this mission leads Socrates before the Assembly and, on his insistence that he will continue on it if left free to do so, the judgment of death. This seems a kind of suicidal gesture; but the wise man is enjoined to seek life (*Phaedo*, 62A). The dilemma which Socrates faces can be resolved only if the life of the philosopher can somehow continue beyond its Athenean situation in the prison facing death, only if what the many call death can be most fully life. Philosophy is the practice of dying (*Phaedo*, 64A). Socrates' gesture can be redeemed from futility only if *he* is immortal. Thus the moral and religious situation seems to require the two realms of Becoming and Being; and in its radical separation from Becoming, philosophy becomes justified.[13]

No doubt the above is entirely too brief to reflect the richness and the depth of the Socratic appeal. It reaches the intensity of the highest art in *Symposium*. The mood he engenders has been the almost constant preoccupation of Western man. Whatever psychological and religious issues it may raise, it does generate a set of convictions and passions which have for centuries prevented most of Plato's admirers from appreciating the problems which

[13] Ballard (*Socratic Ignorance*, 19 ff) has given a preceptive and moving account of the motives for separationism found in the life of Socrates.

they raised for Plato himself and the route which he took in his effort to resolve them. To these problems we now turn.

The Two Worlds

That the idea alone is substantial is the constant theme of Aristotle's criticism of Plato, and on the whole this seems a fair interpretation of the status of ideas in the context of *Phaedo*. The myth of recollection, which may have been no more than Socratic irony at the expense of Meno's rhetorical imagination when it was first introduced (*Meno*, 81B–E), now seems to be of central importance.[14] Man is not simply capable of "recognizing" what was previously unseen by physical vision; he himself possesses a dual nature, one part defined by his apparently eternal communion with the ideas and the other by his bodily involvement in the flux of sensation and desire. That which knows itself through ideas, and thus shares their character, is psyche; while sense defines man's bodily involvement to him. This is an axiom of classical realism; a function is defined by its object. Eternal objects define mind, just as the flux defines body. Each "part" comes to have the ontological status of its proper object, and the presumed individual now becomes disjoined from himself.

To see how this comes about one must bear in mind the hopes which Socrates expressed for himself as he faced the hemlock in *Phaedo*: "For I am ready to admit that in meeting death without resentment I should be doing wrong, if I were not persuaded in the first place that I was going to the Gods who are wise and good (of this I am certain as I can be of any such matters), and secondly (I am not so sure of this last) to men departed, better than those whom I leave behind" (*Phaedo*, 63B–C). If soul is known through ideas and these are its proper object, then it is like them;

[14] Ross contends (*Theory of Ideas*, 22) that in "*Meno* the theory of *anamnesis* is not connected with the knowledge of ideas; in the *Phaedo* it is." This is surely false and is to mistake the myth for the doctrine. The theory of recollection is always connected with the ideas, but the myth plays a different role in the two dialogues.

and since these are eternal, it must be also. But this is to say no more than that the idea of man (or perhaps, as Plotinus thought, the idea of the individual man) is eternal, a privilege enjoyed *in sua genera* by any amoeba or triangle. About this Socrates is reasonably convinced. Let us grant him this privilege, which is the universal right of all that becomes and perishes. But the second hope of Socrates, about which he is far less certain, is critical, for it suggests a personal existence, an existence with other dead men which Dante so charitably grants him in limbo (at the feet of Aristotle) after departure from this unhappy life.[15] This is a great deal more than the existence ("subsistence," *sic*) of Socrates qua idea; it is life most fully and most real for all eternity. The soul, prisoner in the body, passes from the imprisoned body to the really real. Then Socrates achieves the goal of his search, that which he has always been pursuing in the marketplace, the gymnasium, the homes of the mighty, and on the field of battle becomes his.

But this means that when we speak of Socrates, we are quite in error, for there is no one being called "Socrates," but rather two, Socrates-soul and Socrates-body. Any sentence containing "Socrates" is apt to be logically ambiguous.[16] To some philosophers, Descartes for instance, incoherence may not be unwelcome.

[15] Dante, *Inferno*, canto IV, l. 134.

[16] Fred Sommers proposes in "Predicability," 265, the following criterion for type difference: "Two things are of different types if and only if there are two predicates P and Q such that it makes sense to predicate P of the first thing and not of the second and it makes sense to predicate Q of the second and not the first. Thus of Socrates' soul we can say that it is immortal, while of his body that it has perished; but not of soul that it is mortal or of body that it is eternal. As a criterion of individuality, Sommers proposes (p. 279), "An entity x is an individual if and only if every pair of predicates P and Q that is true of x is such that either P is predicable of Q or Q is predicable of P." "P is predicable of Q if and only if for every x, if either x is Q or x is not Q, then either x is P or x is not P" (p. 275). A term is said to be predicable if and only if the affirmation or denial is true (p. 272). With these definitions in mind, we can see that Socrates is a non-individual. We can predicate "will speak with better men" and "will revert to earth, air, fire, and water" of Socrates; but it is clearly the case that "what will rot in the grave" will not "speak with better men."

The bounteous grace of God will join and hold together what analysis reveals to be incompatible. But to Plato and philosophers of his persuasion who live in the shadow of the great Parmenides, this conclusion would be a scandal. The problem of unity is a very central problem, perhaps the most important. As Aquinas has it, Being and One are convertible terms;[17] and, if the father of the Western metaphysics, Parmenides, lacked the subtlety of Thomas and went too hastily from the many to the one in his search for Being (*Philebus*, 17A), his insight must remain a central theme for all who would serve philosophy. While there are as many species of unity as there are Being,[18] that which is of primary concern is how elements (*ousiai*) drawn from different ontological types or levels, Being and Becoming, can be related to one another in a single unity. This is impossible in the context of *Phaedo*. The way a man lives determines how he is to be judged by the gods; but since the gods judge the soul in virtue of the kind of life it leads, then clearly Becoming must *make* a difference to Being! Conversely, Socrates insists that the proper explanation of his presence in the prison is not through the immanent necessities of physical life (as Anaxagoras might put it), but rather soul and its vision of the ideas which has led him unto death (98C–E). The analysis of Socrates' situation in prison requires recourse to the mingling of ideas with the "necessities" of Becoming; for if the ontological levels are disjoined, then neither is relevant to the other and the whole Socratic stance is futile.

Just how futile the separationist doctrine of the *Phaedo* really is was expressed in what has been called the argument of the "two worlds" of *Parmenides* (133C–134E). Whether this argument is strictly valid or whether it is a myth about what Plato conceived to be the fate of his theory as entailed by the considerations in *Phaedo* is of little moment. However it be viewed, clearly an equivocal (homonymous) usage is involved when we predicate the same name of entities of differing ontological type and two

[17] *Summa Theologica*, I, question 11, article 1. See Aristotle, *Metaphysics*, 1003b 19–1004a 1.

[18] Aristotle, *Metaphysics*, 1003b 33.

differing and apparently disjoined orders of being lie side by side without mingling. Becoming can never respond to the lure of Beauty, nor can Being in any way shape the necessities of Becoming, and so the great doctrines of *Symposium* and *Phaedrus* would, like the speeches of Lysias, become school-pieces for rhetoric and the beloved Socrates would join the ranks of the Sophists. Aristotle's summary of the two world argument (*Metaphysics*, 911a 8–17) puts the matter quite nicely:

> Above all one might discuss the question what on earth the Forms contribute to sensible things, either to those that are eternal [the heavenly bodies] or to those that come into being and cease to be. For they cause neither movement nor any change in them. But again they help in no wise towards the knowledge of the other things (for they are not even the substance of these, else they would have been in them), or towards their being, if they are not *in* the particulars that share in them . . . .

There are certainly some difficulties with the exact form of Plato's argument. Aristotle, supported by Alexander, held that Plato did not admit ideas of relations,[19] yet it is quite clear that the argument does employ as an example the relation *master* and its converse, *slave* (*Parmenides*, 133E) to show that some ideas have a relational essence (133D). It is certainly not easy to say what Plato thought about relatives; but whatever it was, it was not that view Aristotle advances in *Categories* (6a 35–8b 24) wherein they are assimilated to monadic predicates. Thus instead of saying "a R b," Aristotle seems to want to say "a is R-b," the existence of the "R-b" complex depending on *a*.[20] Such a position would prevent one from understanding how one existing thing comes to have some integral quality through some other existing thing—a view essential to Aristotle's *Physics* and *De Anima*—for

[19] *Ibid.*, 990b 16; and Alexander, *in Metaphysica* 83.22. Interestingly enough, Bertrand Russell's platonism, such as it is, depends on the belief that there are such ideas of relations *Phaedo* 100E–102E contains the earliest extended argument about relations and seems to treat greatness as both a relative term and as a relation. Simmias is larger than Socrates; and by reason of *greater than* ("absolute greatness" is the name he seems to give this relation. See 102E), he has greatness.

[20] *Categories*, 8a 30.

his logic everywhere stresses that isolated individualism[21] which his immanent and relational view of nature denied. Perhaps had Plato tried to formulate his theory of relations he may have fared as badly, for premature formalism is a very great danger. Good philosophers like Aristotle do it but, because they are good, never take themselves seriously. But just as we cannot foster Aristotle's logical formalism on himself, so too we must be careful in applying it to Plato.[22] Above all, we can expect a far greater measure of intercommunion in Plato, both among things and among ideas, for he was never especially inhibited by the concept of an "atomic" individual and its substantial form. It is true that speculative demonstration might lead to an overemphasis on the individual entity, but with Plato it generally leads, as in *Republic* and even in *Meno* (81C–D, 98A), to a discursive bond, to system and order. Whatever be the final formulation of Plato, it must pay due reverence to the overriding relational character of his metaphysics.

The problem of the two worlds is not that of the failure to define relations within each (though as we know from those who have considered *Phaedo*, 74B–75D, *equality* does present a problem within "Being" itself),[23] but rather to find a bond between the relations of each level.[24] "I may illustrate my meaning in this

[21] Especially his definition of primary substance as neither present in nor predicable of (*Categories*, 1b 5), which had such tragic effects on the thought of Descartes, Spinoza, and Leibniz. In functional notation "*a R b*" is "*R (a, b)*" and "*a* is *R-b*" is "*R-b(a)*." The second case is and remains a monadic predicate, but the first can be generalized as a n-ary predicate, $R(x_1, x_2, x_3, \ldots, x_n)$. It is this later form which seems to express best the sense which both Aristotle and Plato attach to relations in their actual philosophizing. For this reason, the attribution of *Categories* to Aristotle is doubtful.

[22] For examples of the problem which Plato's uses of relations entail, see Ryle, "Plato's *Parmenides*," in Allen, *Studies in Plato's Metaphysics*, 106–10; and G. E. L. Owen, "A Proof in the *Peri Ideon*," in Allen, *Studies in Plato's Metaphysics*, 309–11.

[23] Geach, "Third Man," 269–70; Gregory Vlastos, "Postscript to the Third Man: A Reply to Mr. Geach," in Allen, *Studies in Plato's Metaphysics*, 287–91.

[24] Alexander *in Metaphysica* 82.11: "We predicate of things in this world equality itself, which is only homonymously predicable of them: for neither does the same definition apply to them all, nor are we referring to things truely equal. For a sensible thing's size changes and is not determinate and varies continuously, nor does anything in the world answer precisely to the definition of equality."

way, said Parmenides. Suppose a man to be a master or a slave—he is obviously not a slave of the abstract idea of a master, or a master of the abstract idea of a slave; the relation is one of man to man. The idea of mastership in the abstract must be defined by relation to the idea of slavery in the abstract, and vice versa" (133D–134A). Ideas are what they are in relation to one another, and things have their character in virtue of their relation to things (133D). We who become are out of all relation to absolute essence; and the knowledge we have must be relative to us, the knowledge of things in Becoming, and not of the ideas themselves. (Doubtless there is a shift away from the personal dualism of *Phaedo*, but the reasons for this quasi-Kantianism may be rhetorical rather than doctrinal.) If there were a being who knew things, he would not know ideas; and if he knew ideas, he would not know things. But this would deny that God, "having true knowledge," could know things (134D). Extreme transcendence must always pay the price of religious irrelevancy, whatever other apparent values it may possess.

In *Phaedo* and *Symposium* there is a pervasive tendency to consider the philosopher as one who is trying to escape the fragmented images which constitute this world to a world of perfect objects, the ideas themselves. In stressing the gulf which separates images from ideas, Plato at times may have attributed to the ideas a degree of perfection which if seriously intended would have rather unfortunate consequences. He may have felt that the idea of a perfect object would be itself a perfect object, having all the qualities the thing might have were it rescued from the ravages of time and transported to Being.[25] Peter Geach has given an admirable expression to this tendency: "Mortal lions are so called only because of their relation to the Lion, whose right to the name is pre-eminent and unqualified. The Lion is whatever properly belongs to lions; a particular lion may have its mane clipped and its claws pared, but the Lion still has its mane and sharp claws."[26] Geach admits that this view is inherently self-predicational; and in order

[25] The issue is, however, not to view perfect things, but to become perfect, and so even on this interpretation ideas need not be object-like.

[26] Geach, "The Third Man Again," 270.

to avoid its difficulties, proposes the analogy between idea and the Standard Pound.[27] Whatever be the merits of this analogy, the assumption that Plato thought of ideas as complete objects must be taken as, at best, a very occasional slip on his part. The main drift of the metaphysics of this period is to assume flux and, as in the case of *arete* and the Good, the notion that form is the form of Becoming, the pattern of activity. In this context self-predication is an identity relation, which belongs to form alone (*Phaedo*, 78D), and not the ascription of its own character to the form. That which constitutes character cannot be said to have that character without positing the absurdity of an infinite regress of character.[28]

With this we must clear our accounts with the early theory of ideas. We watched it generate in the dialectic with Meno and saw it flower into the grandest scheme mind has proposed, embracing the higher aims of men and nature too; but we saw that Plato thought that the price to be paid for such exalted vision was too high. The task is that of overcoming the separation between Being and Becoming and giving a coherent account of finite individuality. Participation was supposed to close that gap; and if the problem is to be overcome, the task is that of making sense of that notion. Nevertheless, the separation thesis is not without importance in itself.

Separationism Reconsidered

The separationism of *Phaedo* presented Plato with an obvious paradox. That grand view of the *all*, developed out of a piety for the memory and aspirations of Socrates, became on examination

[27] *Ibid.*, 276. Geach has been effectively criticized by R. E. Allen, "Forms as Standards," *Philosophical Quarterly*, IX (1959), 164–67; R. S. Bluck, "*Parmenides* and the Third Man," *Classical Quarterly*, VI (new series, 1956), 29–37; and Ballard, "*Socratic Ignorance*, 89. See *infra*, 90–91.

[28] Vlastos, "Third Man Argument," 257–58, rather confuses the issue of the "two world" argument with talk of self-predication and non-identity; but his final sentence does reflect the ancient and correct interpretation of this argument: "If only F-ness can be F, how can anything else be F?" Equivocation is the root of the problem.

totally inadequate to account for that life. The key issue was participation, a "relation" which had been postulated to account for the modal relevance of Being to Becoming. Being provided Becoming with a ground for value, knowledge, and existence; but extreme separationism rendered the task of philosophy suspect. To paraphrase Spinoza, if two entities have nothing in common, one cannot be understood through the other. Unless some connexity could be demonstrated, the task of trapping the Sophist was fated to frustrate itself.

It seems reasonable to suggest that throughout the remainder of his life Plato continued to maintain separationism.[29] Certainly the theory underwent modification in very important respects; but even in face of the difficulties he discovered in transcendence, he never adopted an immanence such as that of Aristotle. Now one may wonder why, especially since he seems to have begun with an unseparated view as in *Meno*, he himself did not return to the "cave." The modern student, who will probably begin to read Plato with a distillation of prejudices inherited from Ayer, Nietzsche, and Freud, and who looks upon religion as a betrayal of intelligence and integrity, will probably regard Plato's failure to return to the sophisticated simplicities of his earlier phase as a religious perversion and a philosophic decline. If, however, one seriously wants to do philosophy, he will try to see sound reasons for a position and not waste his time in *ad hominem* excursions into irrelevancy. We learned important and positive lessons in the middle dialogues, and to abandon altogether their most distinctive feature would be a disaster. The middle dialogues represent a very considerable gain in philosophical insight; and surely it was these, and not visceral matters, which made him press on in the full knowledge of the difficulties he had come upon. We wish to comment on some important advances effected during this period. Three which are of great importance are the construction of a romantic metaphysics, a developing concern for process and the conditions of its intelligibility, and the nature of explanation.

(1) *Romantic Metaphysics.* Undoubtedly, Plato's greatest gift

[29] The latest texts supporting the "separationist" view are *Timaeus* 52A and *Philebus* 15B–C.

to the business of civilization was his romantic conception of reality. The obvious fruits are poetic, but I wish to emphasize the deeper poetry of mathematics and physical science. Empiricism can never capture the *logos*, the appeal of formal thought, or the singular beauty of mathematics which leads men into the purest form of Platonism, the love of form for its own sake. "There is a romantic philosophy, mathematics, and physics which have a Platonic inspiration and which is perhaps one of the tortuous ways we can recover the abiding truth in the Platonic texts."[30] The very separation of ideal entities is the ground of their relevance; and this is surely nowhere better expressed than in mathematics, which isn't about anything[31] except form for its own sake; and yet through its ultimate abstraction, we gain power and dominion over the world (*Phaedo*, 100A). Nature is a pattern of interconnected and interrelated entities, and the key to the pattern is mathematics (*Republic*, 510B–511E; 523A–532A). This is, of course, the great theme of A. N. Whitehead's "Mathematics as an Element in the History of Thought," which, together with G. N. Hardy's *A Mathematician's Apology*, constitutes the definitive expression of this phase of romantic Platonism.[32]

Plato recalls us to the ultimate passion of reason. That is the final and sole justification of philosophy. To neglect this contribution would be to forget our credentials for doing philosophy in the first place.

(2) *The Logos of Becoming.* We sought to show that abstractive demonstration, if it is an adequate formalization of the early dialectic, does not involve separationism. There is no bifurcation between what is given for mind and what is given for sense, so that within this context the unity of the human person is not threatened. Perhaps because of the pre-Socratic tendency to think of things as collections of qualities, Plato never split up the thing into different ontological components (though in a phenomena-

[30] Taliaferro, review of Brumbaugh, 254.

[31] One is reminded of Russell's definition of mathematics as that science where we do not know what we are talking about or whether what we are saying is true.

[32] Whitehead, *Science and the Modern World*, Chapter II; G. H. Hardy, *A Mathematician's Apology* (Cambridge, England, 1940).

lism, as Kant showed, unity is the critical problem; and certainly Plato in his earlier phase had not come to see that); but as the Heraclitean view came more into the fore, the older position must give way to that which distinguishes between a form and its several, individual instances. Let us examine this in more detail.

Euthydemus, Cratylus, and *Theaetetus* contain abundant evidence to justify our belief that by the time of Plato's maturity an accommodation between Heracliteanism and Sophistry had been reached. We gather that Sophistry, which was itself at least as eclectic as Academic philosophy, had found in the flux, through a quasi-Megaric logic of same-other, a cosmological basis for Protagorean relativism. Key principles of this new doctrine were the denials of the principles of contradiction and identity, and a novel exploitation of the logic of same-other, or internal and external relations, whereby "all mingled with all" (*Sophist,* 252D) constituting a whole wherein no distinction (*peras*) of reason could be enforced.[33] Rhetoric was the "divine art" and the Sophist, a Demiurgos imposing his own immediate concern upon the world as its constitutive order (*Euthydemus,* 294A–295A). It was Plato's genius to discover within the flux the grounds for a nonarbitrary order and to establish *logos* (order, logic, science) supreme.

Euthydemus is a comic masterpiece, a philosophical burlesque; but if we look beyond its evident sophisms and gross play on equivocation, we can see a much deeper issue. It is very much like the fantasy of Lewis Carroll, an imaginative representation of the look of a world devoid of logical laws,[34] especially contradiction

[33] "Indeed those who say that things at the same time are and are not, should in consequence say that all things are at rest rather than that they are in movement; for there is nothing into which they can change, since all attributes already belong to all subjects." Aristotle, *Metaphysics,* 1010a 35–38.

[34] We know by the method of difference; and thus metaphysics has a peculiarly difficult task in eliciting its primary elements, for we cannot catch the world without them. Speculative imagination is required to demonstrate all-pervasive or categorical features. *Euthydemus* presents us such a world, as do many of the myths in Plato. Philosophers such as Wittgenstein are very much mistaken, as both Carroll and Plato demonstrate, when they claim one cannot talk about an illogical world; they very much underestimate the power of the human imagination.

and identity, and expresses the thesis, at least by inference, that logic must have its foundation in ontology.[35]

The Sophist was unwilling to concede an identity element in nature (*Euthydemus,* 288E; *Theaetetus,* 159C). Since the person who affirms p and later denies it might be thought to be inconsistent with himself, the Sophist proposes that both that "person" and "p" itself are other so no inconsistency is entailed, there being no self-identity. If Plato could not "fit" the given world into Being, the Sophist could not fit it into its immediate past. Whatever one may believe to be true is true, and inconsistency is impossible. According to the relativism of Protagoras a thing *is* in relation to a perceiver. Then suppose some perceiver x is in state or condition P relative to Q and in condition Y relative to Z. Then x is P and Y. But unless P is the same as Y, then x (P) is other than what it is, namely $x(Y)$. Thus there is a manifest inconsistency. A similar argument can be constructed for the objects Q and Z. For these reasons, the (Aristotle's) Heraclitean was willing to concede that everything is a mixture of opposites and has no nature of its own.[36] Finally contradiction is itself overthrown. To say what is false is to say what is not; to say what is not is to say nothing; to say nothing is not to speak; ergo, one cannot say what is false.

If discourse is possible, then the above arguments seem to require of us that we consider the logical order to be the real order of events and not merely a matter of convention.[37] Somehow, in-

[35] Aristotle's discussion of contradiction in *Metaphysics IV* seems to have been inspired by *Euthydemus,* and the doctrine of essence upon which he bases his logical law is derivate from the analogous concept of form in Plato. Both Plato and Aristotle are logical realists. It is the definite structure of things, their being what they are rather than something else, that supplies a ground for logic; and thus the defense of logic is a defense of definiteness against the apeiron, the mingled whole, of Heracliteanism. See *Metaphysics,* 1006a 30–1008a 2; 1009a 5–1011a 2.

[36] Cornford, *Theory of Knowledge,* 34.

[37] A. J. Ayer, *Language, Truth, and Logic* (London, 1938), is a delightful source of such sophisms: "What has contributed as much as anything to the prevalent misunderstanding of the nature of philosophical analysis is the fact that propositions and questions which are really linguistic are often expressed in such a way that they appear to be factual. A striking instance of this is provided by the proposition that a material thing cannot be in two

gredient in the flux is that which does not change (*Theaetetus*, 158E–159E, especially 159D). Ideas are the required identity elements. Thus we face the problem of immanent participation, of the way in which a thing qua other and other is yet one. If a thing is what it is in virtue of the way it embodies eternity, it also is what it *is* in virtue of the way it embodies its own past. Both of these involve the participation of Becoming in Being. How this can be so will concern us deeply later.

But ideas are the required identity elements. Clearly, we cannot say that an instance of the flux is self-identical (*Theaetetus*, 157B–E; *Timaeus*, 27D–29D), for this would deny change. If there is to be some knowledge of the flux, and knowledge is of what *is*, then clearly knowledge cannot be of the flux qua flux. The idea must be separated from the flux; yet at the same time, if in an obscure manner, it must contribute its shape, its pattern, to the ever going-on-ness of nature. An example of this would be the theory of the virtues in *Republic*.[38]

The analysis of a region of Becoming will thus disclose entities of different type, one derived from Being qua pattern, and the other, the patterned act of Becoming itself. No item of flux is self-identical. Self-identity is a characteristic of ideas insofar as they are ideas. We may express this as self-predication, "the Good is good" or "Beauty is beautiful," but we mean thereby to express the eternal self-identity of form as over against the other and other of nature's passage.

Change is not in every case a temporal phenomenon. A thing

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places at once. This looks like an empirical proposition . . . but a more critical inspection shows it is not empirical at all but linguistic" (pp. 62–63). "Thus if I say, 'Nothing can be colored in different ways at the same time with respect to the same part of itself,' I am not saying anything about the properties of an actual thing. . . . In other words, I am simply calling attention to the implications of a certain linguistic usage" (p. 104).

[38] One should not overlook the increasingly dynamic concern of Plato's mathematics in *Republic VII*, for astronomy, having to do with bodies in motion, and harmonics are the final stages of the curriculum. If, as the third stage of the divided line suggests, mathematics is the "language" of dialectic, then Plato's form theory is dynamic. The importance of this must not be overlooked, especially for the later dialogues such as *Sophist* and *Timaeus*.

is in relation to other things. "Nothing is just one thing by itself" (*Theaetetus*, 157B), so a thing can become other by simply changing its relations to other things. Socrates is small in relation to Theodorus; but when Theaetetus enters, he who was small becomes large, for he is larger than Theaetetus. Protagoras had argued that a thing is as it appears, that is, to the perceiver. But since the condition of the perceiver is relative to the object, object and subject are both relative to one another (*Theaetetus*, 160B). But surely relations without relata are nonsense. Thus, relative to twelve, six is less; but relative to two, it is more. Thus six is both more and less, depending on that to which it is related. But sober judgment tells us this is sheer nonsense, for six is six, i.e. self-identical, and because of its being what it is, is more or less than other numbers. It is not itself constituted by this relation as Protagoras and his relativism would have it (*Theaetetus*, 154B–155C). Even if everything is relative, there must be *definite* terms standing as relata to the relation. There may be flux indeed, but change itself requires a standpoint that is unchanging which makes possible discourse about change, and this is the role of idea. Ideas are the relata in relation to which instances of Becoming derive such identity as they may possess.

The issue of contradiction and its truth-value falsity is one which Plato faces in *Sophist*; and for the time being we can ignore it for another insight provided by the puzzles of *Euthydemus*. In an argument whose slapstick humor must be unmatched in the entire history of philosophy, Dionysodorus "proves" to Ctesippus that his father is a dog (298A–299A). Ctesippus has a dog who is a father. The dog is his. "Then he is a father and he is yours; ergo, he is your father" (298E). Earlier Euthydemus had proved to Socrates that his father, Sophroniscus, was not his father (297E–299B). Chaeredemus was the father of Patrocles, the half-brother of Socrates; so that both Chaeredemus and Sophroniscus were fathers. But Chaeredemus was other than Sophroniscus, a father. How could he then be a father, being other than father? Being other than a stone, you are not a stone. Therefore Chaeredemus was not a father. Were he a father, Sophroniscus, being other,

could hardly be father (same). "Sophroniscus, being other than father, is not a father; and you, Socrates, are without a father" (298B).

Schematically, we can exhibit the Megaric character of this language game as follows: Assume x is P and y is P. Here "x is P" is understood as "x is same (identity) as P." Thus if y is other than x, it cannot be P. If both x and y are P, then $x=y$, by Leibniz's law.

The usual way out of such an absurdity is to stipulate, with Aristotle, that *is* has many meanings and that in this case there is a confusion between the *is* of predication and the *is* of identity. But this should be recognized for what it is, viz., the assumption of a "substance" theory within which the universal-particular distinction is operative. This sort of thing will not do. Except in the very special case of mathematics, to speak of form in Aristotle is to speak of classes of entities which *have* the form, things to which the form stands either substantivally or adjectivally. But with Plato the case is quite different, for if form transcends its instances, then its extension is ontologically irrelevant to it qua form. Classes and instances are going to play a very derivative role in this logic; character, which is dependent in Aristotle, is going to be primary in Plato. Though we are at present unable to stipulate the relation of form to Becoming, it is clearly not that entertained by Aristotle and the great tradition of which he is the acknowledged master. The relation of an image to an archetype is clearly not that of a complex whole to an ubiquitous ingredient. Plato is really much closer to the universal mingling envisaged by Heraclitus or the "manifold" entertained by Anaxagoras[39] than he was to the unchanging, substratal definiteness (an "a this") of Aristotle. The Platonic revision of this early flux theory required that the separated (transcendent) form, i.e. father, be capable of multiple relevance to natural process, that it can be "instanced"

[39] The most suggestive interpretation of this phase of Anaxagoras is that found in G. S. Kirk and J. E. Raven, *The Pre-Socratic Philosophers* (Cambridge, England, 1962), 370–72. See also W. K. C. Guthrie, *A History of Greek Philosophy* (Cambridge, England, 1965), II, 279–94.

in several events, and is that which binds each of these into types of unity signified by the word "father." The condition of being a father will constitute an immanent nexus of paternal relations; but such nexus can be everywhere throughout nature, provided of course that there are beings who can exhibit this relation scattered about also. The only way out of the internal relatedness envisaged by the Sophist is to recognize that form has the status of a possible, that it functions as a limit (*peras*) of a Dedekind *Schnitt* and is of recurrent character.

Granted that sense can be made of participation, we can see that separated form is necessary to any philosophy which, like those of Heraclitus, Anaxagoras, and Bradley, conceives entities in terms of multiple types of internal relatedness and which takes immanence seriously. Perhaps it was here Aristotle failed; surely substance philosophy, whether in its traditional or in the sublated form of the predicate calculus, fails in the problem of expressing connexity. Whatever the merits of Plato's formulation, it brings us to recognize the dependence of logic on metaphysics.[40] It is high time philosophers developed sufficient self-criticism to recognize the basis of their own pretension; but then it is easier to root out nonsense in others than to have the integrity, the courage to face it in oneself.

(3) *Explanation*: Until he was led to take Becoming seriously, Plato seems to have shown little concern for the problem of explanation. The Socratic dialogue was an effort to perpetuate the mission of the master and was largely purgative, seeking to reach that ignorance which passes for knowledge and to bring it to recognize itself. What self-recognition entailed was the discovery of the universe of real values, and not the ego of post-Cartesian philosophy and its epistemic and moral isolation from the self-transcending world of power and events. The Socratic interior life was life in the good polis (*Republic*, 443D–E).

But the Socratic search, if it did not land itself in the dreary isolation of subjectivity, did find itself in an isolationism of an-

[40] For interesting comments on the relation of logic to metaphysics, see Sommers, "Predicability," 281.

other sort, that of the moral ideas. Early Socratic dialectic concentrated on the nature of the single form, those answering to the names "courage," "friendship," "temperance," and the like, and was largely unconcerned with how such a domain may have real relations with the remainder of the universe. Socrates reminds us that he had no concern for natural philosophy (*Apology*, 19D; *Phaedo*, 96A–100A). For Socrates, as for so many philosophers since G. E. Moore, ethics is *sui generis*.

It would be a mistake to suggest, however, that an undue attention to terms, rather than syntax, led Plato to the early form of the idea theory whereby intercommunion between forms is ignored at the expense of discriminating more precisely their natures. It is true that intercommunion is the subject of a great deal of post-*Parmenides* concern; but the constant theme of the early dialectic is that no man can be courageous, for instance, without being wise and temperate. This surely assumes intercommunion and the one-many problem.[41] It seems that the real question is how ethical statements are related to descriptions of the world.[42]

The real reason for this isolation of moral form must be Socrates'. The natural philosophers raised questions which were of no use to man; for even if everything were known, unless the Good were known too, this knowledge would be useless (*Charmides*, 172D–176A).

Socrates' was a philosophy of moral vision. It tried to break down the self-imposed barriers which stood between man and his own self and, in the image of Meno's slave, bring him to look and see. There were no explanations to offer; none are required in the passionate apprehension of the beauty of the moral ideal. To ask for explanation would be in very poor taste.

Insofar as explanations may be called for, they usually have to do with human behavior. One does not have to explain the truth

41 For a contrary opinion, see Ballard, *Socratic Ignorance*, 10–11.

42 Our concern is not with the perplexing question "Does *Republic* commit the naturalistic fallacy?" Yes, it probably does. But rather, we wish to show that Socrates' mode of thinking leads to incoherence; and that if this too is Moore's mode, so much the worse for the "naturalistic fallacy," and so much the worse for Moore.

he vividly and plainly sees, but he does have to explain why it is not seen by others. In *Protagoras*, for instance, Socrates is confronted with the example of the man who knows the good, but does otherwise, having been "overcome by pleasure" (*Protagoras*, 352A–356C). He invokes a hedonistic explanation and rather ironically explains that the situation has been misdescribed: If pleasure is the good, then the failure to act on knowledge would mean good overcame good; so the failure to act on knowledge discloses ignorance of which of the goods (the one known, or the one which overcomes) is greater. The emphasis is on knowledge of a measure, perhaps not unlike the hedonistic calculus of Bentham (*Protagoras*, 357B). Another example is found in *Symposium* where, through ignorance of one's true nature, man attempts to achieve a sort of temporal wholeness (Being), a wasting effort to shore up oneself against the ravages of time. Knowledge, that which man truly lacks, does indeed induce that immortality (Being), for it is man's effort to complete himself by eternal things. Knowing and not knowing are the explanations of human behavior.

Perhaps Socrates was too much the detached spectator, too wise to be fully involved in the failure that was the constant fruit of his dialectical therapy. He saw the ignorance of others and tried to cure it; like a somewhat similar mission of Isaiah, he knew that he was doomed to be unheard. The chief characters of the dialogues constitute a sort of rogues' gallery of Athenean history. Plato was a greater participant than Socrates in the effort to reshape the human lot.

But the problem of explanation became critical when Socrates had to explain himself. The *Phaedo*, if it is the ironic refutation of Socrates' aspirations, is the beginning of real philosophic maturity. Socrates would have had it that way, he who cared so little for himself and so very much for philosophy (*Phaedo*, 89B–91C). Pleasure and pain, knowledge of true pleasure (*Republic*, 582A–592B), and man's welfare, could serve as the naturalistic ground of explanation in those dialogues up to and through the *Republic*; but the soul-body distinction of *Phaedo* carried with it the repudiation of any legitimate motivation played by pleasure. Pleasures

become a "sort of nail which nails and rivets the soul to the body, until she becomes like the body and believes that to be true which the body affirms to be true" (83D). Philosophy is a "release . . . [from] the thraldom of pleasures and pains" (84A). Pleasure and pain cannot be proper motives to the virtuous life. This dehedonizing of motives leads to a moral sterility second only to that of Kant.

But while we are rightly repelled by this intellectual puritanism, it does bring another factor into analysis which must be considered. In a later passage, Socrates tells us he was first attracted to Anaxagoras because of the role that philosopher assigned to mind in causing all things, but that he became disappointed when he was given explanations solely in terms of "efficient" and "material" causes (*Phaedo*, 97C–98D). Thus he was not sitting in prison because of the necessities of joint, muscle, and the details of physiology; but that he was sitting because his choice of a way of life and his choice to remain consistent thereunto had brought him to the judgment of the Assembly (98E–99A). Physiology presents only conditions, hypothetical necessities as Aristotle called them,[43] and the true cause is the idea. Although his separationist view of soul is inadequate to the power of his own insights (How can pleasure effect an eternal thing, making it like the body?), nevertheless, we do come to recognize that explanation requires immanent conditions as well as transcendent ideas; and we must be on the lookout for some way to join them together. Socrates' choice was of alternatives not uniquely determined by the immanent necessities of physical nature, and both orders must be invoked in explanation. In *Republic*, Plato said that the grand harmonies are formed by the theme of freedom and the theme of necessity (399B). Reason must persuade these necessities (*Timaeus*, 47E–48A) in the conduct of the moral life. Explanation of human behavior must show how that behavior is rooted in nature, but it also entails that the ideas be separated from the flux as opening novel routes of conduct, which must then mingle with physiological detail if they are to be carried out. Moral isolationism must be overcome; ethics requires a philosophy of nature.[44]

[43] Aristotle, *De Physica* 200a 30–200b 8.

It is true that *Phaedo* makes only a very limited move in the direction of a coherent and adequate theory of explanation; but the role of the idea as cause, as principle of explanation does make its appearance:

> There is nothing new . . . in what I am about to tell you; but only what I have been everywhere and always re-repeating in the previous discussion and on other occasions: I shall try to show you the sort of causation which has occupied my thoughts. I shall have to go back to those familiar theories which are in the mouth of everyone, and first of all assume that there is an absolute beauty and goodness and greatness, and the like; grant me these and admit that they exist, and I hope to be able to show you the nature of cause, and to prove the immortality of the soul. . . . I cannot help thinking that if there be anything beautiful other than absolute beauty it is beautiful only in so far as it partakes of absolute beauty. . . . nothing makes a thing beautiful but the presence or participation of beauty . . . .
>
> (100B ff)

The above account clearly understands cause as participation; and cause is to be understood in this context as "sufficient reason," that whereby a thing is as it is rather than otherwise.[45] If it tends to limit explanation to what Aristotle has called formal causality (formal participation), there are other elements which begin to impinge upon the problem and whose relevance cannot be neglected. Perhaps Plato is reluctant to recognize any other species of cause (101A–103A); but he begins to see that formal participation may be the consequence of the way one thing mingles (material participation) with another. A thing becomes hot, not merely through the presence of heat (form), but through fire, a thing which carries heat with it (103D–E). If we are willing to recognize other species of cause, then participation is the funda-

[44] Charles P. Bigger, "Participation: A Definition," *Southern Journal of Philosophy*, II (1964), 18–19.

[45] Collingwood, *Idea of Nature*, 75–76.

mental relation involved in all types of explanation.[46] For if, as we learn in *Theaetetus* (157B), in nature there is no single, self-existent thing, then its relation to all of those other factors beyond itself whereby it is and is charactered, will be understood as instances of participation, either in the formal or the material mode. This requires a far more adequate account of the formal type than is now available; and we must now direct our attention to the great critique of that relation in *Parmenides*.

46 Participation is never to be confused with predication. When we predicate, we say what something is; but when we invoke participation, we say why it is. Form is not merely a character which a thing has; it is a thing because it has that character. Form is only incidentally a principle of classification; it is primarily the specification of the mode of operation of the thing. The confusion, induced by several centuries of sensationalist epistemology in the name of empiricism, whereby we take the looks and thus the sense qualities of the thing for the thing must be put aside for the view that a thing is its operations, potential or actual. If the "looks" are to be taken as primary, then this appearance specifies quite a different "thing," the physical-psychological unity embracing both bodily events and external, physical events, and it is of this unit that the "looks" may be said to be a specification. This aspect of Plato's theory will emerge hereafter.

III THE BROKEN BOND: *PARMENIDES*

PARMENIDES is admittedly so extraordinarily difficult that one can easily appreciate the wide disagreement which its interpretation has occasioned,[1] but there is certainly no dispute as to its centrality in Plato's philosophical development. Happily, our task will not lead us in the depths of its dialectical labyrinth (136A–166C); like cowards we shall linger with the preliminary passages, where things are really quite bad enough. This section 127E–136A) may be the most remarkable monument ever erected by any philosopher to the love of wisdom, for in it Plato seems to present all the possible objections to his theory of ideas. The cost must have been hard to bear; no other among us has produced so noble a vision of man and his cosmic environment as one finds in the middle dialogues. But then he turned on himself with all his elegant and penetrating critical skill and tore away at all that his passion and piety and intellect had wrought to show it wanting. He was a very great man. He took seriously Socrates' belief that the "unexamined life is not worth living" and so gave us our finest model of what it is to do philosophy.

Until *Parmenides*, participation remained largely unexamined,

1 The most important study of the main section of the *Parmenides* is Robert S. Brumbaugh's *Plato on the One*. My own interpretation has been greatly influenced by E. G. Ballard's review article of Brumbaugh, "On Parsing the *Parmenides*," *Review of Metaphysics*, XV (1962) and by his *Socratic Ignorance*, 91–99.

almost as if it were a primitive idea. There had been a few suggestions: a thing is beautiful because beauty is present with it (*Euthydemus*, 301A; *Lysis*, 217D–E), or participation is an image-original relation (*Republic*, 597A ff); but no serious effort had been made to examine it dialectically. To a philosopher of "vision" perhaps this did not seem necessary; one reported what one saw. *Parmenides*, on the contrary, presents us with what appears to be an exhaustive set of models, all of which are examined and found defective. As a result of this critique, we may take three possible attitudes towards the idea theory: We can assume that, acting against the advice of Parmenides himself (*Parmenides*, 135C), Plato abandoned the theory; we can show that no analysis of participation is possible, that it is a unique relation and, though like other ordinary relations, not same with any of them; or we can try to revise the theory in a way which will meet the objections which are raised against it. Plato certainly did not abandon the theory of ideas. Indeed, he wrote *Theaetetus* to show that one could not achieve completeness in a theory of knowledge without recourse to ideas and, what is more, continued to invoke the theory throughout the rest of his life. But this does not mean the theory was unambiguously stated or that the objections in *Parmenides* were explicitly answered. As we shall see, we cannot be sure just what his objections were; but in taking a stand on what seems a reasonable interpretation of the objections, we will see emerge a new form of the doctrine. In Plato criticism is apt to be construction; and we should not forget that when he attacks a position, as he attacked Polemarchus in *Republic I*, he may well be using it to show us the way towards a proper resolution.

The second alternative may be true; for it may be possible to hold that participation is *sui generis*, that it is a unique and prime relation. It may be analogous to a great many other relations, part-whole, image-likeness, one-many, and the like; but in itself it is what it is and cannot be analyzed further. Philosophers are suspicious of "unique" concepts, but this is in itself no reason for denying them. If we cannot define, in the usual manner, *sui generis* (or, if you will, primitive) concepts, we can nevertheless point to

them, even as one might point to red. By means of the technique of speculative demonstration we can construct a dialectical matrix which will *point* to the relation in question. The grounds for this procedure have been laid by Austin Farrer in what may well be the most important contribution to metaphysics of this era, *Finite and Infinite*.[2] Farrer was concerned to point out a unique relation, the cosmological relation (that whereby the infinite term is presumed to constitute the finite term), by means of an ordered set of relations which are in one way or another similar to the relation in question. These relations serve as the regions in which demonstration takes place.[3] An application of this technique to participation would be a very important contribution to metaphysics, but in this case I believe it to be ill-advised. If participation is unique, it is a mystery in the theological sense of that term; and thus what stands at the base of all finite understanding would be beyond range of understanding itself. Certainly Plato and a great many other philosophers would be willing to concede that rationality rests on a ground beyond reason; but to concede that we should begin where we may perhaps end, in mystery, is a council of despair and a disparagement of reason within its own domain. Participation is that relation between all nonself-sufficient entities and their causes, the basic structure presumed in any act of understanding. In this case, as with metaphysics in general, the possibility of a solution to the problem of participation rests on finding one. If we cannot, then we have available the type of alternative suggested by Farrer.

The third alternative, that of constructing an alternative to the available models of participation, will have to be our concern. But we must first face a powerful and cogent objection: it might be said that while Plato did not abandon the theory of ideas in some form or another, it is the case that he should have done so; for it is untenable. This attitude, which is as old as Aristotle, has recently been advanced by Gilbert Ryle and Ronald J. Butler.

[2] Austin Farrer, *Finite and Infinite* (Westminster, 1943), 14–62.

[3] For an application of this technique in terms of speculative demonstration, see my article, "Speculative Language and Theological Vision."

We have been in the habit of assuming that participation is "some sort" of relation, but Ryle has argued that it cannot in the nature of the case be any sort of relation.[4] Apparently all of the proposed models for participation break down in *Parmenides*; and though the account leads us to believe that some more adequate theory is forthcoming, Ryle argues that such hopes are unjustified. In order to show this, Ryle translates "participation" by the more natural, logical term "exemplification." The proposition, "*x* is green," will be read, "*x* exemplifies greenness" and not "*x* participates in green." Since every relation has a converse, the converse of this statement would be "greenness is exemplified in *x*." But assume that there is a relation called "exemplification" and that it is intelligible, then it itself must be an "exemplification" of the idea "relation." Thus we face an infinite regress: "The exemplification of *P* by *S* will be an instance of exemplification, and that of a third, and so on ad infinitum."[5] While relations may be involved in participation, Ryle is certainly correct when he asserts that participation is not a relation between a form and an entity instancing that form. He assumes that Plato intended to translate all attributive statements into a relational form, that instead of saying, "*x* is *p*," one should say, "*x* participates in *p*," where *x* is the entity instancing the form and *p* some form characteristic of *x*. Insofar as participation can be stated relationally, paradoxes arise which render the entire form theory suspect. Professor Ryle believes that the root of Plato's problem lay in his erroneous belief that relations can hold between entities of different logical (and ontological?) type, that it follows from treating abstract nouns as if they were the names of entities which "are terms in relational propositions with their instances acting as other terms. . . . Forms cannot be the subjects of simple propositions, affirmative or negative, attributive or relational."[6]

A somewhat similar argument has been advanced by Butler.[7]

4 Ryle, "Plato's *Parmenides*," 105–10.
5 *Ibid.*, 107.
6 *Ibid.*
7 Butler, "The Measure and Weight of the Third Man," 62–78.

He too argues that Plato intended to assert some sort of relation between instances and forms; but holds, in an argument reminiscent of Spinoza, that if two things have nothing in common, then no relation can hold between them: "For a general relation to hold between two different kinds of things, there must be something characteristic of both kinds."[8] Edinburgh is north of London, but hardly the same can be said of virtue.

Ryle and Butler are among the many who feel that the Parmenidean arguments against the form theory rendered it highly suspect, if not false; for that theory must depend on the establishment of some relation between the world of form and the world of Becoming, and such a relation would be logically vicious. It is certainly true that if we treat these domains as if they were separate things to be related, then *no* relation can exist between them! The problem is not with form as a relatum (as the quotation from Ryle would have us believe) in the participation relation; it is with the instancing term. Professor Butler correctly expresses the problem: "Once Plato had postulated the world of Being and the world of Becoming, he could not without recanting say that the things in the world of Becoming, are anything at all . . . ."[9] But in endorsing Butler's remarks, we must make one very major reservation: Participation, whatever it may be, constitutes a term as a relatum. It is not a relation describing two things as having some common feature; for if we may anticipate, that is the point of the argument at *Parmenides* 132D–133B. The idea is a cause whereby the exemplifying term exists as such. It is not because an already existing relation shares somehow in the form of *relation* that it exists as a relation; it exists because of the form. The form does not have the given character; it is not red or large or a bed or what have you; but other things, instances of Becoming, *are* in virtue of the form. If participation is a relation, it is a real relation,[10] one whereby at least one relatum *is* through the other(s).

Since the status of participation in the middle dialogues seems

8 *Ibid.*, 75.
9 *Ibid.*, 62.
10 Farrer, *Finite and Infinite*, 16–23.

to have perplexed many scholars, perhaps it may be useful to dwell further on this point. There are not two sorts of things, forms and instances, and a relation, participation, between them. Forms are not things. They constitute things, in the sense of providing Becoming with a definite pattern of activity, with a determinate character. There are no instances of Becoming unless there are forms. This relation between the form and its instance does not, like "greater than" or "above," hold between two existing things; rather it is a real relation which constitutes the instancing relatum as such. As long as we insist on supposing that all relations are merely nominal and that none are real, we shall have a great deal of trouble understanding Plato. There remain great difficulties in the concept of participation; but these are obscured, rather than clarified, by our insistence on treating participation as if it were a mere description of a relation between two sorts of already existing things.

By the time of the later dialogues, Plato seems to have shifted his position on participation. It is no longer the case that participation is a relation, real or otherwise, whose relata are respectively forms and instances. To anticipate what has to be shown in greater detail, participation involves a real relation between instances of Becoming, and the form is the form of this relation. Consider Professor Ryle's example, "*x* is green." In *Theaetetus* a paradigm analysis of perception is given which is relational in form and which also has something very important to do with participation (156A–158B). But the relations are not between things and ideas but *inter se* among things. We are told that we should say, "*x* is white in relation to *y*"[11] (153D–154B; 156E); for nothing is by

[11] In *Concept of Nature*, 18–19, Whitehead showed that expressions of the form, "The grass is green," are ambiguous. "I hold that the relation of green to a blade of grass is entirely different from the relation of green to the event which is the life history of that blade for some short period, and is different from the relation of that blade to that event." Failure to distinguish between types of modal ingression is unfortunate, but each is relational in quite the usual sense. Participation is a relational form, not a relation between an event (or thing) and its character. Grass is green in relation to *x*. If I see a green blade, then green is the way the grass event relates to the preceptual event. The way things relate to one another is characterized, depending on

itself but only in relation to others (157B). Another illuminating instance is the analysis of larger and smaller: six is large in relation to two, small in relation to twenty (154B–155C). Butler himself notices another incidence in *Phaedo*, but ignores its force: "Body is hot in relation to fire."[12] (105B–C). In the case of the first and third examples, the relations constitute the character *in* the thing; while the second, that of number, has to do with the status of a relative predicate. In every case, we deal with a logical form, $R(x_1, x_2, x_3, \ldots, x_n)$, where $n \geqq 2$, the individual variables, x_1, x_2, etc., ranging over events and the predicate, white, hot, larger, etc., presumably representing a form.[13] We will have more to say about these examples in the following chapter, but surely they should be taken seriously by anyone who is concerned to understand what Plato is about. We shall try to show that most of the difficulties Socrates encounters in his discussion with Parmenides arise from

the relation, by green, large, and the like. Nothing except forms are *simpliciter*, though we shall have to qualify even this statement later. The relational nature of participation, "*x* is *y* in relation to *z*," has perplexed those who have assumed that Aristotle's discussion is the norm for classical philosophy. Cornford, *Plato's Theory of Knowledge*, 182–84, and Cherniss, *Aristotle's Criticism of Plato and the Academy*, I, 275–88, are among those confused by the dogma that only since Peirce and *Principia Mathematica* do we have an adequate concept of relations, as against relative terms; but an examination of the examples in the text will show this to be a confusion. Whitehead, who was responsible for the logic of relations in *Principia* was not in the least confused and saw *Theaetetus* as a model for his own relational metaphysics.

[12] Butler, "The Measure of the Third Man," 77.

[13] If taken as a serious analysis of the first and third examples, our symbolism is misleading, for qualities are not relations. They are themselves relata (*Concept of Nature*, 149; *Theaetetus*, 182A). A more adequate symbolism is available in Scott Buchanan's concept of parametric order in *Possibility* (London, 1927), 33–65, which is itself a sophistication of the relation notation of *Principia*. Consider the function, F(x,y), where *x* is a function of the form $\Phi(a,b,c,\ldots)$ and *y* of the form $\Psi(s,t,u,\ldots)$. F is a super-parameter, Φ and Ψ sub-parameters. In the simplest form, let F be the parameter *red* and the sub-parameters, the complex physical objects and conditions and biophysical conditions of the object and subject, respectively. Such forms as *red* are constitutive and ordering, but for a given specific parameter do not admit of more or less. The account of perception in *Theaetetus* is of this form. A parameter is a boundary condition on possibility. In the equation $ax^2 + bx + c = 0$, *a*, *b*, and *c* are constants or parameters, which limit the range of the variable *x*. A parameter limits an otherwise infinite range of variation.

the effort to formulate participation in the language of "vision" and that these can be overcome if we employ the later doctrine of Being as power (*Sophist*, 247E) and the mutual immanence of events it entails. Participation is not the immanence of form; it is rather the way form characterizes the immanence of events. This is the conclusion towards which *Theaetetus* and *Sophist* point.

We must now determine how the arguments with Parmenides are to be treated. Clearly the tone and the context reveal no inconsiderable admiration for Parmenides, who was apparently the first to try to prove in a fairly rigorous way the truth of his conclusions and, in so doing, transformed philosophy from myth, poetry, and oracular aphorism into logic and demonstration. I assume that the argument may best be understood within the context of the logic of Parmenides which, as A. E. Taylor remarked, is not unlike that of F. H. Bradley.[14] For the "same" and "other" of Parmenideanism we may employ wherever convenient the "internal" and "external" relations of idealism. Above all, the *Parmenides* is to be regarded from the standpoint of Eleatic monism,[15] though not as a mere dialectical exercise or game as Taylor thought.[16] Perhaps it may best be described as an effort to reformulate the only available philosophic logic from within, to make that logic go beyond itself so that it could reflect both the unity and the diversity of the world. It was rather like trying to rebuild a boat in the middle of the ocean; and if the job does not get fully done, it seems to be clear what must be accomplished to bring it off—unless, of course, as some would claim, Socrates (and Plato with him) was drowned in the endless sea of words. But there was an even more compelling reason to return to Parmenides; the Megaric school had made an eristic of the logic of the master and was using it to attack the Academic philosophy, and it may be true that Bryson, a member of the school, had launched a critique of the idea theory through something like what later became known as the Third Man Argument. Perhaps this logic, through

[14] *Plato: The Sophist and Statesman*, trans. A. E. Taylor (Edinburgh, 1961), 34.

[15] Taylor, *Parmenides of Plato*, 9.

[16] *Ibid.*, 39.

the presence of Eudoxus, has found a respected place in the Academy itself. All of these factors required that Plato take Parmenides seriously; and in his use of the master's logic he found a precise diagnostic instrument whereby the limits of his own theory could be brought into the clear light of dialectic and perhaps thereby reformulated.[17]

The Idea Classes

With *Parmenides* Plato and philosophy come into their full maturity. One feels a considerable pretension in saying anything about *Parmenides*; perhaps if we take the lowly road of patient analysis we can gain a surer view of its majesty, but the prospect is hardly encouraging. Nevertheless there are things that can be said that should be said, and there are some things which have been said which should be set aside. Perhaps we can clear away some rubbish and not obstruct the view too much in the process.

The first point to be made is that *Parmenides* contains the rather clear admission of three distinct idea classes, and with them the recognition that participation is a rather more complex problem than was previously anticipated. The primary idea class is that of the transcendentals, those "all-pervading, connecting terms" of discourse (*Sophist*, 253C): likeness, unlikeness, unity, plurality, rest and motion (*Parmenides*, 129E). Being is missing from this list, but this is no problem since it is admittedly incomplete. The second idea class is that of the regulative forms, such as rightness, goodness, and beauty (130C). The final class is that of the constitutive forms: man, fire, water, and the like (130D). Since

[17] Peck, "Plato versus Parmenides," 159 ff, seems to follow Taylor in regarding *Parmenides* as a long and painful joke. It must be admitted that, as in *Cratylus*, Plato could carry a joke to a very painful length; but in this case I believe the use of Parmenides' logic serves to show wherein the problem lay for Plato and the necessity of a reformulation of the logic itself. This is done in *Sophist*. In an earlier article, "Plato's *Parmenides*: Some Suggestions for Its Interpretation," Arthur Peck correctly contended that Plato's purpose was to show "where Parmenides was wrong or inadequate," for Parmenides himself would deny any connection between the sensible and intelligible because he denied the reality of the former. See *Classical Quarterly*, III (new series, 1953), 126.

these are distinctions which, as far as I can discover, have not been clearly made in the literature, a preliminary discussion may be useful.

(1) *The Transcendental Ideas.* The transcendental ideas constitute the fundamental principles of philosophic logic. They predicate with all things and with themselves (*Sophist*, 254C), and constitute the modes of universal relatedness (communion) of all things, the forms of separation and mingling.

The list given in *Parmenides* is not that of *Sophist* or *Timaeus* (it is, as we suggested, Parmenidean), and its power to define participation may be less than adequate; but since this is the subject of the following chapter, we may now ignore it. We might, however, notice the apparent ambiguity in "likeness" (and by inference, "unlikeness"). In the *Sophist* we find instead "same" and "other." What are the problems one might encounter in making a choice between these two lists? Is it possible to "reduce" likeness to same and other? We might say, in case "*A* is like *B*," that there is some identity element *x* which is *same* with respect to *A* and *B* and that their differences fall outside this relation.[18] This is an admittedly attractive solution and accords with the intentions of Eleatic logic; for if "like" is treated as a primitive, then given two phenomenal entities *A* and *B*, there is no "same" in which each shares, and this sameness was just what a form was supposed to achieve. The primacy of "like" (resemblance) was Hume's assumption, whereby he managed to achieve a nominalism of sorts; but surely Plato would have wished to avoid *this*. In some cases we can undoubtedly employ "same," as we might say John is like Philip in virtue of the identity *man* present in each. But suppose that we are given the statement, "Orange is more like red than yellow." It would be difficult to find any sort of identity element between the several color tones, for each is surely just what it is. It might be possible in this case to construct a scale of colors

[18] A paradigm for this type of argument may be found in *Sophist*, 243E ff. Any who have been schooled in the great modern master of dialectic, F. H. Bradley, will recognize the problems in this formulation. To them we can only say, "Cast a cold eye . . . horseman, pass by!"

whose intervals were such that degrees of likeness and difference could be precisely measured. The scale would play the role of a mathematical form. In case of heterogeneous genera of sensa, such as when we say a certain color tone is like a certain note, perhaps a similar procedure can be employed, especially if we are willing to accept Charles Hartshorne's thesis that all sensa of whatever genera form a continuum.[19] But on the whole, it might be wiser to follow Brand Blanshard's advice and regard certain "universals," those generated by irreducible "likeness," as purely nominal and not look for a corresponding form.[20] Plato may at one time have thought that forms correspond in some one to one way with the terms of discourse (*Republic*, 596A), but he wisely abandoned this in *Politicus* (262D–E). Indeed he was aware of the danger of taking language itself as the primary datum for analysis (*Cratylus*, 440A–E).[21] Unless we are able to reduce a given relation to same-

[19] Charles Hartshorne, *The Philosophy and Psychology of Sensation* (Chicago, 1934), 5–10, 190–242.

[20] Brand Blanshard, "Universals," *Reason and Analysis* (London, 1962), 382–421. The terms "generic" and "specific" as identifying the types of universals are borrowed from him.

[21] For an excellent discussion of the relation of language to ideas, see Paul Ricoeur, *Entre, Essence et Substance Chez Platon Et Aristote* (Paris, 1954), 5–8. Ricoeur correctly distinguishes the naming or discriminating act as primary and sees that this leads to a pluralistic ontology, but he neglects to notice that the primary concern throughout Plato is with the discrimination of ordering concepts (regulative ideas). He does recognize the relational character of Plato's metaphysics: "le platonisme est une philosophie engagée dans une réflexion sur la relation des êtres entre eux. . . . Une ontologie pluraliste est une ontologie relationnelle" (p. 7). The critical metaphor in Plato is the weaver (*Cratylus*, 388A ff; see also Appendix A) who in the act of discrimination also binds together in virtue of a pattern which he produces but which also governs his work. Discrimination (naming) is within a pattern of order, but it "creates" as well as reiterates that pattern. That pattern is descriptive, i.e. propositional and unifying. Description and discrimination mutually involve and presuppose one another. We will have occasion to reflect on the metaphysical import of this in the following chapter. All of Plato's thinking is bipolar, an interplay between nature and convention, describing and naming, one and many, form and fact, and the like; and to seize on one pole at the expense of the other is to distort him unmercifully. On the whole, Ricoeur's treatment is fairer than most. His two "laws," however, stress disengagement at the expense of connexity and are to be viewed as only partial explications.

other, that is, to a "specific" rather than a "generic" universal, we may well be suspicious of the ontological relevance of that relation. This will give us a more adequate analysis of the role of form; though if the relation of participation be unique, then this may be quite another matter.

(2) *Constitutive Forms.* The primary role of this kind of form is that whereby it constitutes that which participates in it. For this reason, we call such forms constitutive. Doubtless this class enjoys an ambiguous status in the middle dialogues, though constitutives are more readily admissible within the limits of the earlier form theory. We have a turning away from unseparated form in *Phaedo* and *Symposium*. As we saw in that context, form tends to become a highly privileged object having merely degenerate instances. We also saw that this separationism generated the problem in *Phaedo* of the ontological status of psyche; for, in virtue of its at least partial identity with the idea realm, it could not mingle with the facts of its incarnate life whereby it at least could be (and most generally was) shaped and, as a consequence, was judged by the gods. But even *Phaedo*, for all its unconcern with the immanent and efficacious order of events, does recognize some cases of constitution, for fire is hot in virtue of heat (103C–D). Heat does not have our sense of a scalar quality but is the constitutive quality, as in Empedocles, of pre-Socratic natural philosophy. Again, whatever be the final interpretation of the confusing passage on the form *equality* (74C–75E) and the equals, it is clear that phenomenal equals share somehow in equality itself. Though the young Socrates may hesitate to introduce forms for all natural kinds (*Parmenides*, 130C), the mature Plato seemed under no such inhibitions (*Timaeus*, 35B–36B; *Seventh Epistle*, 342D–E).

Let us state in a rather dogmatic manner how we understand constitutive form, hoping to justify our position as the argument progresses.

Constitutive forms are wholly present in their instances. In this they contrast radically with the third idea class, the regulatives. Assuming that being-an-apple is a "specific" form, anything which

might participate in that form is not, insofar as it participates solely in that form, a deficient instance of that form. If something has the character of being-an-apple, then it is fully and completely an apple. Things are neither more nor less what they are, though they may be more or less good or beautiful or large. Regulative forms stand to constitutive forms as measures of their mode of realization. It is admittedly the case that in Plato certain regulatives are primary, for instance, good and beauty; good is prior to Being (*Republic*, 509B–C; *Timaeus*, 29A–B). Plato is not Aristotle or St. Thomas, for whom Being is primary; but as Aquinas reminds us, it is not as if good and Being were two things, but that rather a distinction of reason is involved whose object is a single reality,[22] and the Platonic tradition has placed its emphasis on value and insisted that existence is to be viewed within its parameters. Thus, to make the distinction between constitutive and regulative forms is to make a distinction only in thought and not to hold that in the end either can be considered apart from the other. If we bear this in mind, we see that there is no "degree of reality" at the level of constitutive forms in Plato, as there are in neo-Platonism and F. H. Bradley. Apples are not degenerate cases of the apple itself.[23] Were a given specimen not an apple in the fullest sense of that term, this would be in virtue of some principle of otherness, say peach; and so this apple would be like the apple itself in virtue of being like the peach itself, etc. Professor Bluck has contested this point, arguing that were something deficiently F with respect to some constitutive form F-ness, this deficiency

[22] The primacy of Being to Good in Aristotle is so all-pervasive that citations seem irrelevant. St. Thomas Aquinas nicely sums up this tradition in *Summa Theologia*, I, q. 5, a. 1, 2. The emphasis on Being is always on the individual, at the possible expense of the systematic relation of individuals, which is the case when Good is made primary. The Platonic primacy of Good is not that of Plotinus, for whom Good is emanatistic, not systematic.

[23] Vlastos, "Third Man Argument," is an outstanding supporter of the "degrees of reality" theory in Plato. As I understand it, the position we are upholding entails a denial of his non-identity assumption in both its strong and weak forms. For further reasons as to why Plato might be thought (I think wrongly) to uphold this theory, see W. G. Runciman, *Plato's Later Epistemology*, Cambridge Classical Studies (Cambridge, England, 1962) 22–23.

could not be accounted for through some other form, F_1, "because in so far as it is a deficient character at all it is characterized by the form F-ness and is F."[24] But why need it be deficient? Certainly a man can have a severe virus; and so because he is ill, he might be said to be deficiently a man, for the virus would inhibit or prevent him from performing certain human operations. But surely just because something is an image, to use that model of participation, it is not deficient. It is simply other than the form, at least in the sense that the predicates of the form qua form are different from those of the image qua image. The principle of otherness *must* be non-formal, for otherwise we would find ourselves confronted with an infinite regress of characters. The principle whereby images are other than forms is that of the receptacle of *Timaeus* or, perhaps, *apeiron* of *Philebus* (that which is limited and specified by *peras*). It is certainly true that once measure is introduced, and with it the concept of a paradigm, we can and indeed must use the language of more or less, of deficiency and deformity; for value forms are systematic, not emmanentistic, and it is only within the value impregnated whole that we can talk of Being or existence. But this does not mean that we can confuse existence and value,[25] which though differing, as Aquinas says, formally or only in idea,[26] nevertheless differ.

Finally, we should remind ourselves of a point made earlier, that constitutive forms, though nonseparated, perhaps even immanent in particular instances, transcend all such instances as pure possibilities for the definiteness of nature. Value forms, or regulatives, define possible systematic orderings; and so, if value is primary and is that to which particular Becomings should conform, we must have real possibility. This is a fundamental difference between Plato and Aristotle. Further, a form can effect no realization of itself; how it gets into nature depends on the go of things.

(3) *Regulative Ideas.* In turning to the regulative class, we can find several important clues as to their nature in Kant, from whom

[24] Bluck, "Parmenides and the Third Man," 31.
[25] Runciman, *Plato's Epistemology*, 19.
[26] *Summa Theologica*, I, q. 5, a. 2.

the term "regulative (and constitutive) idea" has been borrowed.[27] It is obvious that Kant is interested in the way mind constructs its world, and the regulative ideas play a role in this mental synthesis; while Plato, a realistic philosopher of Becoming, is concerned with ontological synthesis, with the coming to be of entity. Justice, rightness, largeness, and the like are terms prescribing certain norms for objective synthesis, involving both the environmental and self-integration of a given entity with respect to some appropriate modal norm.

In the philosophy of Kant regulative ideas concern the manner in which the ego synthesizes empirical concepts in accordance with certain *rational* criteria in order to give to knowledge both completeness and teleological form. Since these criteria have their roots in reason itself, they carry with them, even if in a somewhat vacuous manner, the absolutely unconditioned character of their presumed source or ground.[28] These "maxims" are meant to shape the way we think phenomena, demanding completeness in virtue of an a priori idea of the whole; but they are quite empty with respect to any quasi-categorical and categorical demands they may make with respect to a *specific* phenomenon or its possible or actual connexity with the entirety of experience. They constitute the necessity for mind that it complete phenomenal synthesis. Kant is party to that dogma which since Descartes has insisted on an enforced separation between the way the world is known and the way it is valued, so the regulative ideas are devoid of axiological import.[29] The notion of system has no value prescriptive role, as it does, say,

[27] This Kantian usage, and I believe the notion of the idea classes, was suggested by W. S. Weedon. I am not certain that I understood what he meant in 1948, nor am I convinced that he would approve of the present interpretation.

[28] As Kemp Smith has rightly remarked in *Commentary on Kant's Critique of Pure Reason* (New York, 1950), 547–52, Kant wavers between a subjective and an objective interpretation of the regulative ideas. At times they are treated as if they were illegitimate extensions of understanding and at times as if they were constituted by reason. We have assumed the "objective" interpretation, but without any claim as to its legitimacy.

[29] Those such as James, Dewey, and Whitehead who have felt this to be a mere dogma, in the invidious sense of that term, have been strangely ignored by the "professional" community.

in Plato and those for whom value is the primary term in synthesis. The one case in which Kant admits to a valuational and constitutive role for reason, the instance wherein it is not the emptiest and most illusory of forms, is in the field of action. Here we do indeed have system, the "kingdom of ends." Activity which synthesizes in accordance with and out of respect for duty and its unconditional ground is in the spirit of Plato's theme; but even here in the ethical domain Kant enforces a bifurcation between reason and the immanent and constitutive necessities (empirical) of experience, wherein pleasure, not respect for the law, may be the real motive. Kant everywhere finds a gap between the regulative and the constitutive, between how things are and how they ought to be or be thought.

Platonic realism has a different lesson to teach. Synthesis, we remarked, is ontological, the becoming of entity for itself and thus for others, and so not merely in or for thought. Regulative ideas relate to the *particular* constitutive synthesis of something. The primacy of the good and of valuational ideals in general requires, as we have seen, that they be germane to every instance of becoming and that all such instances be understood through them. Valuational ideals must inform any synthesis, not those involving mind alone, in the given world as persuasive routes to higher levels of attainment; but each such synthesis must be understood through its own form of value, a form relevant to this synthesis. There is an absoluteness of value categorically operative in a given synthesis; but there are no absolute values holding for all forms of constitution.[30] Kant suggests what may be the correct mode of analysis, but his Newtonian mode of understanding the world as a mechanical system exhibiting closure to mind and value led him to separate fact and value (which has for him to be universal, not contextual) and thus to trivialize his great insights. To use his terminology is to borrow the greater import of his vision.

The philosophy of Plato is a constant protest against all forms of incoherence. He may give good and convincing arguments which

[30] *Infra*, 185–88.

lead to dualism, and they may be beguiling indeed; but his genius always brings him back to the problem of real togetherness, to the tri-unity of existence, order, and value. No Christian philosopher-saint ever saw it so clearly or labored with greater piety (and considerably less humor) to achieve it.

Let us consider the following points in somewhat greater detail: regulative forms are (1) realized only in degree in the detail of their participating particulars, (2) measures in their respective particulars, and (3) relative to the entity or type of ordered domain which may be said to partake in them.

(1) "More or less" holds with respect to participation in a regulative form. This suggests that one could locate entities participating in regulatives such as beauty, justice, and the like along a scale, like the Kelvin scale, which would determine their distance from the absolute norm (*Republic*, 587E–588A). One must be careful, however, in comparing specifically different forms with respect to a regulative. Is a good apple better than a good carrot? In themselves, to me, or to a rabbit? Unless some specific context is or can be specified, no sense can be made of such statements.

Expressions of the form "like really just" or "*ontos on*" are apt to convey the idea that Plato had a "degree of reality" theory, the theory that everything other than the form is more or less but never wholly real. In the case of constitutive forms, we understood such expressions as "is a reality," "the really real," "is true being"[31] as referring to the self-identity of a form as over against the other and other of Becoming. These epithets serve to indicate the unity of the form as against the "fragmentation" and possible disruption of the image in the flux.[32] In the case of the regulatives, something else is entailed. A regulative orders a complex domain,

[31] These designations are borrowed from Vlastos, "Third Man Argument," 245.

[32] Collingwood, *Idea of Nature*, 56–57: "If Plato calls the sun unreal, he does not mean that when we say 'There is the sun' there is in fact nothing at all; what he means is that the thing which is really there does not possess, firmly and unconcealedly, the qualities which when we call it the sun we think it to possess; these qualities it only enjoys for the time being; they are not its inalienable property; we think that they are, but we are deceived."

but that domain may be "mixed." In *Republic VIII* it will be recalled that Plato held that existing men and states were mixtures of various ideal types, aristocratic, timocratic, and so on. As such, they combine incompatible types of character. A man may be moved by the love of fame and honor and be a timocrat, but he may be moved in other respects by greed and is at best an oligarch and at worst a democrat. These are value, not descriptive, types.[33] No given complex, and every instance of Becoming is complex, is an instance of a *simple* form, but in its constitution embodies other forms and their multiple lures and partial demands.[34] If man were an absolute simplicity, analogous to a Democritean atom, then the case would be otherwise. In a famous metaphor, that of the hanged man, St. Augustine illustrates the concept of multiple orders ingredient or participating in a fact and the ideals prevalent in each such order.[35] "Let us imagine some such unsociable fellow . . . calling him 'half-man' for his inhuman barbarism." He acts contrary to his own nature and that of society as defined by moral law, but even as a criminal preserves a certain order and form in his behavior: "in that horrid dungeon of his, whose floor and walls were always dank with the blood of new slaughters, he desired nothing but to rest in peace therein, without molestation." Crime too has its *arete* and *telos*. But since this order is contrary to the public good, the order of retributive justice demands that he be hung from his feet 'til death. Granted the unjust character of retribution, we can nevertheless conceive the ideal the image conveys. Upside down, the order of life and its purely

[33] Any application of a value term is a valuational description of the way something acts, its mode of life, in itself or to another. What is meant in this particular case is that such terms as "aristocracy," "democracy," and the like do not have the sense given them by Aristotle and later political philosophers and scientists; they do not exhibit a constitutional form. The failure to observe this has been too common among political thinkers, a charge that does not apply, however, to Thomas Jefferson and John Adams.

[34] An ideal is a limit abstracted from a complex whole. The simplicity of such ideals makes understanding possible; but if they are taken as the reals and fact is seen as degenerate, the result is vicious intellectualism or misplaced concreteness, however one wishes to describe it.

[35] St. Augustine, *City of God*, XIX, 12. The whole of this book is an important commentary on this aspect of Platonism.

biological purposes is threatened and finally overthrown by another order, the primary laws of physics which "destroy" the living system as such. And the order proper to a dead body is itself finally overthrown by that proper to maggots. Each has an excellence, an ideal form, if you will, which measures a stratum of activity relative to it. If man is, as Plato believed, multiform, each constituent can act at the expense of others and constitute ideals for itself that may be antithetical to the life of the well-ordered whole. Justice to the oligarch is not justice to the tyrant, timocrat, democrat, or aristocrat; but, relative to a type of order we may single out (assuming all types are present in our chosen instance), a "really just" can be defined which has the sense of excluding the others. But unless this type is that of aristocracy, then there will be higher orders in virtue of which it is not "really just." A state may hang a man justly; but in consideration of the nature of the state and its relation to human good, we may decide that this action is really unjust.

Plato, with all due respect to those who say otherwise, does not admit of "degrees of reality." He does admit measure and the relative distance a thing can be from its norm. But measure is relative to the nature of the measured thing (in the important sense) and, at least aesthetically and ethically, a lure to that thing being itself; and in being itself, to better fit in to its relevant universe. What is relevant can itself be graded, and we thus admit a value hierarchy. Socrates thought that the universe included soul and body, gods and fellow citizens, and he also thought that man's nature entailed normative relations with the whole of the cosmos. Rightly or wrongly, except perhaps for moments in *Phaedo* and *Symposium*, Plato's view of things did not lead to degrees of reality, but to an even more objectionable dualism.

Looked at in this way, we see that the self-predication problem does not arise with respect to regulatives and (in those cases wherein a dominant constitutive structure can be specified) the paradigms which they define.[36] But there are other regulatives which

[36] In the next chapter we will be in a position to give a more adequate account of "paradigm formation" and will see that such paradigms occupy the place of the intermediates of *Phaedo*.

are universally applicable, Beauty, Good, and Truth, and which for this reason were counted among the transcendentals by the Scholastic philosophers. It is here that the self-predication issue becomes quite intense. We could say of such phrases as "justice itself" that, instead of leading to expressions of the form "justice is just" and the regress it engenders,[37] they specify the normative form as against the mixed character of the participating instance. But if Good and Beauty[38] are omnipredicable, if they can be said of everything, then what would the phrase "the really Good" or "the really Beautiful" serve to make specific? And indeed Plato seems to have thought of Beauty as beautiful and Goodness as good.[39] It is true that in *Symposium* Plato, still under the influence of his earlier "thing" theory of form, did think of Beauty as an object, the vision of which moves the soul from fair objects to the birth in Beauty itself. Surely Beauty is more enravishing than all mere images of Beauty, but even in *Symposium* there is another side to the story, one which lifts such ideas from the sterility of an infinite regress to the status of sounder doctrine, for Beauty is an ordering concept. Analogous considerations hold for Good.[40] Beauty is a way of regarding all things with respect to (a) their formal completeness and (b) their integration into the harmony of the cosmic system. The first point (a) is the moral of the substitution of Beauty for Good (*Symposium*, 201B), where the condition of fulfillment, that of satisfying quasi-pythagorean conditions of well-ordering, replaces that of the goal. What results, Beauty, is the presumed condition of being integrally in harmony. The

[37] Butler, "The Measure and Weight of the Third Man," 65–67, limits "self-predication" to what we have called regulative forms without explicitly distinguishing them from the other form classes. He does not seem to see that these are ordering principles contingent on constitutive character.

[38] There may be some question as to whether Beauty deserves this status. It does in *Symposium*, but perhaps this is not the case in *Phaedo*.

[39] Vlastos, "Third Man Argument," 245–51.

[40] The present treatment of the idea of the Good is by no means intended to be adequate. That which as ground is beyond truth and being must be approached otherwise than as a mere instance of a regulative, whose vacuous character it must share in a pre-eminent degree. E. G. Ballard has suggested that it can be approached only in myth and metaphor, and I find his treatment of these themes in *Socratic Ignorance* of considerable interest.

second point (b) is made in the justly famous ladder of love (*Symposium*, 210A–212A), where concern for the well-formed individual soul is transformed into a love for the polis and finally for the cosmos.[41] No degrees of reality are entailed. These considerations will reveal the arguments in *Parmenides* in a new light. Since Gregory Vlastos admits the "self-predication assumption," the source of what he takes to be Plato's greatest difficulties, is never explicit[42] but must be inferred from usage (*Lysis*, 117D; *Protagoras*, 330C–D; *Phaedo*, 100C), and since, as we have tried to show, in the middle dialogues this usage is to be seen in relation to Being-Becoming as the pattern of action and thus reflects the growth of Plato's thought, perhaps this hope for a new understanding of *Parmenides* is not without foundation.

(2) While it may be true that regulative forms do provide us with a superlative ideal, a standard for the regulative ordering of a given domain, the form must never be confused with that which it measures. This is the lesson of *Republic* 472A–E. Plato warns that justice is ideal and is not the form of existing situations and that it can never be fully realized. To assume otherwise is to confuse Being and Becoming. This enables us to distinguish, for instance, between the immanentistic utopias of Marx and More and the thought of Plato, which assumes the transcendence of the ideal form of justice.

In an effort to show the relevance of the regulative form to its instance, and at the same time to preserve the necessary separation between these realms, it is sometimes assumed that Plato advocated a theory of "likeness." A likeness contains within itself the notion that it is both same and other with that which it is like. But this simply will not do. If we minimize the "distance" between

[41] Read in this way, the role of the Good in *Republic VI* becomes much more nearly providential. Whitehead once remarked that the greatest theological discovery of the Greeks was the persuasive, rather than the constitutive, role of deity. We can see this clearly in the Good as a principle—associated with Beauty—of regulative, not constitutive, order. This is the greatest difference between the Greek and Hebrew or neo-Platonic view of God. It is also relevant to Plato's concern for providence in the "two-world" argument of *Parmenides*.

[42] Vlastos, "Third Man Argument," 248.

the two realms, then likeness tends towards *sameness*; and if we maximize that distance, then we tend towards equivocation and otherness. Since by hypothesis we assume the thing and the form are other, if we wish to preserve this otherness and at the same time minimize it, we can say the thing is "like" the form. But then why "Like?" Why not same? If we minimize the "distance" between the realms, we approach univocity, which is to be avoided; and if we maximize it, we risk equivocation. But then how can two entities, solely within the context each provides for the other, be both same and other? This seems to be the basic dilemma of participation. If we could preserve "likeness," we would do so at the risk of self-contradiction.

Peter Geach has developed a very interesting defense of the "likeness" theory. He suggests that it is possible to say that in relation to the Standard Pound, a given object is same, and thus weighs a pound; but this does not mean that the Pound is same with the object, for the Standard Pound does not weigh a pound.[43] A somewhat similar argument has been advanced by Aquinas.[44] The de-

[43] Geach, "Third Man." The Standard Pound and the pound determined by this as a standard are either same or other. If same, they have an identical mass. Same is reflexive (If aSb, the bSa) and transitive (If aSb and bSc, then aSc). The psychological factor of least noticeable difference may be ignored. It must be transitive in the case of the mass: the Standard Pound can be put on a balance with the one it measures and that in turn can be used to measure another. The choice of "pound" shows the point clearly in virtue of the balance used to determine the equality of mass. For other objections to Geach's thesis, see Allen, "Forms as Standards," 164–67; Bluck, "Parmenides and the Third man," 29–37; and Ballard (who inspired the critique found in my text), *Socratic Ignorance*, 89.

[44] In his discussion of the way in which names are predicated of God and creatures (*Summa Theologica*, I, q. 13, a. 7, also I, q. 45, a. 3), St. Thomas holds that a relation between God and creatures may be real in one relatum, conceptual in the other. The world is really related to God as His effect, but God has no real relation to the world. This may make of God a monster, for the world can make no real difference to him, and providence, which is an expression of his compassionate love for his creatures, would be a fudge; but it does contain a very important clue as to the nature of participation. If participation is a relation which is real in the image, then that image is same with the idea; and if it is in concept with respect to the idea, then that idea is other than and transcendent to the thing. If we can justify this way of talking, then we have the germ of a solution to the problem of participation.

fect of Geach's version, which is not shared by that in Aquinas,[45] is that the Standard Pound and the pound it measures are both of the same ontological type: both have shape, mass (otherwise one could not weigh one by the other), etc. But this is not the case with ideas and things, which share no common predicates (temporal vs. eternal, one vs. many, etc.). The form is not an object, and to speak of likeness is to suggest that it is. This is the root of the matter. Forms *constitute* objects; forms are not *like* objects.

Professor Geach does succeed in making the useful point that we cannot say of the instance of a form what we should say of the form, and conversely. The thing is an instance of Becoming, while the form simply *is*. The forms are quasi-Parmenidean, for each is a principle of Being and Unity; while the flux is always other and other, a world in the making and being made.

There is a special difficulty in our interpretation of regulative forms to which we see no wholly convincing solution. The early form theory did not face up to the issue of a paradigm which was both exemplary and "cause," a situation well within the grasp of the separationist doctrine of the middle dialogues. Both admitted one and only one kind of form, either *in* things or beyond them, and each was in its way able to provide a measure. In the "idealization" provided by speculative demonstration, there is a distance between the ideal and its regional inherence such that the ideal may be imperfectly realized. This is especially the case with mathematical form, and it may have been reflection on this case that led Plato into the extremes of the "two world" hypothesis. In the

[45] One example given by Aquinas, (*Summa Theologica*, I, q. 13, a. 7), that of the relation of a round column to the right side of a man, does suggest the sort of thing Geach does, for it is a relation between objects of the same ontological type. However, the primary example, that of sense and science to their objects, does insist on a difference in ontological type. The seen object makes all the difference to the perceiver, but the perceiver makes no difference to the object. Had Geach used this example, he could have avoided the likeness language and have said that just as sense is its object qua sensible form, though the object is other than sense, so things are in virtue of form, though form remains other and separated. Of course we lose the notion of regulative form in this analogy, which remains in the notion of the Standard Pound, but this could be saved were "Truth" introduced and the object said to be the measure of seeing and knowing.

separated theory, the plane figure on the blackboard is quite remote from "the triangle itself" (*Republic*, 472C–473B), and ideals measure the respective excellence of our representations. It is this separation which provides the romantic appeal of form: its ever-receding distance from fact is a lure to ideal attainment. But we now have a form dualism on our hands. Let me explain. In the account which is now emerging and which will be made more precise in the final chapters of this enquiry, we are assigning an "ingressional" role to form. Our hypothesis is that constitutive form is immanent in the *ousia* of a given image. Form is just what the thing is. But that form is related to another, its ideal paradigm, which is regulative. The relation is not that between a thing and its formal ideal, but rather between the form qua constitutive and the form qua regulative. To put it otherwise, the relation is between the way a thing is and what it should be. If then regulative participation is simply a relation between two forms, then why should not the distance be overcome and a thing be its paradigm? This should not be impossible, for we have said that in some sense the regulative ideal is a function of constitutive form.

This is messy on two counts. In the first place, a form seems required for every constitutive possibility, and the simplification effected by the ideal is lost. The separated doctrine could account for a variety of degenerate instances as instances of one type, but now possibility becomes far more complex than the actuality it was meant to explain. Secondly, certain forms, especially those of mathematics, can be shown never to inhere in nature per se, and yet through them we have power over nature. Do we need to remind ourselves that there are no planes and points in nature? The solution we propose is to assign mathematical form (in the sense of "applied" mathematics) just the status it enjoyed in *Meno*.[46] The points and planes of mathematics are idealizations of constitutive form, not regulative forms. We restrict regulative forms to those cases wherein the decisiveness of fact is expressed in terms of alternatives, and thus diverse values. We will show how "distance" can be preserved in the final chapter with respect to this sort of

[46] See Appendix B, and also *infra*, 175–76, 178–82.

situation, and in Chapter IV we will make some suggestions which could lead to a greater simplification of constitutive possibility. Value alternatives will apply to our *use* of mathematics, which could be more or less appropriate; and there might be some non-formal indeterminateness which could in principle make any application an approximation. Something like this seems to be the case in *Timaeus*. Interpreted in this light, the concept of "distance" is to be understood as expressing the value alternatives which do in fact inform any instance of Becoming; and thus Becoming is to be seen as essentially a valuational grading of possibilities.

(3) The final point concerns the fact that regulative forms are (systematically) ambiguous. To suggest that a given regulative form has a common signification over a domain of otherwise dissimilar entities is absolutely absurd. Given an entity of a certain constitutive type, its regulative ideas are systematically defined; given a regulative form, it will not specify those entities over whom it might be supposed to predicate. To know what an apple is is to know what a good or a large apple is, at least in principle; but goodness and largeness do not pick out anything. They are empty. This is especially important. In neo-Platonism or orthodox Christianity, to know that God is good is to know what he will (Leibniz) or must (Spinoza) do, for good is an engendering term, fecund with Being. In Platonism per se, to know that God is good is to know very little indeed about the consequences of his act (*Republic*, 379C–383C); that he can do no evil, that he does not lie (is True), and that He is unchanging (Being) leads to the trinity of his act, but to no determinate consequences for and to fact. Given constitutive character, the relevant ideals can be specified, and the relation of the divine nature to fact receives content.[47] This points to the apparent fact that regulative ideas are systematically ambiguous[48] and depend on specific constitutive forms for their content.

[47] One may assume that the primary ground of value from the position of deity is in his response to fact, the valuational act Whitehead has described as God's "consequential nature." Plato is a dualist, and the world is not derivate from value in the neo-Platonic or usual Christian senses.

[48] This would seem to function very much as do the Scholastic transcendentals in the analogy of proper proportionality, at least as understood by Cajatan in his *Analogy of Names*.

Since this point is central to an interpretation of the objections Parmenides raises against Socrates, it might be wise to labor it. Given a set of apples, good will be unambiguously specified if certain other conditions are specified. Let these be instrumental conditions, say for cooking, and then the set can be graded on this basis. Let the conditions be terminal, then the apples will exhibit apple functioning (conatus and whatever else it may be) in a preeminent degree. But unless the constitutive forms be given, and with them the relevant conditions, then good will select nothing. Suppose a set of heterogeneous objects be given and we are asked to select those which are good. What meaning could that have for us? If some prior constitutive character can be given to the set, then good will be meaningful. Of a random set "good" can be predicated of *each* member, assuming each to be known to us, so that we may say of one member, a man, that he is good (meaning perhaps "moral"), of another, a dog, that he is good (meaning perhaps "obedient"), etc. We cannot say of the set collectively that it is a good set, nor can we say without equivocation of each member that it is good. Good is ambiguous. This conclusion is presumed to hold for all regulative forms.[49]

There is a further passage in *Parmenides* (136A–C) which has been thought to introduce another idea class.[50] "Visible," "Becoming," and "Destructible" apply uniquely to the given world, to things sensible and always changing. That Plato subscribed to such extreme "essentialism," stronger even than that of Scotus, is very unlikely; it certainly is not supported by the remainder of the dialogues. We have already exposed the fallacy that every term in a true description corresponds to an idea. Even at the idea level it

[49] Our concern is not with "bastard" cases, as when we say to one who in fact is a man, "Be a man!" Here, "man" has regulative force. In the following chapter we will be able to constitute an entire class of such paradigms, which will play a role analogous to the "intermediates" of *Phaedo*; but our concern is with pure regulatives, since it is necessary to isolate this class prior to further synthesis.

[50] Vlastos, "Third Man Argument," 251. Butler, "The Measure of the Third Man," 65, denies that this is *intended* to be a new class, but says that "to deny that any of the epithets in question have Forms would land the theory in impossible straits."

has been presumed that we need such forms as "eternal," "intelligible," and the like,[51] for by means of these we impart character to ideas. But ideas *are* character, not things which are possessors of attributes. Certain philosophers, notably Bradley and Hegel, have thought that certain terms involved in descriptions of concrete fact were "universals," such as "this," "individual," "self," "I," and the like. But to those who are so misled, we should cite the Buddhist proverb: "Do not mistake the finger for the moon." Index terms, terms used to point out something and separate it from others, should not be said to be characters of the thing pointed to.[52] Were we to do this, "red" would be *red* and "that" *that*. Surely "visible," "intelligible," and all the rest of these presumed classes can themselves be defined by means of other terms, especially by the transcendentals which define how things mingle. Let us hold

[51] Butler's reformulation of the so-called "third man arguments" avoids Vlastos' problems and preserves a valid regress in a vicious form. "When several things are large, then there is a form, the Large, by which they are large; but if this is so, and if the Large is also large, then there is another form by which these things and the Large are all large" (p. 71, as amended by his suggestions on p. 72). Then Butler proceeds to show that if Immutable is a form and all forms are immutable, then there must be some form Immutability by which the Immutable and the immutable forms are immutable (p. 74). If Immutable is not a form, then Butler holds that the legitimate question, "What do two forms have in common in virtue of which they are immutable?" has no answer. Furthermore, "let us look at the class of epithets common and exclusive to Appearances. If any regress is generated by these expressions, it arises from the question, 'What is it that the Sensible and sensible things have in common in virtue of which the Sensible is the form of sensible things?' If it is improper, how is it that the Sensible is the form of sensible things? If it is legitimate, then in admitting an answer it gives birth to a regress by spawning another form, whereby the Sensible is the form of sensible things" (p. 74). There are several errors involved in this position, but the most obvious is that of treating index terms as forms. Butler also misunderstands the argument in *Republic*, 597C, in virtue of which he creates a "formal" regress.

[52] For the very important distinction between demonstrative and descriptive phrases, see Whitehead's *Concept of Nature*, 6–12. For a confusion concerning "I" in Hegel, see *Encyclopaedia*, sections 20 and 24; and for the far less reasonable error of treating "this" as a universal, see F. H. Bradley's *The Principles of Logic* (2nd ed.; 2 vols.; Oxford, 1928), 63 ff. Ludwig Wittgenstein describes this as an attempt to "sublime the logic of our language." See *Philosophical Investigations* (Oxford, 1958), section 38.

on faith that we do not require such forms and hope the sequel affords sufficient grounds for this confidence. Whatever our fate, may the many who are wiser have mercy.

Whatever else it is, participation is not univocal. It differs with respect to the kind of idea (transcendental, constitutive, or regulative) which may be in question. Since Aristotle by inference denied that Plato understood Good to be analogical,[53] the learned community has taken him at his word and neglected to study the subtlety of Platonic usage. We hold that this has led to serious errors in interpretation; and if we can make but one contribution to the study of Plato, we would hope that it would be a recognition of the various idea classes and their several modes of participation. It is ironic that the vast literature on the Third Man argument since Vlastos' analysis has utterly missed the force of the argument.[54] What has been called the "third man argument" (*Parmenides*, 132A–B) is an argument about participation in regulative ideas, and it is not until 132D–133B that we come to the "TMA" proper. As far as I can discover, this mistake was not made in antiquity; but then too, except for Plato, antiquity had little sense of the import of regulative form.

Parmenides' Critique of Participation

Parmenides raises six *aporiai* to young Socrates' effort to give an acceptable statement of the relation between the forms and their "instances." Let us designate them as follows: (1) Many Forms (130C–D); (2) Part-Whole (131A–E); (3) Embracing Argument

[53] *Ethica Nicomachea* 1096a 11–1097b 1.

[54] Contemporary interest in the "third man argument" begins with Gregory Vlastos' article "The Third Man Argument in the Parmenides," in the *Philosophical Review*, LXIII (1954), 319–49 (reprinted with addendum [1963] in Allen, *Studies in Plato's Metaphysics*, 231–63), which contains a useful bibliography of earlier efforts to deal with the argument. The exchanges between Vlastos and W. Sellers and Vlastos and Peter Geach in the *Philosophical Review* LXIV and LXV should also be consulted. Among the articles inspired by Vlastos which are of rather special interest are Peck's "Plato versus Parmenides"; Butler, "The Measure and Weight of the Third Man"; and Bluck, "Parmenides and the Third Man."

(132A–B); (4) Conceptual Argument (132B–D); (5) Third Man (132D–133B); and (6) Two Worlds (133B–135D). They represent possible ways of "misunderstanding" participation, perhaps at times shared by Plato himself, and point to a revision of the theory, the most prominent elements of which will emerge in *Theaetetus*, *Sophist*, and *Timaeus*. We will take up the *aporiai* in order, trying to show what they are "against" and indicating, where possible, the sort of revision of our concept of participation each calls for. The purpose of the following chapter will be a general reconstruction of the theory of participation.

(1) *Many Forms* (130C–D). The middle dialogues tended towards an excessive spiritualization of *idea*, dealing largely with the soul and its anthropomorphically conceived environment, the polis and the ideal order, and the regulatives pertaining to *arete* and *techne*. This produced the separationist problems we encountered in the last chapter. In this context, Parmenides' suggestion that we need an idea of man is apt; but if so, how about his mundane constituents, mud, hair, and dirt? But if we admit these, then this would entail the recognition of the entire range of constitutive form. Socrates was torn between his desire to deal with the uniquely human, itself a reflection of the humanism of the Sophists, and the necessity of fitting man into his cosmic environment, of which he was a part. If indeed the ideas could be restricted to the purely human and the remainder of things relegated to relative nonentity, then the presumed (possible) unity of human nature would itself entail a restriction of the idea realm of just those necessary to account for the forms of human virtue. Certainly this would appeal to Plato's own neo-Parmenidean passion for unity. The one idea of man would perhaps constitute a solution to the manifoldness of the human world. Perhaps the Socratic belief that "virtue is knowledge" would serve as a regulative myth for this undertaking, reminding us of the univocal character of *arete*, perhaps one as the parts of gold are one (*Protagoras*, 329D); but the futility of this must have appeared to Plato by the time of the *Republic* when he was quite aware of the diversity of human functioning and the characteristic excellence of each. By this time *arete* could hardly

be said to signify a univocal form. But the young Socrates was not happy to concede that which the mature Plato found it necessary to insist upon; an absolute unity, justice, could be made up of many other virtues (forms).[55] "If you could show me that the absolute one was many, or the absolute many one, I should be truly amazed" (*Parmenides*, 129C). But Plato was willing to concede the entire universe of constitutive form and the relatedness of this all to the purely human. The world is not a simple unity nor is anything in it merely one, but such unity as it may enjoy is that of a connected system. This poses vast metaphysical problems of an obvious sort; and to admit so much in what was initially an attempt to attain simplicity, which is effected at the idea level, is to see the goal of unity as ever receding, both qua Being and qua Becoming.[56] This leads to the part-whole problem, both in the next argument and in the latter part of *Parmenides*. Unity is never simple: one must not go too hastily from the many to the one.[57]

(2) *Part-Whole* (131A–E). This argument, and that immediately succeeding it, assigns a critical role to the regulative forms,[58] es-

[55] We should not lose sight of Socrates' explicit statement that the problem is not just how Becoming participates in Being, but also how the forms intercommunicate (mingle, participate) with one another (*Parmenides*, 129B). The effort on our part to show the mutual relevance of constitutive and regulative form has the advantage of keeping this problem constantly before us. The *Parmenides* is concerned with the ideal one and many, but it is "also concerned with the participation of the concrete in ideal objects and with the multiplicity in concrete unities" (Ballard, *Socratic Ignorance*, 83).

[56] There is an even more frightful problem, for if form is possibility, then the idea realm is richer by far than mere actuality. To effect some economy in the idea realm must remain a primary goal for the Platonist in metaphysics.

[57] One is reminded of Whitehead's aphorism, "Seek simplicity, but distrust it."

[58] These two arguments are prefaced by a list of regulative forms, largeness, beauty, and justice (131A); and equality, introduced at 131D, can have regulative force. On the other hand, similarity (131A) counts against this thesis. This is either a "likeness" or a "same-other" and thus a transcendental. One can take these arguments as against forms as themselves super objects, but one is closer to the text and the texture of Plato's subtlety and complexity if one sees as many types of participation as possible involved in a given argument. Our treatment is designed to correct oversights, not to give a final account, which is quite frankly beyond our powers.

pecially "large"; and we shall preface our analysis with a word from Plato and a few distinctions which may lead to a better understanding of the argument.

> There are many accomplished men who say, believing themselves to speak wisely, that the art to measurement is universal, and has to do with all things that come to be. And this means what we are now saying; for all things that come within the province of art do certainly in some sense partake of measure. But these persons, because they are not accustomed to distinguish classes according to real forms, jumble together two widely different things, relation to one another, and to a standard, under the idea that they are the same, and also fall into the converse error of dividing other things not according to their real parts. Whereas the right way is, if a man has first seen the common nature of several things, to go on with the inquiry and not desist until he has found all the differences contained in it which form distinct classes; nor again should he be able to rest contented with the manifold diversities which are seen in a multitude of things until he has comprehended all of them which have any affinity within the bounds of one similarity and embraced them within the reality of a single kind. (*Politicus*, 285A–C; also see *Philebus*, 56A–57B).

To fail to connect "large" with measure, and then to lump all together as a single kind without due attention to the real affinities and real natures of things is what our two arguments protest against; and except for Gilbert Ryle, who did notice that "large" is a relative term but then did not let this discovery color his discussion,[59] I fear that all of Plato's modern commentators have fallen into just this trap. But then perhaps our errors are even more gross and unworthy of our text. "Large" is incurably equivocal. We shall see that it seems to have been used in at least four senses by Plato; and the set of unities it would collect into the unity of a single idea would be odd indeed. Both this and the following argument regard participation as a species of the one-many problem, this from the standpoint of the unity of a given regulative form and the latter from the way a given heterogeneous many can

[59] Ryle, "Plato's *Parmenides*," 104. He objects that Plato did not treat large as a relation, but perhaps this is not Plato's error so much as it is of those who misunderstand his intentions.

be one. We shall see that "large" will force us to make distinctions which will in the end lead to a partial solution of the problem of participation (*Phaedo*, 100E–101E).

(1) Things are large, irrespective of what each might be, relative to some arbitrary standard or measure. Socrates is taller than Theaetetus, but shorter than Theodorus. Given such an arbitrary measure, Socrates or a foot rule, three sets of otherwise heterogeneous entities are thereby determined; things less than, things equal to, and things greater than the given standard. By some other standard, a new collection of sets would be determined. Theaetetus is large relative to a foot, but in relation to Socrates he is small. It may be possible, however, to order the measures *inter se*; and this brings us to our second meaning of large, one contingent on the existence of a well-ordered series.

(2) Numbers, being what they are, are larger or smaller relative to the predecessors and successors respectively. Six is large relative to two, but quite small relative to sixty. If the arbitrary standards (as in the meaning of "large" given immediately above) can be mapped into and onto the series of integers, then an arbitrary, but uniform, meaning can be attached to "large."

(3) The next meaning of large is associated with the realization of a certain quality relative to a norm, in virtue of which we can speak of deficiency, rightness, and excess. That in which the quality is realized is of a certain kind, to which the norm is relative; but it is a natural or nonarbitrary limit specified by the nature (*ousia*) in question. A very large mouse is quite small indeed when compared (in sense one) with a very small elephant. Each kind seems to possess a natural limit against which the individuals may be measured.[60] The kind determines its own measure. Plato and Aristotle thought that the polis had natural limits of size, and Aristotle even extended this notion to the drama in *De Poetica*.

[60] This is the thesis of a translation of the parameters of Aristotle's biological thought into those of modern physiology by D'Arcy W. Thompson, *Growth and Form* (2nd ed; Cambridge, England, 1952). No serious students of philosophy should neglect it. Of equal importance is Galileo's discussion of ratios or parameters in his *Two New Sciences*, *passim*.

(4) Clearly associated with this organic concept of limiting form is that of scale, "the fit, the opportune, and the due" (*Politicus*, 284E), ideas which we are beginning to rediscover in the aesthetic poverty of our environment.[61] The large and the small regulate the mode of togetherness of heterogeneous elements (suggesting harmony, justice, and beauty) with respect to some ideal. What is the scale of life in the modern city?[62] Is it man, or is it the arbitrary and romantic "large" and the chaos it engenders? Large and small may be matters of scale, regulative limits with respect to the appropriate exercise of function within the scale of the whole.[63] (*Politicus*, 283E–284E). Scale is not size; it is fitness. This was the discovery of the Pythagoreans. They expressed in it the intuitive mode of feeling characteristic of Greek genius. This should be contrasted to the disassociation of the mathematical and the aesthetic in Wordsworth, who in the fifth book of the *Prelude* presents them in the symbol of the stone and the shell. Scale and form are aesthetic. Largeness can refer to spiritual intensity, a rediscovery Nietzsche made in his search among the ancient Greeks for a clue to the meaning of being human.[64] Large is not merely quantitative measurement (*Politicus*, 285B); it may also mean the Dionysian mode of qualitative intensity or, more Platonically, the height of appropriate achievement, where appropriate has the sense of proportional order to a given whole, a whole somehow more than human, somehow even divine.

"Large" is always a matter of ratios and proportions, but otherwise it is equivocal over its range of meanings. Within usage one above, it is equivocal; usage two, univocal; and in the final two senses, analogical. Needless to say, if one looks at the world

[61] The form of thinking represented by scale is so widely spread today that no effort to give even a representative list of those who have dealt with it is necessary. Harold Innis, Henry Adams, Oswald Spengler, Kenneth Boulding, and Susan Langer have all made important contributions.

[62] Brumbaugh exhibits a lively apprehension of the relevance of *Parmenides* to these problems of modern life in his *Plato on the One*, 1–5.

[63] See *Ethica Nicomachea* 1106a 14–1108b 10. Of special importance are his remarks concerning the relative mean.

[64] See especially Aristotle's discussion of "magnificence" in *Ethica Nicomachea* 119b 20–113a 33.

through the form "large" without making the appropriate distinctions, one will see confusion beyond all belief. It is foolish to say "*a, b,* and *c* are all *F*," where *F* is "large" unless the natures of *a, b, c* and the relevant *F* be given initially.[65] Otherwise we would get the oddest sort of nominalism, classes formed in virtue of the resemblance of words, not things. Aristotle, who knew very well the way of the indefinite dyad, the large and the small, would be a better guide to the meaning of Plato than the ubiquitous mathematical symbolism of the predicate calculus.

A summary of the arguments making up the "part-whole" argument will show it to be quite crude. Perhaps this is because so much is packed into it, rather than a sign of a lack of skill on Plato's part.[66] What appears to begin as a clear-cut part-whole analysis tends towards the oddities of self-predication.

"Each individual partakes either of the whole of the idea or else a part of the idea?" The part-whole problem is the most difficult in all of Plato. There is no problem with simple, constitutive forms, for surely an instance of a certain shade of red is wholly that red; and yet red itself is not one whit diminished thereby, remaining fully itself and one for a possible infinity of exemplifications. Not only does a constitutive bind Becoming into a unity (as red signifies a type of perceiver-perceived unity), but also its exemplifications have that unity which is just itself. In such cases as that of justice in man and in the polis, the problem deepens as we approach greater structural complexity and its relevant regulative

[65] Vlastos, "Third Man Argument," 232, is the initial instance of this long confusion whereby the logical symbolism leads on to "improper" divisions or classes. As Brumbaugh remarks in *Plato on the One*, 40, "given only abstract structures and ideals, concrete entities cannot be constructed." To this we add that they cannot even be conceived.

[66] A particular argument, though stated for one idea class, may be applicable to all such classes. This multi-dimensionality is the usual classical method of philosophy and myth whereby absolute generality of statement is achieved. Our concern is the prima facie argument in every case, but each should be carried out on all levels if the full meaning of participation is to be revealed. Our main criticism with so many of Plato's recent critics is that they fail to see the generality of the arguments or the philosophical thesis entailed in each premise qua Plato. Perhaps this was the reason Vlastos found this argument crude ("Third Man Argument," 255).

forms. Men may be parts of a whole, the state, in many ways, but in the case of justice as defining such a whole, the form of the whole is fully in each proper part. It is important to realize that there are many different part-whole structures and that regulative forms determine the type of analysis relevant to the case in question.[67] I suspect that this particular "part-whole" argument aims to open up these possibilities, especially in view of Plato's subsequent concern in the dialectical portion of *Parmenides*.

But to return to the issue immediately before us, there seem to be two possibilities: (a) the idea is wholly in each of the many parts, or (b) in part in each of the many parts. The use of the measuring idea "large" reminds us that we are dealing with proportions between entities. Consider the case of simple measurement with a physical object arbitrarily associated with unity, then we say the object to be measured is to the measure as *x* is to unity. But wily Parmenides "subverts" the issue, neglecting to acknowledge that one and the same form is wholly present in each ratio; for the relation between the two objects is the same as that between the two numbers. Thus on hypothesis (a) he holds that it is absurd to think that the same form will "exist at the same time in many separate individuals" for it "will therefore be in separation from itself"; that is, its unity will be disrupted, and it will be many. But if the idea is in each wholly, then the many will be one with respect to this idea, since it is the basis of their unity. It is not as if the informed things are and the idea is also, so that we have form in two places. The things are in virtue of the idea, with which they are same and one. In a *reductio ad absurdum* argument in *Republic*, 597D,[68] Plato remarks that if God made two idea beds, there would have to be a third "of which they possessed the form." But

[67] For a particularly useful discussion of various types of part-wholes and their relation to *Parmenides*, see Ballard, *Socratic Ignorance*, 59 ff, 91 ff.

[68] In his "Measure and Weight of the Third Man," 68, Butler seems to think it makes sense to say that there can be two forms for one kind of thing, and of course were this true, we could indeed posit a third form "in virtue of which they are both forms for that kind of thing." But *Republic* 597D is in effect a statement of Leibniz's law of identity; and if the argument is so understood, no regress is implied or intended.

if this were the case, the initial idea beds would not be ideas, for the third alone would be the "real bed." The idea is the one of many, not one among many. So too our unity would not be disrupted on a principle of proportional order. The regulative could be wholly in each ratio. It would be disrupted were we to think of the idea as a thing to be cut apart into bits, and something like this may have been in the back of Plato's mind at the time of *Meno*. Both F. M. Cornford and David Scarrow have remarked that this seems to be the attitude towards ideas expressed in Parmenides' later analogy of the sail, which opens the second hypothesis.[69] (b) Just as only part of the sail covers each individual who may happen to be under it, so too individuals have only a part of the idea in which they share. It is quite difficult to make sense of this at the level of constitutive ideas; for if only part of the idea man were *in* individual men, then they could not be same with the idea as a whole. They would then be partial men; and while that may make a kind of sense in some contexts, it is obviously absurd here. The example, however, is that of the regulative large. We are told that if only a part of large were in its instances, then relative to the whole that part would be small, so the large things would be large in virtue of being small.

The simple but misleading route out of this perplexity is to assume that Plato had self-predication in mind and that he thought large itself a large thing (or kind of thing). There are other alternatives. If the first hypothesis (a) shows that the concept of participation as a *whole* disrupts the unity of the idea unless properly specified in accordance with type, may this (b) not be a fanciful way of saying that if we preserve the unity of the whole, as if the idea were an absolute one, then those things that are supposed to participate will be left outside that unity? Thus while on one level it may be an attack on the belief that ideas are thing-like, in the immediate context it is an attack on mistaken attitudes towards regulative participation. A persistent error in the interpretation of Plato has been to assume that in *Republic* justice must reside in

[69] F. M. Cornford, *Plato and Parmenides* (London, 1939), 85; and David S. Scarrow, "*Phaedo*, 106A–106E," *Philosophical Review*, LXX (1961), 252.

the state and that individuals can only have part of it. This error arises from a serious neglect of the "mathematical" structure of Plato's thinking, especially the role or proportions and isomorphic mappings. As a consequence of this neglect it has become fashionable since Sir Karl Popper's *The Open Society and Its Enemies* to say that rulers are wise, administrators courageous, and producers temperate; and the unity and freedom of the individual is sacrificed to that of the totalitarian state. Men would be only partial men, none exercising all the functions of man as such. This misreading is possible only if one enters the Academy without paying proper attention to the inscription over the entrance: "Let no one enter here who is ignorant of geometry." A part may be isomorphic with the whole, and "large" could be wholly in each large thing.

There are alternative types of part-whole relations and each may entail a different interpretation of this argument, but this should show that we must be careful to "distinguish classes according to their true forms" and not "jumble together two widely different things."

What is required for a solution to the way an idea can be in itself and in others is suggested by Socrates' analogy of the day "which is one and the same in many places at once, and yet continuous with itself" (131B) which, of course, is ignored by Parmenides. This has obvious reference to the myth of the sun and Good in *Republic VI*. Like the sun, the cause of day, the regulative idea must be in each entity it "covers" wholly and fully, yet wholly and fully in itself. The day regulates the basic cycles of biological act and orders things to one another in determinate ways, as it makes possible vision in food gathering animals and understanding in men. So too regulative ideas order complex wholes, both with respect to their internal modes of function and their proper proportions to the effective environment. Regulative ideas are ultimately matters of scale, and the day image points us in this direction. If in the first argument we begin with the duly constituted whole (130C–D), we here turn to the even more primary considerations of value.

(3) *The Embracing Argument* (132A–B). Both this and the immediately preceding argument regard participation through Parmenides' concern for one-many parameters. Perhaps concern for one-many is true of all the arguments of *Parmenides*, and it is a mistake to regard any as primarily ontological (form as constituting determinate character) or epistemological (form as the object of knowledge).

In the literal sense of the last argument, we saw that if we begin from the side of the unitary form, that unity either suffers fission or else maintains itself and "collects" nothing under it. Instead of a one-many, we have either many or one. Suppose, beginning with many, we embrace that multitude with a single form. Suppose that form is "inductively" apprehended as that which makes this many one. "When a number of entities appear to you to be large, there doubtless seems to be one and the same idea, visible in them all [which is the same when you look at all of them]; hence you think of the Large as a single thing."[70]

If the previous argument was quasi-intentional in its approach to class-formation, the "embracing" argument may be extensional; but neither represents the approach to this problem we have learned to associate with Plato in *Republic*, *Meno*, or *Phaedo*. Form is not induced from determinate individuals as what is common to the set; the route to form is rather more like the seductive method of *Symposium* (210A ff). One is taught that if he can discover the beauty in one thing and love it aright, he will in due order see all Beauty everywhere. It is true that form is "seen" in

[70] The view of form which lies on the surface of these arguments (thing-like immanence) may have been directed against Eudoxus and his Anaxagoreanism. This view had its roots in Pythagoras and was apparently entertained by Plato himself in *Meno*. Collingwood, *Idea of Nature*, 61–64, offers a perceptive account of these issues. More directly relevant is the testimony of *Philebus*. Eudoxus apparently asserted some form of hedonism; but since it admits of more or less, it is treated as defining an illegitimate class and identified with *apeiron* not *peras* (form). At 24A–25D terms such as "hot," "large," "strongly," and the like are placed in this class. Unless associated with limit or measure, "large" cannot be the form of anything. Our analysis of the "largeness" has been governed by these considerations. The type of regress engendered by this argument does indeed suggest the apeiron and may be meant to suggest the care we must employ in hypothesizing that a form corresponds to any given term of discourse. I owe this latter observation to the Reverend Robert Cooper.

individuals, but they are recognized to be what they are in virtue of form. It is not as if we looked at the instances and then discerned form, nor do we begin with form and then look about for "verification"; mind sees form in the givenness of experience, and what is apprehended (qua right opinion) must be put to the test of system and science. The fact that in this argument we do begin with a scattered multitude of large things and then discern a common Large whereby the many are large is cause for wonder. Does this really make sense, especially with a term like *large*?

There is excellent reason to presume that Plato was suspicious of this procedure (*Politicus*, 262E–263A), which in the case of regulative form can yield only a nominal unity. What are these things which are "large" and in what sense is "large" being used? If I collect a set of things which appear large, am I not collecting via the word for "large" and not the form? Would there be such a form? Would not the idea be an even worse metaphysical monster than Locke's abstract general idea of dog, which the good Berkeley so severely criticized?

In order to appreciate this problem from Plato's point of view, let us consider the situation at *Meno* 71E–72A. When asked what virtue is, Meno replied by citing the characteristic excellences of rulers, warriors, children, slaves, and the like. Socrates then said that Meno responded as if he had been asked for a bee and had given back a swarm. Let us call this "swarm" of instances v_1, v_2, v_3, . . . , v_n and the swarm itself V. How would V itself collect these instances into any unity? If we specify any one meaning for V, say v_1, then the other instances fall outside the meaning of V. One might adjoin a further meaning to V, $(v_1 + v_j)$, but what could V now mean? In general, no form V can be constructed by this procedure which would give unity to the set; it would remain staunchly equivocal. Every higher order form introduced to secure unity would itself suffer fission (in the example above V is really V_1 and V_j and some other form would have to unify them, etc.) and/or would fail to embrace possible instances. This process could go on indefinitely. This seems to be the sort of regress generated in this particular argument.

Charmed by the name "large," we think of it as designating a

single thing. But when we survey the "large" things, which may be "large" in arbitrary ways, and then the form "Large" itself [*sic*], do we not need another meaning for "Large," in virtue of which they all appear "large"? And will not this search for unity generate an indefinite plurality?

If our conjectures are correct, the embracing argument is a critique of participation indeed, but it is aimed at a method for constituting unities for which participation is the presumed principle. It has the merit of relating the argument to a constant concern of Plato's and of giving it a different status from that at *Parmenides* 132C–133A with which it has often been confused. It is the latter which deals with constitutive form and which should be called the "Third Man Argument." There is no special error in taking it as an argument against self-predication; except that this was for Plato never a very pressing issue and in the great economy of his mind and style, he would hardly have belabored it to the extent suggested by his recent critics. Regulative forms must be *in* or same with their instances, which may from one viewpoint be heterogeneous, giving them unity qua the given form. Men, having different skills and capacities, can be same with respect to justice, which orders their activities to a common end. Regulative participation requires an analysis of part-whole. Without a theory of scale or well-ordering, collection by a regulative form is random and leads to illegitimate classes.

(4) *Conceptualist Argument* (132B–D). Since A. E. Taylor recognized that this was an argument against conceptualism and the bifurcation between thought and things which this would entail, the meaning of this argument has been well established. The assumption is that unity is given the many through thinking them in some one way, so that form would be a thought.

> The form is, *ex hypothesi*, the *object* known by the act of knowledge, and is the same form wherever it is recognized. For no knowing is objectless; all knowing has a *being*, and a definite being, for its object. If this *being* is itself always mental, we are driven to make our choice between two alternatives. The known object must always itself be a 'thought,' and we must therefore say either (a) that all knowable objects think (which seems manifestly false), or (b) they are thoughts, but thoughts which do not think (and this is meaningless). Conceptualism is thus no way of escape from the difficulties created by an epistemological realism.[71]

Before we pass this by, we should remark that here again is a deeper stratum of meaning. Philosophers such as Leibniz, Peirce, and Whitehead who take mind and ideas seriously have found a more intimate association between mind and things than might immediately appear. We are reminded of the remarkable status of the world-soul in *Timaeus* (34C ff), and we might suspect a far closer relation between ideas and *thinking* than one might presume from this argument. In our final chapter we hope to show that mind (or psyche) is one term in the complex participation relation.

(5) *Third Man Argument* (132D–133A). We may presume that this argument is restricted to constitutive forms, and it is for this reason that we call it the "Third Man." It is intended to exhibit the infinite regress which ensues when we seek to define the relation between a form (separated) and the informed entity.[72] Just as the first three arguments tend to "immanence" and the fourth towards mediation, so the final two presuppose transcendence (or separation). Even here we notice a reverse irony between the immanent and transcendent cases, for one would normally assume constitutive form immanent and regulative transcendent.

Gregory Vlastos has given an elegant analysis of this argument where the attempt to create a unified class may lead infinitely "upward"; and on the basis of certain assumptions which he supposes Plato to have made, shows it to be invalid.[73] But perhaps neither self-predication nor non-identity are involved. This argument does not generate an ascending hierarchy in the manner of the "em-

[71] A. E. Taylor, *The Parmenides of Plato*, 23–24.

[72] Aristotle's statement of these difficulties may be found in *Metaphysics*, 997b 13–34.

[73] Vlastos, "Third Man Argument," 242–44. The steps in his reconstruction are as follows: (B1) The Copy Theory; If *a* and *b* are similar (in respect of being F), there must be a form, F-ness, in which they both participate by way of resemblance: *a* and *b* must resemble F-ness, as copies resemble their model.

(B2) If *a* and F-ness are similar (in respect of being F), there must be another form, F-ness $_1$, in which they both participate by way or resemblance; *a* and F-ness must resemble F-ness $_1$, as copies resemble their model.

bracing" argument where the attempt to create a unified class may lead infinitely "upward," but rather to an infinite set of intervening terms whereby the form is supposedly connected to its instance. Let us see how this comes about.

In the first place, as Vlastos correctly remarks, the copy theory as such is not involved; and so Taylor's effort to save the copy model of participation was misleading.[74] Plato does not seem to be trying to show that things are "likenesses" of ideas, which is indeed a good Platonic metaphor (*Sophist, passim,* especially 266D–267B; *Timaeus,* 29A–D, 37D) and is asymmetrical; rather he is positing two entities of different ontological type and asking how one can participate in the other. His hypothesis is that a unity can be established between the two if the relation between them is that of "like." It is not that *a* is a likeness of *b*, but *a* is like *b*. If *a* is the "copy" and *b* the "original," then *a* can thus be said to be a "likeness" of *b*. We must first make sense of saying that *a* is like *b* ere we talk of likeness.

But how are we to understand "like"? We have seen that "like" can be an unanalyzed and irreducible concept, constituting a generic universal which can have little metaphysical force and, indeed, can lead toward nominalism. It is with this loose sense that Vlastos deals;[75] and since on his account even more question-

(B3) F-ness is F; for if F-ness were not F, it would not resemble *a* in respect of being F. (This is the self-predication assumption.)

(B4) If *x* is F, it cannot be identical with the Form F-ness. (Non-identity assumption.)

Vlastos holds that B2 implies B3 and that B4 is required to account for the necessity of positing another form in B2 to account for the resemblance between *a* and F-ness. But B3 and B4 are inconsistent, and together will generate the self-contradictory statement:

(B5) If F-ness is F (B3), then F-ness cannot be identical with F-ness; for if anything is F, it cannot be identical with F-ness (B4). On this basis Vlastos holds the argument to be invalid.

74 Taylor, *Parmenides of Plato,* 25–26. See also Ballard, *Socratic Ignorance,* 87–91; and Brumbaugh, *Plato on the One,* 39.

75 Vlastos' B1 and B2 rest on a "same" rather than a "likeness" assumption. Need it be remarked that since anything is like anything else, any unity based on "like" would embrace the entire universe, but hardly in the way Plato envisaged the forms to order the world. Vlastos' failure to realize that he had picked out an identity element and that the logic was same-other, not subject-predicate, seems to have misled him.

able assumptions are involved, perhaps there is another way of regarding the argument.

If a thing is in virtue of its form, then we have seen that it must be in some sense *same* with that form. Thus there must be partial identity between entities and their "separated" forms.[76] Let us then assume that if *a* is the "copy" and *A* the form, then if *a* is like *A*, there must be a sameness A_1 between *A* and *a*, as well as some otherness. But *a* is not A_1 nor is A_1 the same as *A*. What is the relation between *a* and A_1, and between A_1 and *A*? We can posit A_2 to bind *a* and A_1, and A_3 to bind A_1 and *A*. This regress could go on indefinitely. If we make *a* and *A* same and yet other, we have to stick in all sorts of intermediate forms to bind them together, but the effort is logically vicious. If we separate form from the world and yet say that world nevertheless is, we are led into the absurdities of the "Third Man" argument. If the assertion of separation leads to absurdity, then perhaps its denial will fare better; but how we can deny it remains to be shown. The necessity of a denial is the moral of the "Two World" dilemma.

There is a further moral to this argument. Form qua possibility must remain other, for were it same with its instances it would be totally involved in them. Aquinas, in stating the relation between God and the World, held that there was real relation (internal) between the World and God; but the converse held in *idea* (being of reason) only.[77] This suggests that ideas must be both externally and internally related to fact to account for participation. On this point we shall take a strong stand.

(6) *Two Worlds* (133B–135D). Since our inquiries in the last chapter led us to this argument and to an estimate of its force, further comment seems quite unnecessary. There may be some obscurity in the statement of the argument, but it is clear that if

76 This apparently has the force of denying Vlastos' non-identity assumption and the degree of reality theory upon which it is based.

77 Christian exemplarism, as in Aquinas, faces the "two world" thesis in an acute way; and St. Thomas' efforts to avoid separationism are worthy of consideration. *Summa Theologica,* I, q. 13, a. 7; q. 28, a. 4; and q. 45, a. 4. The problem of God's knowledge of particulars and the questions on providence should also be consulted, but here it seems to me that Aquinas is less successful than he is with the problem of relating diverse ontological realms.

ideas are to be modes of unity, there must be something of different ontological type to be unified; but the separation herein entailed makes this impossible.

As a final note, let us insist upon the providential role of God. This is a very important concern of our philosopher, and in our final, speculative chapter we will be able to estimate the relevance of Plato's theology to his theory of participation.

Summary

Having come a long and weary way, one might reasonably ask, "What have we come to?" The proper answer is that we have come to a way of resolving the nexus of problems associated with participation, and this will be our concern during the remainder of this enquiry. But since we shall get there from where we now are, a summary of the conclusions we can draw from this study of *Parmenides* may prove useful.

In the first place, we hope to have removed certain misconceptions concerning the nature of participation which are current in the literature. In so doing, we have proposed an alternative model, that of parametric order. We have also sought to untangle certain issues associated with the three idea classes, showing that participation differs according to the idea class involved and that unless this is acknowledged, Parmenides' objections to the young Socrates' theory of forms will be misunderstood. Furthermore, we have held that each of these arguments is valid; but the conclusions which we should draw from them, like those we earlier drew from Socrates' encounter with Polemarchus in *Republic I*, are themselves dialectical. In Tibet, I am told, one points by looking back along the forearm, not in the direction of the finger. Plato may be a Tibetian.

Let us now attempt a summary statement of the inferences we might draw from the six arguments between Socrates and Parmenides:

(1) Many Forms: A concern for values (regulative ideas) detached from fact, when indeed facts are the conditions for the

occurrence of values, leads to a vicious ontological bifurcation. Values express the ordering of facts, and thus require recourse to constitutive forms; but this raises questions concerning the simplicity of the resulting system. Not only are we confronted within the idea realm with a host of unrealized constitutive forms, the possibles, as well as a reduplication of all that is the case, but also the way a regulative idea orders a complex of heterogeneous natures into the unity of a system becomes a problem. This problem of regulative unity leads to the next argument.

(2) Part-Whole: A regulative form is the unity of a many. Given the many, how do they stand to the one regulative which orders them into the unity of system? The form is either wholly in each of the many, in which case the principle of unity would be many; or it is in part in the many, and thus the many cannot express that unity of nature secured by the form. We conclude, in the first place, that part-whole must be conceived otherwise than quantitatively, and thus we posit a new meaning for part-whole, that secured by isomorphism between part and whole. Secondly, we hold that a regulative must be in itself as well as in the many. This insight is provided by the myth of the day.

(3) Embracing Argument: But then how are we to think the many in such a way as to reconcile their heterogeneous natures to make them compatible with the unity expressed by the form? Given the many, we cannot go to such a unity, for each effort to secure unity by the postulation of a form leads to the necessity of further postulation. It follows that classes or unities must be formed by natural divisions, for otherwise we form illegitimate collections. We have to respect the actual nature of things, their real interconnectness; and it is just this interconnection that provides the "regions" within which the regulative order is to be discerned. This argument is a protest against vicious intellectualism or misplaced concreteness.

(4) Conceptualistic argument: Perhaps any type of unity, regulative or constitutive, lies in our thinking the world in one way. But then, in Whitehead's words, nature becomes the conjecture, science the dream. This leads us to suggest that while an idea can-

not be a thought, there must be some affinity between thought, ideas, and the world. This will eventually lead us in the final chapter to identify the principle of natural unity with psyche.

(5) Third Man: Turning to the problem of the relation of separated constitutive form to the world, we find that if we insist that it be wholly separated, an infinite regress of intervening terms is engendered. No relation can relate form and that which is characterized by it. Thus, extreme separation must be denied. Form must be a potential for immanence. We can assume that the arguments in favor of separation, as given in the last chapter, do have a point; and so we must find a way of saying form is both same (immanent) and other (transcendent) to fact.

(6) Two Worlds: If separation is maintained, then we have equivocation. Things have their character through their interrelations, and forms have theirs through their interrelations. But unless there is some identity between the two realms, then the truth about form is not the truth about the world, and conversely. So too, if God knew form and it were separated, he would not know things; and hence his providential concern would be ineffective. Thus what God knows must be related to the world, but since he knows the world through values, his vision must encompass fact and its relevant alternatives. We shall develop this thesis in the final chapter.

This is the meaning of what we have done. We must now carry out the great program laid down by the encounter between Socrates and Parmenides.

The moral of all of these arguments can only be speculative and dialectical, and it is to philosophy proper that we turn in the remainder of this inquiry. There are certain basic premises with which we must deal. Regulative ideas are specifications of modes of relevant unity for constitutive wholes. They are in each of the parts, yet other qua measures of specific attainment. Constitutive ideas are *in* things; yet qua ideas, their being cannot be contingent upon that which they inform. Both of these classes require one another to account for participation, but the regulative class is ontologically primary. The transcendental ideas are the means

whereby definition of all of these complex types of relations are possible. This is what participation is all about, the way things mingle. As we learned in *Republic I,* in pointing to *aporiai,* Plato points to solutions. Let us hope that we may hereafter follow his direction. He may be worth following.

IV PARTICIPATION

IN the preceding chapters we saw how the problem of participation arose and the difficulty Plato encountered in his effort to invoke it as a principle which would bind together the "two worlds." We have yet to discover how the various idea classes can shape and vector Becoming; but, at least inferentially, we have been shown what is desirable and have been provided with partial grounds for a solution. But we know that Plato never gave an explicit solution to the problem of ontological bifurcation, that there is no single dialogue or argument wherein we will be told: "This is my solution, this is the way it is!" If there is a solution, it is either itself a new philosophy or one which, drawing from hither and yon in the dialogues, can be adduced as one Plato might have taken seriously. The latter is the route we will take.

We have previously remarked that we shall understand the concept of participation as an answer to the demands that are made upon us when we seek to explain that which is not *causa sui*. So far, our concern has been directed to the way in which a thing is and is characterized through a form. This is a fair statement of the situation as it was understood in *Phaedo* (100B). But even in that dialogue we saw that an account based purely on ideas might be inadequate. Indeed, not only does soul, if it is to participate in the judgment of the Gods, require some community or participation with the body; but even on a very mundane level we are told that if a body x is hot, to say that it participates in hot is not

enough, for we must invoke the mingling of that body with the material mode of hot, namely fire. If we will permit ourselves to generalize over this, we may say that the problem of participation is the problem of explanation.

In order to develop our account of participation, let us begin with a limited perspective, that of an instance of Becoming. What is required is the discovery of the manner in which the modal presence of Beings of various types enter into and constitute the unity and Being of the given instance.

In order to facilitate this discussion, let us invoke as a new technical term one which we have hereto used quite loosely, an image. This has the advantage of a long and distinguished usage in the dialogues, but that which is most suggestive of the significance which we attach to it is Plato's characterization of time as "the moving image of eternity" (*Timaeus*, 37D). As moving, it carries with it the notion of vector quality. It is, is from, and is toward. But as image it is clearly derivate, the principles through which it is and is understood lying beyond it. To complete the figure, those principles which are primary, its causes, lie in eternity. Finally, in the sense that it is, it is now, momentally (*Parmenides*, 155E–157B) a Being. That is to say, as a Being it will possess its own intrinsic character and nature. Thus it will not be a mere adjective of its causes and conditions but will enjoy in some manner Being for itself.

An image is not derived merely from ideas and conditions. Whatever it is, it has a standpoint which is its own. It is somewhere at some time. The conditions of its localizable Being, of its exclusive "thisness" are also among its elements, but they cannot themselves be purely formal.[1] Thus we need a further principle to serve as the locus of enactment. This is the function of the receptacle (*Timaeus*, 47E ff).

We have said that an image has a vector character, which means simply that whatever its eternal derivation, its past also enters

[1] *Supra* 62–63. Forms can be multiply located in a contemporaneous environment, but not so for an image. Something other than form is required for "thisness."

into its being and shapes it, and so too must its future. Insofar as it is, the image is at least the partial outcome of a relevant past and future.

If we begin by assuming the contemporaneous unity of an image, a unity involving form, past, future, self-agency, and the receptacle, then perhaps its division into these co-ingredients can be made in such a manner as to be compatible with that unity. That at least is our hope. But in this chapter we will stipulate a limitation to this analysis, considering only the relevance of the first three ingredients, reserving discussion of the soul and the receptacle in the final chapter. This will have the advantage of restricting us, in a manner to be demonstrated, to formal constituents; and it is just the relation of these formal constituents to a presumed unity which is the problem of participation. The *how* of participation, at least at the level of the image, belongs to the soul, the principle of agency, and to the locus of enactment. On the basis of this restriction we will be in a position to give an account which can subsequently be extended to cover all formal modes of relatedness, especially what is sometimes called participation of the ideas *inter se*; but we believe that this simplification will lend a certain analytical clarity to our argument.

The formal characterization of participation will involve recourse to three principles: Relativity, Mingling, and the Ontological Principle. If we begin with the assumption that the image is a unity, what is first required is a grammar which will permit us to exhibit the modes of connexity of the other elements with this presumed unity. The situation of the early and middle dialogues did not permit this stance; for were we to take the ideas as Being, then the many would collapse into the one in the fashion of neo-Platonism; while the converse stipulation, for which little justification could be found in Plato, would lead to Aristotle, Democritus, or to nominalism. We have to say that the ideas are and that images are, and yet somehow preserve the separation between them. This is just the sort of problem with which Plato is concerned in the *Sophist*; and in order to provide a way out, he

invoked our old acquaintance, the class of transcendental ideas. These terms give us the requisite "grammar." We shall invoke these terms under the "Principle of Relativity." Secondly, we require the stipulation that in the analysis of anything which may be said to be, that entity cannot be *altogether* in and for itself, but that in understanding it, we require recourse to a universe of transcendent entity. This is a protest against vacuous actuality, the notion that the real can be and be out of all relation to anything else. The "Ontological Principle" will specify this relational attitude toward Being. Finally, we must recognize that our image, somewhat maimed by the elimination of its status as a localizable agency, is qua form a mingled, or internally related, whole. Any other stipulation would make it a mere collection of qualities. This real togetherness of derived factors in the unity of the image is covered by the "Principle of Mingling." Let us see how we can begin to clarify these several factors.

It is apparent that an image is an entity involving the togetherness of elements having different routes of derivation. If it is to be and to be one, even momentally, these elements must be mutually implicated in one another. Certainly there must be conjunction, but mere conjunction of a set of elements in a given locus does not constitute a unity of Being in and through that locus. Collocation is accidental togetherness. What is required is the unity of system, a whole such that the withdrawal or replacement of any element constitutes a new and, at least relatively, novel image.[2] We shall understand a unity satisfying these demands to be a *mingled whole*, and the Principle of Mingling is a categorical demand that any explanation of an image satisfy the conditions of real togetherness of its elements.

In that the constituents of a mingled whole have different routes

[2] The unity proper to an image is that of beginning, middle, and end (*Phaedrus*, 264C). Aristotle's elaboration of this theme in *De Poetica*, 8, is of interest: ". . . in poetry the plot, as an imitation of action, must represent one action, a complete whole, with its several incidents so closely connected that the transposal or withdrawal of any one of them will disjoin and dislocate the whole."

of derivation, each may be considered in itself, apart from its co-ingredience in that image. Every such element may be the logical subject of discourse, may itself be a Being which is other to its enactment in the image. To take a rather simple example, consider some past state of affairs which has some sort of originative role in the present image. The past situation may be said to *be*, and true and false statements may be made about it which do not implicate the present. The past situation may be enjoyed in and of itself, for it transcends the present. This is the ground for our quite unpragmatic or aesthetic interest in history. But since by hypothesis, that past is related to the present, some statements about that past will implicate the present. These statements will exhibit some immanence of the pattern of the past in the present. This is the basis of our ordinary understanding of historical causality[3] and is the root of the pragmatic interest in history. In this case the present will have adjectival relatedness to the past, through which that present is, and is understood.[4] But the converse of this situation also holds. Aesthetic awareness discloses the present as quite unbounded by past and future; it is what it is and is taken in its full immediacy. It is Being. But among the statements we make about this Being are some which will implicate the

3 This is the sense of the phrase, "according to nature" (*Timaeus*, 29B); for nature is that which contains immanently its own past and whose "growth" is to be understood through that past. But if the image is itself creative, if it is an agency in the passage from non-Being to Being (*Symposium*, 205C), then the fact that any "present" can impose novel forms or order means that the future can participate in the present only in the form of probability. It is in this sense that Plato's account of natural science (*Timaeus*, 29C) is to be understood. Unless the present, the image, is creative, then nature will run down, as in entropy (*Phaedo*, 72B–D; also A. N. Whitehead, *Adventures of Ideas* [New York, 1947], 146); or it is necessary to invoke some extrinsic source which "renews" creation through the imposition of novel forms of order, perhaps in the form of differential conditions (*Politicus*, 270A). The final alternative is that of a cyclical ("steady state" or "reversible") view of the cosmos (*Phaedo*, 72B–D) wherein time would be an illusion. If psyche is alone self-moving (*Phaedrus*, 245C–D; *Laws* 893B–896E), and if psyche knows itself through recollection, which entails novelty of insight and hence novelty of act, then in the concept of the image we seem to have the only possible way of "saving" time and the integrity of nature.

4 In the language of *Phaedo*, as condition, if not cause.

past, which is related to it as an adjectival nexus of possibility. For instance, suppose one possesses a modicum of English vocabulary "in" his memory. If we think of memory in this context as a dictionary-like collection of words, it is a collection rooted in the past. But we use this past *now* in speech and writing. One selects the appropriate word which will convey a thought of immediate concern; and this is the sense in which the present determines the past, what is to be effective from that past through the standpoint of the now. In these examples we have been making a very limited application of a principle we have associated with the transcendental class of ideas, their omnipredicability. Since any entity of whatever ontological type can, in virtue of being the logical subject, be said to be, and thereby establish the "others" as adjectival or modal dependencies,[5] we shall call this the Principle of Relativity. This principle expresses the separating and combining function of the transcendental ideas, Being, Same, Other, One, Many, Rest, and Motion (*Sophist*, 254D ff).[6]

The above account illustrates the relevance of our final principle of connexity, the Ontological Principle.[7] The term is due to

5 The remaining transcendentals, over and above the one chosen, are "present in" in the sense of Aristotle's *Categories*, Ia 23.

6 In his "Plato and the Megiste Gene of the *Sophist*: A Reinterpretation," *Classical Quarterly*, I (new series, 1952), 32–56, Arthur Peck advances the thesis that what we have called "transcendentals" are not forms but mere empty names which generate sophistic puzzles and which must be done away with (which he takes to be the point of the *Sophist*) prior to the real work of philosophy. This real task he understands to be that exhibited in the method of division. He further develops his thesis concerning the non-formal character of the transcendentals in "Plato's *Parmenides*." See *Classical Quarterly*, III (new series, 1953), 127–50; IV (new series, 1954) 31–45. Peck has been effectively criticized by A. R. Lacey, "Plato's *Sophist* and the Forms," *Classical Quarterly*, IX (new series, 1959), 43–52. Neither Lacey nor Peck seem to grasp the metaphysical role of transcendentals, whereby they define all possible types of ontological structure, the *logos* itself of philosophy. This has been most recently demonstrated for the latter part of *Parmenides* by Brumbaugh, *Plato on the One*, though indeed it is the whole and entire theme of the history of philosophy itself, if that history is viewed in the light of metaphysics. See footnote 17, *infra*.

7 This term is borrowed from Whitehead, *Process and Reality*, 36: "That every condition to which the process of becoming conforms in any particular

Whitehead, but the relevant concepts are Plato's: "There is not one self-existent thing, but everything is becoming and in relation" (*Theaetetus*, 157B). This in context has an admittedly Heraclitean bias, but it has a larger import; for as long as "Being" did not have a transcendental status and applied exclusively to the idea realm, it could hardly signify an activity of relatedness. Indeed ideas are quite ahistoric or, as Berkeley put it in quite a different context, inert.[8] But if we may anticipate the "definition" of Being in *Sophist* (247E) as the power to act and be acted upon, we then see that given this definition, the Ontological Principle is analytic.

These principles which are explicative of participation must now be examined in somewhat greater detail. Let it be conceded that in all probability these three principles are neither categorical nor unique. It well may be the case that the Principle of Relativity will do the work of the Principle of Mingling and the Ontological Principle, and a simpler apparatus for defining participation could be constructed. Nor do we claim this to be the unique route to a solution; though, it would be delightful if any correct solution were its equivalent. We must admit to certain grave doubts which do beset us and which may render this account inaccurate. These have to do with Plato's theory of time.

It is true to say that Plato was a philosopher of process, one for whom, coordinate with Being, Becoming was an irreducible and final fact. But a philosophy of Becoming entails a theory of time; and it is doubtful that Plato was quite so aware as we might be, in the light of the great achievements of Alexander, Bergson, James, and Whitehead, as to what might be entailed in such a theory. In the simplest terms, time requires continuity and discreteness. But to say this is one thing; to say how this can be is quite another matter. Is there, in Whitehead's phrase, a continuity of becoming or a becoming of continuity? If we stress novelty and act and creativeness, we are committed to the view that time is made of discreta which are functionally independent of the past; but then the continuity of nature is threatened, and above all *change* itself. But a continuity of Becoming threatens the integrity of the self-being of the image, making it perhaps no more than the reiteration of the past.[9]

Plato made many remarks about time, but it is doubtful that he had assembled these into what might be called a theory. We can make a choice among these remarks, for they are hardly consistent, and come up with alternative accounts, all of which could be said to have a ground in Plato. We shall make a choice and take a stand in the final chapter on the discreta theory, but we admit quite frankly that, lacking what might be called Plato's real view, this is apt to be at least a partial distortion and even a trivialization of deeper insights. Since time is relevant to the theory of the Image, which is the way time stands to eternity, then our construction of a particular model may yield an inadequate account of participation. But error, if interesting error, has its use: let the gods then grant that this, if not acceptable, at least be interesting.

The Ontological Principle

The Ontological Principle is a protest against any division of the world (the *all*) into its necessary constituents such that they are and are meaningful apart from one another. If the world is a system, an intelligible whole, then each of its basic constituents must be so related to the others that its modification, or with-

instance, has its reason *either* in the character of some actual entity in the actual world of that concrescence, *or* in the character of the subject which is in process or concrescence." Our use will parallel Whitehead's.

[8] George Berkeley, *Principles of Human Knowledge*, sec. 25. Both Berkeley and Hume exhibit a kind of upside-down Platonism; for in their denial of power as a real part of an idea of nature (Being), actuality becomes as vacuous as it was for Plato in his "transcendent" phase.

[9] This is surely the most difficult and important of all philosophical problems; but we can see that if reiteration is the case (and this is but another way of describing determinism from a formal perspective), then the given image is a mere vehicle for the perpetuation of form, not a creative agent in determining form.

drawal, or displacement entails a "corruption" of that whole. If a so-called basic constituent can be out of relation and as such be fully and completely itself and real, then it could no longer be basic. It would be a mere adjunct, parasitical on the whole, and could be removed with even a very artless use of Occam's razor and thus relegated to what it in fact is, non-entity.

To this point Plato's philosophy has exhibited a curious set of paradoxes. Admittedly ideas and images are and are necessary. Images certainly entail ideas. But the converse relation does not hold; and because of this, the separationism of the middle dialogues seems a foregone conclusion. But we have seen through *Parmenides* that separationism entails the non-being of the image. But this means that images would not be a constituent, which by hypothesis is clearly false. The moral is that each must somehow be involved in the other.

Plato was fully aware of this dilemma. But he saw an even deeper and more important issue: if ideas are devoid of agency, if they are mere principles of definiteness, how can they *cause*? Becoming is the arena of change, of things acting and being acted upon. Clearly, the only way an entity can modify another entity is by acting upon it. But to fall back upon a principle dear to Spinoza, unless they have something in common, modification is hardly possible. Agency (*dynamis*), as modifying and being modified, belongs to Becoming. Socrates in prison is prepared to die for an ideal good, but it is the hemlock, not the idea, which finally does him in. Separationism entails the non-being of the image; but were we able to bestow a kind of existence on the image, it is difficult to see how the idea could become ingredient in it as an effective *cause* of its act.

This is the moral of the famous War of the Giants and the Gods (*Sophist*, 245E–249E), the struggle between those who make real the massive irrelevancies of earth or the vacuous inspirations of heaven. This must surely be the most important passage for an understanding of participation in the dialogues. We need not concern ourselves with the presumed historic roots of this quarrel,

for its higher truth is that of a myth about this most critical situation.[10] It portrays an ontological dualism of a separationist sort, one party (the materialists) representing the primacy of Becoming and the other (the friends of the forms) the absolute ultimacy of Being; and surely by this time we are prepared to accept the merits and the difficulties in each position. Perhaps we might describe it as a dialectic Plato is having with himself. Each party concedes that the position of the other is not without a ground (246E, 249E). In other words, idea and image are granted by both to be necessary constituents in the constitution of the all, and the problem is the old one of showing how they can be in connection. The problem is phrased in what has now become the standard way: if we begin with Becoming, how can ideas be causes; if we begin with Being, how can this have any relatedness (except accidental) to images?

Plato's response is a radical one. Instead of assigning agency to the nexus of images, why not make it the primary metaphysical category? "I hold that the definition of Being to be simply power [*dynamis*]" (247E).[11] Power implies the interaction of things. Thus

[10] Cornford believes the giants and the gods represent rival schools of philosophy, and not aspects of Plato's own thinking which have come into conflict with one another; and thus he does not look upon the image as possessing central importance for a study of Plato. It is true that schools lurk behind the images, for it is the business of "schools" to clearly articulate alternative positions. Thus the giants may be, as Cornford suggests, representatives of the new philosophy of atomism (*Plato's Theory of Knowledge*, 231–32), but there is probably more merit in his suggestion (p. 232) that the materialists express the common sense view of reality as that which can be kicked (Samuel Johnson) or squeezed (John Locke). Cornford is able to identify the "friends of the forms" with "idealists" (p. 243). Jason Xenakis in "Plato on Truth-Value" suggests that the "friends" are school children in the Academy who have not heard that the idea theory has been abandoned.

[11] Plato is hardly one to pass off definitions lightly; and when he does, we should take him very seriously. We understand this to be a major revolution in Platonism, but this is not generally conceded. The very strong argument Auguste Dies (*Platon* [Paris, 1950], Tome VIII, 3e Partie, 386–97) makes against a dynamical interpretation of Being is itself based on the confusion between power and the dynamical concepts, Motion and Rest. Certainly Being is other than Motion and Rest (250C); for to say that it is power is not to say that it

the primary form of any metaphysical analysis must be relational, one relatum being "anything with power to affect" and the other with the power "to be affected." Being is bipolar, the fundamental unity being that of dynamic interaction between entities. The point of Plato's analysis is to extend this interaction to entities of any ontological type. The fact that Being is power to act and to be acted upon is the grounds for the real community of being. The idea realm and the realm of images are members of a common whole.

Cornford's commentary on this definition is vastly misleading. Because he identifies the disputants in the myth with "schools" of philosophy, he thinks of this as a definition "that a reasonable materialist would accept,"[12] neglecting to note that it is also used against the friends of the forms and is indeed central to Platonism.[13] "The dynamism of Plato is so deep that it is beyond sensible motion which is only a symbol, an appearance, of something which is the property of all being, even that being which is *auto kath auto*. . . . In spite of the misunderstanding of generations of professional commentators, living Platonists have all understood in one way or another, either implicitly or explicitly, the message of this transcendent dynamism: Cusanus, Kepler, Galileo, Leibniz,

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is changing (for the absurdity of which see *Cratylus* 440A–D) or *stasis*. Dies is one among the many students of Plato who seem not to be able to recognize the nature and role of transcendentals.

12 Cornford, *Plato's Theory of Knowledge*, 239.

13 Cornford, *Plato's Theory of Knowledge*, 234–39 has given an interesting and useful account of the use of "power" in early medical practice, in pre-Socratic philosophy, and in Plato and Aristotle. He does not accept its metaphysical import, possibly as a consequence of his rather philological interests. Even less sensitivity is evidenced by more recent commentators on the *Sophist*. Especially noteworthy in this regard are Runciman, *Plato's Later Epistemology*, and J. L. Ackrill, "Symploke Eidon," in Allen, *Studies in Plato's Metaphysics*, 199–206, and "Plato and the Copula: *Sophist* 251–59," in Allen, *Studies in Plato's Metaphysics*, 207–18. At least Cornford knew something about the nature of "transcendentals," but these gentlemen display an ignorance that is frightening. Perhaps the whole concept of a "transcendental" is false, but not to see that this is what the *Sophist* is about and to waste time on puerile distinctions between the "existential" and "copula" senses of *estin* is perhaps to lose sight of the real philosophic issues.

and Whitehead have all developed it in their fashion."[14] With Professor Taliaferro's rejoinder to the Cornford thesis there can be no quarrel.

The Ontological Principle is a restatement of the definition of being as power: to be is to be implicated in that which acts or is acted upon.[15] Form is no longer true being, inert and immovable, splendidly isolated from the mundane world. Insofar as it may be said to be, it is an ingredient in power. The alternative, as we saw in *Phaedo*, led to the separation of "mind, and life, and soul" from the world, leaving them "no place in what is perfectly real" and relegating them to a timeless Being "that has neither life nor thought, but stands immutable in solemn aloofness, devoid of intelligence" (*Sophist*, 248E–249A). The only real alternative to a separationist ontology is one of interactive community: "Then the philosopher, who has the truest reverence for these qualities, cannot possibly accept the notion of those who say that the whole is at rest, either as unity or in many forms; and he will be utterly deaf to those who assert universal motion. As children say entreatingly 'Give us both,' so he will include both the movable and the immovable in his definition of being and all" (249D).

The immediate application which Plato makes of this principle is to show the mutual relevance of image and idea to one another. The "materialist," who looks at the whole from the side of Be-

14 Taliaferro, review of Brumbaugh, 260.

15 In connection wtih this definition, the following statements from *Theaetetus* should be kept in mind: "There are two kinds of motion. Of each kind there are any number of instances, but they differ in that one kind has the power of acting, and the other of being acted upon (156A). . . . For there is no such thing as an agent until it meets with a patient (157A) . . . . The conclusion from all this is, as we said at the outset, that nothing *is* one thing just by itself, but is always in process of becoming for someone, and being is to be ruled out altogether (157B) . . . . Accordingly, when we speak of something 'being' or of its 'becoming,' we must speak of it as being or becoming *for someone* or *of something* or *toward something*; but we must not speak, or allow others to speak, of a thing as being or becoming anything just in and by itself" (160B). The relevant section of the *Theaetetus* is concerned with applying the ontological principle to the particular phenomenon of perception, which we shall later use as a model for participation itself; but it abundantly exhibits the concept that being is power and the relatedness which this entails.

coming, must, on admitting regulative ideas, also admit that they can order Becoming in virtue of some agency. They must be real constituents in effectively channelizing the flux (246E–248A). This side of the argument presents no novel insights; but when Plato turns to the "friends of the forms," he proposes relationships which are revolutionary. We are told that images must make a difference to ideas, that Becoming is the active agency to which ideas may be patient; thus it seems that in some sense part of what ideas are is contingent on their relation to Becoming itself (248A–249B). This reciprocal conditioning of idea and image, which is necessary if participation is to be made intelligible, must await further clarification.

This must suffice for a preliminary characterization of the Ontological Principle. We shall have occasion to give a more thorough analysis of this concept and the various types of structure it entails in the final section of this chapter. As a consequence, the figure of the giants and the gods should take on even deeper significance; for if power is the fundamental philosophical category, then cosmology is first philosophy.

The Principle of Relativity

The Principle of the Relativity of the Transcendentals, which we shall call for short the Principle of Relativity, is based on an interpretation of the central, or core, section of the *Sophist* (237B–261B); and in order to establish it, we must state what we take to be the point of this extended argument. We understand this core to conclude with a demonstration of the "nature and number" of the most fundamental members of the class of transcendental ideas, Being, One, Many, Same, Other, Rest, and Motion. Of the three principles which we presume requisite for a definition of participation, this is by far the most important; and it may indeed be the case that by means of it alone the other two principles could be demonstrated. Since we are not concerned with categorical or minimal assumptions, we can leave this conjecture aside.

We shall see that transcendental terms are the "some that

mingle with all" (*Sophist*, 254C), suggesting a revision and limitation of the Heraclitean hypothesis "that all things have the power to communicate with one another" (252D). These terms constitute the *logos* of philosophy; but it is a peculiar *logos* indeed which they define, for it seems that each can be both subject and predicate.[16] Perhaps it would be useful, though possibly misleading in the end, if we were to think of them as incomplete symbols; for in themselves they are purely formal, requiring other entities whose modes of relatedness to one another they specify. Thus they are logical subjects only in the sense that $\Phi(x)$ is a logical subject. Their meaning lies in relation to the other kinds, the constitutive and regulative ideas, whose combinations and separation they serve to render intelligible (*Sophist*, 253C–54C; *Philebus*, 15D). Thus, if we say "Being is One," we mean that something or other, satisfying the Ontological Principle, is One in some respect to be specified. When predicated among themselves without reference to the other kinds which they qualify, they define the possible types of ontological structure. They constitute the grammar of ontology (*Sophist*, 253B). Ideally, one might suppose that every possible conjugation will receive a possible systematic interpretation;[17] but their status as "incomplete symbols" requires a stipulation as to the type of ontology in question, and thus the interpretation might well vary with one's ontological commitments. We assume with Plato the Being-Becoming dualism; but

[16] The best brief introduction to the transcendentals, though decidedly second intensional and Aristotelian, is Scott Buchanan, "An Introduction to the *De Modis Significandi* of Thomas of Erfut," in *Philosophical Essays for Alfred North Whitehead* (New York, 1936), 67–89. This same volume contains an excellent article by Raphael Demos, "The One and the Many in Plato," 41–66, which is by far the best account of the role of transcendentals in Plato with which I am familiar. It is because of the completeness of Demos' account that we are able to pay relatively little attention to one-many.

[17] The translucence of language to thought makes it uniquely available as an instance of Being. As numerous discussions in *Cratylus*, *Sophist*, *Phaedrus*, and *Philebus* indicate, language was for Plato what *techne* was for Aristotle and his philosophy of nature. A genuine linguistic philosophy would itself be first philosophy. When those moderns who are concerned for language can lay aside their analytical prejudices, one might expect a renaissance in philosophy of considerable importance.

even here we confess to an inability to give a formal account, satisfying the requirements of modern logic (in this case, probably combinatorial) of the behavior of these terms.

An even greater difficulty confronts us when we question the ontological status of the terms themselves. Are they second intensions, belonging uniquely to the activity of thought and language? Or is it that since language (or thought, if that "language" is permitted) is a kind of Being (*Sophist*, 260A), they may themselves be forms? These questions must surely be asked and answered, but, happily, they need not now detain us. This question, which is once again being asked in philosophy, promises a renaissance whose roots lie in the great Scholastics, if not in *Parmenides* itself.[18]

The choice of transcendentals determines the type of system. In the case of Plato, it seems immediately obvious that Being defines his as a dynamical system, One-Many as having a part-whole isomorphism (*Timaeus*, 30C–31B), Same-Other as having conditions of continuity and discreteness, and Motion-Rest as expressing the mutual action and reaction of components of whatever ontological type. These are aspects of Being, if you will; and the absence of Universal-Particular and certain elevated regulatives, (which count as transcendentals in the many Scholastic accounts) such as Good-Evil, True-False, and Beautiful-Ugly, shows this to be a philosophy of process, not substance. The transcendentals for Plato exhibit how diverse things relate in time and eternity, not the presumed perfections of finished Being. Even One-Many, which occurs in both the Platonic and Scholastic accounts, has a different role. One suspects the influence of Plotinus, where multiplicity is held to be a defect in Being and One the primary principle, may have been more strongly intrenched in medieval philosophy than is usually realized. However that may be, what one takes the transcendentals to be determines how Being (= Reality) is to be characterized; and, in this sense, we may properly define metaphysics as the science of transcendentals. This reflects a self-consciousness of itself which perhaps Aristotle's metaphysics lacked, but which was certainly clear to both Plato and the Scholastic doctors.

[18] Any random predication will not make sense per se. Thus we can say "Being is Rest" and "Rest is Being," but these are incomplete symbols, meaningless as they stand. What is required is that they have an interpretation. Otherwise we have incoherence. This means that, contrary to Sommers ("Predicability," 262), transcendental terms such as Being will be analogic. One does not make a system by twisting terms about; but given types of entity, transcendentals determine consistency and coherence and types of connexity. Thus we know that ideas must be acted upon (*Sophist*, 248A–249D), but so far we have no satisfactory interpretation. Unless such can be given, the system is defective.

The relevant section of the *Sophist* begins with three dialectical exercises. Though the transcendental terms are used, it is very important to understand that it is not until 253E that they come to be understood as transcendentals. Prior to that, they have the well-defined sense these terms had in the fourth-century understanding of pre-Socratic philosophy, wherein they represented thing-like opposites, on one term of which a philosopher was supposed to take his stand. Being was either One with Parmenides or Many with Empedocles. The dialectical exercises are meant to show the necessity of a transformation into transcendentals of what had been presumed to be constitutive terms. The first exercise is the dialectic of Being, One, and Many (242D–246A); the second is that of Being, Motion, and Rest (246A–251B); and the last is that of Being, Same, and Other (251B–253C). Each triad either leads to the collapse of the terms into one another or to a radical separationism. It is then that Plato invokes the entire set of terms as transcendentals and attempts to show how a consistent account, which we now know to require both "mingling" and separation, can be effected. The first and second triads are concerned with the old "chestnuts" of pre-Socratic philosophy; on the one hand with the dispute between the pluralists and the monists and on the other with that between the partisans of universal flux and changeless Being. Being, Same, and Other constitute the logical vocabulary of all schools, but it is not until the final triad that they are brought into the open and treated in and of themselves, and not simply implied or left to be latent.

If the Platonic transcendentals can yield a consistent account

of separation (transcendence of the subject in question, and generally implying atomicity) and "mingling" (mutual immanence with others whereby the assumed subject is, and thus generally implying continuity), then they are what is required for an account of participation. In particular, if we can show the transcendentals to be applicable to an image, then by their means we can exhibit both its continuity with and discreteness from the "Others" (qua ideas and qua Becoming) whereby it is. This is the basis of our interest in the transcendentals, and we now must turn to an analysis of *Sophist* if we are to justify it.

The main section opens when, as a result of a successful division, the Stranger arrives at the definition of the sophist as one who creates a likeness of the true, an appearance (236D); but this definition provokes his observation that it is a very perplexing question "how a man can say a thing which is not true or how a thing can appear or seem, and not be." (236E). The assertion of falsehood seems to involve the assertion of non-Being; and, unless one can talk sensibly about non-Being, the task of catching the sophist will be difficult indeed. The search for a way to discuss non-Being seems to involve one in hopeless paradox (237C–241D); and yet if error is possible, in some sense non-being must be:

> I must test the philosophy of my father Parmenides, and try to prove by main force that in a certain sense non-being is, and that being, on the other hand, is not.
>
> (*Sophist*, 241D)

* * * * * * * * *

> I think that Parmenides, and all who ever yet undertook to determine the number and nature of existences, talked to us in rather a light and easy strain.
>
> (242C)

It is then to the philosophers who seek to determine the nature and number of existences that we turn, to the pluralists and the monists. If we cannot talk sense about non-Being, perhaps Being will itself give us a clue. But Being is at least as elusive as non-Being. (a) If we begin with the pluralists, who assert, say, the being

of hot and cold, then: (i) Being is other than hot and cold, but in this case they could not be; (ii) Being may be identical with one, say hot, then cold would fall without; or (iii) Being is identical with hot and cold, but then their difference would fall outside Being. In each case pluralism reduces to monism, which is self-contradictory. (b) Suppose we assume monism. Then we say, "Being is One"; yet we now have three—Being, "Being" and "One" (244B). Furthermore, either (i) the One (or Real) is a whole of parts, or (ii) the One (or Real) is not a whole of parts (244E). But the first hypothesis is self-contradictory, for there is Being, whole, and parts. On the second hypothesis (ii), we have the following possibilities: (1) there is such a thing as wholeness, or (2) wholeness does not exist. If we assume the whole exists (1), by hypothesis it is other than Being, so Being would lack something that *is*, namely wholeness. Therefore, Being would be and not be, which is self-contradictory. If we assume the whole does not exist (2), then this involves the same objections as above.[19] Furthermore, nothing could come into existence, and there would be no quantity or number. Whatever comes into Being does so as a whole, so it would always not be. Nor could there be number, for number is a whole having parts. The monists are either reduced to self-contradiction or to the admission of pluralism. If Being is many, it is one; and if it is one, it is many. The triad Being, One, and Many, is therefore inadequate to a description of the real. The One collapses into multiplicity, and the Many coalesce into unity. But it should be noted that these terms do not have transcendental signification but are fixed in their signification to a plurity of elements, like those of Empedocles, or to the One of Parmenides.

It is just this univocity of signification that destroys the effort to make sense of those who would conduct metaphysics in terms of the assertion of the reality of change or of rest. It is at this point that Plato introduces the figure of the Giants and the Gods (246A–249B) which we discussed, admittedly in the light of the

[19] Cornford in *Plato's Theory of Knowledge*, 226, gives an excellent summary of these arguments.

full theory of the transcendentals, in the last section; but the formal dialectic discloses dreary results. Let us assume Being, Motion, Rest (249E), then: (1) since Rest is not Motion, and if both Motion and Rest are, we have an evident contradiction; (2) if Being is Rest, then if Motion is, it is Rest; or if Being is Motion, then if Rest is, Rest is Motion; and finally (3) if Being is that in which both Motion and Rest participate and neither is Being, then either Being and Rest are not, or Being is not.

The above arguments each seek to express the necessities—Being, One, Many, Rest, and Motion—but always in terms of their "classical" signification, in terms of clearly defined schools and positions. But some attention to the pre-Socratic "grammar" of Being will be useful. As predicated of another term, say Rest, it has the sense of absolutely real, and any other term, say Motion, would thus fall outside of this into non-entity. As predicated of two terms ("Motion and Rest are"), it has the sense of pointing to a reality either outside the terms so that they fall into non-entity, or of an identity *inter se* such that their respective differences fall outside into non-entity. Being means either sameness of that of which it is predicated (Motion and Rest *are*), or that just Being itself is real, otherness in both cases falling into non-entity. The effort to talk sensibly about Being has landed us in greater absurdity than discourse about non-Being (250E).

The key issue is obviously the dialectic of Same, Other, and Being. Let us "provide a rich feast for tyros" and consider the expression, "Man is good (251C). To say that man *is* good is to say man is same as good, and thus, as Bradley might put it, to say nothing at all except the tautology "Man is man" (or "Good is good"). But if we say that he is good, do we not say something other of man, something which man is not? To be man is one thing, to be good is another; but then we are saying something false if we predicate good of man. We seem to be reduced to saying that all things mingle (are same) (252D) or that all things separate (252A). Can we find a "betweenness" that will lead us through this to clarity and the possibility of discourse (251A)?

Plato's solution is to assert that some terms combine with some, that some terms combine with none, and that some terms combine with all (253D). Those terms which combine with all are the transcendentals, "the all-pervading connecting terms which enable the other kinds to blend; and conversely, in divisions, . . . [there are] others which cause whole classes to separate" (253C). These "other kinds" may be taken to be the constitutive forms and the regulative forms, some of which combine and some of which qua separated serve as possibilities or incompatibilities. Let us see how we can unpack these assumptions. But that "unpacking" will give us that of which we are in search, the nature of participation itself; and in order to do that as effectively as possible, we require a statement of the third principle.

The Principle of Mingling

We should not forget that Plato is a philosopher of *eros*, and *eros* is a principle of engendering. In *Symposium* we are told that if one is led by his instructor aright, he will come to love one fair body, and Beauty is engendered (210A–B). Indeed the great myth of *Timaeus* is concerned with the engendering of images by a Demiurgos out of the receptacle. Socrates is a midwife (*Theaetetus* 148E–151E); and yet if we follow the actual dialectic, he seems a great deal more, spawning ideas in those good and pure enough to behold and to enter into relation with him. To neglect the erotic act of mingling is to miss a constant preoccupation of Plato.

Mingling is more than an image. It is a description of the actuality of participation itself. Two beings, one the agent and the other the patient, mingle one with another, and this is the grounds for the novel ingression of form.

Of course the relevant image is the model account of perception we find in *Theaetetus* (152D–160C). Granted that though it is couched in the language of a Protagoras who has taken on the guise of Heraclitus, it seems unmistakable that it is Plato's own theory, that it is he who has seen the real power and the deeper point of the philosophy of the universal flux. As is so often the case, we have to use it as a reverse image, an image against Hera-

clitus and Protagoras and expressive of the deeper insights of Plato.[20]

Theaetetus is admittedly an effort to show that Protagorean relativism is an insufficient basis for knowledge; but the world of Becoming is not, as Parmenides would have it, to be thereby dismissed. Such existence (Being) as it may have is that of action and reaction: "Nothing *is* one thing just by itself, but is always in process of becoming for someone, and being is to be ruled out all together . . ." (157B). But in the light of the definition of Being in *Sophist* (247E), we must take this "ruling out" of Being as ironic. For while Being may be power, it is not an undifferentiated chaos, an *apeiron*, but has an identifiable structure in virtue of which *something* acts and *something* is acted upon. An act-patient unity may be alternatively described as, in the case of perception, thing perceived or perception (156B). But what is constitutive of the unity?

> As soon, then, as an eye and something adjusted to the structure of the eye give birth to the whiteness and the cognate perception—things which would never have come into existence if either of the two had approached anything else—then it is that, as the vision of the eyes and the whiteness from the thing that joins in giving birth to the color pass in the space between, the eye becomes filled with vision and now sees, and becomes, not vision, but a seeing eye; while the other parent of the color is saturated with whiteness and becomes, on its side, not whiteness, but a white thing, be it stock or stone or whatever else may chance to be so colored.
>
> (156D–E)

It is obviously the ingression of the form whiteness, as alternatively characterizing what is seen, "It is white," or the seeing, "I see white." White is the form of the flux (ignoring the medium) characterized by the active motion of the perceived and the passive motion of the perceiver. Plato is careful to point out that "white" cannot be uniquely associated with either agent or patient. If it were in the perceived and the "measure" of perception as in realism, then it would not "really" change with different perceivers or with different states of the same perceiver; and were it relative to the percipient as in idealism, then how could it change with differing perceptual objects (154B; 159C)?[21] Realism and idealism are both consequences of a defective analysis of perception.[22] Out of the mutual immanence of agent and patient (or, in Platonic language, in the procreative embrace wherein they mingle) is born the sign and form of their unity, the sense object. The sense object is a higher grade form characterizing the mode of formal unity of agent and patient. The Principle of Mingling concerns primarily the way in which the form as ingredient in the agent and the form as ingredient in the patient (in each case itself parametric in Buchanan's sense)[23] blend to constitute a new formal unity, which may be described as the

[20] Cornford in *Plato's Theory of Knowledge*, 30–58, gives an adequate treatment of this theory as Plato's own. Unfortunately he does not see that this is a paradigm of participation; though on page 45 he does indeed come quite close to seeing the main point: "The inference seems to be that Plato, since writing the *Phaedo*, has given up the view that any of these qualities—hot, white, large—is an instance of a form residing in an individual thing and perishing or withdrawing out of it when the thing changes. We are now to think of the change as falling between a thing and a percipient." While we might chide his neglect of an analogous consideration in *Phaedo* concerning "hot" and his failure to see agent and patient as a unity characterized by the given form, it is a fair statement of "mingling."

[21] The point of the argument concerning the dice at *Theaetetus* 154C–155A should not be ignored. The predicates "more" and "less" attach to six, but only because it is related to something definite, namely four and twelve. The number six is greater in relation to four. Thus I see white in the object, and white is relative to me. It was on this basis that Protagoras established relativism. But in order to talk about "relative," the relative entity has to be related to something; and the structural or formal character of the object and the subject are the relata in the relation "white." Rather than relativism, such as realism or idealism portend, this is a relationism. This must be reckoned as one of the most important arguments in the entire compass of philosophy, the neglect of which has trivialized vast stretches of her history. The failure to grasp this is the price we have paid for the subject-predicate logic. Aristotle in *De Anima* was fortunately not trapped by his logic; and in very important ways his treatment is very much like Plato's.

[22] I have elsewhere attempted to show how most of the traditional problems of perception arise from the unavailability of adequate logical models. Thus, white is a monadic predicate and must be predicated of an object (realism) or a "mind" (idealism). We propose that it be treated as a n-ary predicate, where $n \geqq 2$. See my "Maps and Models," *Southern Journal of Philosophy*, I (1963), 8–13.

[23] Scott Buchanan, *Possibility* (London, 1927), 52. See *Supra*, 75.

ingression of a novel form (154A).[24] "White" is not immanent in either the agent or patient, for apart from the perceptual relation neither can be said to be white. The structured activity of the agent ("active motion") and of the patient ("passive motion") in the unity of a perceptual act are defined, in virtue of the immanent, formal conditions, by the ingression or participation of a novel form, whiteness (*Theaetetus* 156D; 159D–160A). Since each present image "perceives" its own past, each historic route of images is a sequence of minglings. Mingling is a principle of the internal relatedness of forms derived from diverse routes, one derived from the agent and the other from the patient, in virtue of which a new and novel unity, itself formally characterizable, is thereby constituted. Given some form x and some form y satisfying the Ontological Principle, if they mingle, then this will be defined by some form A which is other than either taken as such, but which can be predicated of either *in the given relation*. Thus we may say either "the stone is white" or "I see white," but the sense object "white" is predicable of both the perceiving and the perceived because it is the form of their unity in the perceptual event. In the above case, stone and eye are the necessary conditions for the occurrence of "white," but the sense object has characteristics and values which are not definable in terms of its necessary conditions. This is even more apparent in those cases of mingling which engender what Aristotle has called a substantial change, but even in qualitative synthesis or mingling this seems evident. In this way we preserve the sense of "cause" to which Socrates appeals in his critique of Anaxagoras in *Phaedo* 96A ff.

We next desire to show that with respect to a mingled whole all predicates are analytic or, as we prefer to say, internally related. Consider the case of a man who comes to have knowledge, having before been ignorant. His state of knowing cannot be defined as the conjunction of human nature and knowledge, the

[24] The only effort to map these relations and structures relative to the idea realm with which I am familiar is Whitehead's chapter, "Abstraction," in *Science and the Modern World*. It is remarkable how little attention this interesting problem has received.

mere togetherness of character and quality, for knowledge is a qualitative enhancement of that character. The man surely was prior to his having become learned, but the learned man is not the man he was. Furthermore, intelligible objects are prior to their being known, but their being known qualifies them and adds indeed a new structure, itself intelligible, to the universe (*Sophist*, 248A–249D). Thus, prior to mingling, the man was other than knowledge and its intelligible object; but the mingled whole which is said to be a knowing man is such that he is his knowledge and his knowledge is what he is.[25] This is admittedly an idealized and stilted example, one into which we have surreptitiously introduced certain regulative ideas to yield the case of the perfectly knowing man (who is little else besides); but on the basis of this example, we should be able to see that characteristics which were *other* prior to mingling, insofar as they enter into mingling as its conditions, become *same* through mingling. The predicates of that mingled whole qua that whole are analytic: that they have the status of forms, in virtue of which they are possibles for recurrence, entails that they can also be apart from that mingling and that the relation between them will then be other. This analytic character depends on the principle that a mingled whole is indeed a unity specified by a form. Thus this particular man knows, and his knowing nature is one, but man is not knowledge. *Man* and *knowledge* are possibles for fact, in principle inexhaustible in any set, finite or infinite, of occurrences. Possibility is thus the ground for otherness.

Given any two subordinate forms x and y (which may themselves be parameters) and the parametric form A for which they provide the requisite conditions (in the sense of *Phaedo*, 99A), then with respect to the mingled whole A, the following statements are analytic: "x is A," "y is A," "x is y," and "y is x."[26] Ac-

[25] The unitary form for which man and intelligible objects provide necessary conditions might be called "learned."

[26] The following interpretation may be useful: let x be the stone event, y the perceptual event, and A the whiteness which qua white binds them together into a perceptual event. Then we have the following analytic sentences

tuality is expressed through the mingling of "some with some" (*Sophist*, 252E) and is an interpretation of the Parmenidean thesis (*Sophist*, 252D) of universal communion, expressed in the form of atomic actuality. *A* is the form of an actuality of mingling; so that apart from an appropriate actuality *A*, the following statements are false or express synthetic possibilities: "*x* is *A*," "*y* is *A*," "*x* is *y*," and "*y* is *x*." Possibility relative to some specific actuality is expressed in the denial of mingling, "some with none" (*Sophist*, 252E), and gives us the unmingled plurality of a separated many (*Sophist*, 252A; 253D). The transcendentals display the possibilities of this mingling.

Some comparison with an analogous position in Leibniz may clarify our point. Because he was saddled with a monadic predicate logic, Leibniz could not join together two or more actualities in a single form, $\Phi\ (x_1, x_2, \ldots, x_n)$. Otherness, or external relatedness, to the monad could only be secured by granting God the arbitrary power to create other monads; but even here propositions expressing relation of other monads to the actual, *internal* constitution of a given monad are analytic. Each monad "dreams" the common world.

Otherness for Plato is real, and it is of a variety of types which can be conditions of synthesis either of the image or referable to the act of the image itself. Though there are exceptions, it is in general true that other images can come together as conditions for synthesis of a given image, and thus become in part formally same, without losing their transcendent otherness. The parents live their lives beyond that of the child. The clue lies in the nature of form, which is as a possibility capable of multiple participation, of being exhibited now and then, hither and yon.

So far we have restricted ourselves to mingling at the level of the image, in which form has been presumed to be immanent with respect to the mingling in question; but we have neglected to account for mingling at the level of ideas *inter se*. Indeed we

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relative to *this* event: "The stone is white"; "I see white"; "The stone is that which I perceive"; "I perceive the stone." The copula is understood in accordance with the ontological principle.

have not shown any particular sensitivity to the way the several idea classes as such are involved in mingling. But before we attempt to rectify these through a resolute effort to get at participation, let us remember that however freely we use the language of power, ideas of themselves can *do* nothing. Agency belongs to psyche and to God and to the receptacle. How this can be will concern us in the final chapter.

Participation

In virtue of the Principle of Relativity, Being may be predicated of the idea realm, of Becoming, and of the two taken together. In virtue of the first assumption, ontology is possible; the second, philosophy of nature; and the third, cosmology. Cosmology is concerned with the way ideas become ingredient in Becoming, as constitutive of its order and definiteness (and thus making it an object of knowledge) and its value. Cosmology cannot determine which forms mingle or "what" exists; but it can exhibit the way in which constitutive form becomes ingredient in the image and the role of the regulative ideas relative to that image and its actual environment. The study of these relations is possible in virtue of participation.

If we take the Ontological Principle seriously, then at the level of Becoming participation is defined by the relation of two actualities, one in "active" motion and the other in "passive" motion. This unity is expressed in a form which is "drawn" from the idea realm, to which the initial forms of agent and patient stand as conditions. This occurs in accordance with the Principle of Mingling.

We have previously spoken of the necessary conditions which are relevant for the occurrence of a unitary form, but it should be recognized that these conditions admit of a certain range of variation. Thus, if "white" is to occur, certain psychological and physical conditions must be satisfied, but in general there can be a variety of such conditions (as determined by "white"). Certain conditions are evidently optimal, and these may be said to be

normal with respect to the form in question. The case of "white" is trivial, but those having to do with being a man are of more importance. A man is a whole of functionally related parts, and he remains a man only as long as those subordinate functions exhibit a certain range of activity. Within that range, some will be normal. It is the business of the physician, for example, to determine just what this norm is with respect to biologic function. But the environment in which man participates is not only biochemical but embraces, among other things, certain social relations and forms. Thus certain regulative ideas define the way "being a man" is normal with respect to this larger whole. This was the point of Plato's concern for justice in *Republic*. A whole is a unity of act, and the form of a mingled whole, which expresses this unity, must be understood through the Ontological Principle. Habits of a too long engrained sensationalistic philosophy may obscure this, especially in the case of perception. This latter has generally been seen as the entertainment of vivid sensa and not as an expression of a functional unity having value components. It is to be hoped that this Platonic method of analysis, which seeks to preserve isomorphism between part and whole, is more fruitful than the reductive tendencies which have governed analysis in recent philosophy.

So far we have been concerned with the agent-patient complex at the level of an image. The choice of the instance of "white" is unfortunate in that it suggests that form is drawn from agent and patient who are given; yet as Plato rightly recognized, both agent and patient are becoming, themselves defining linear routes of change (*Theaetetus* 160B–C). Both perceiver and perceived are inheritors from the past and the dominant necessities to which their "own" future must conformally become. Thus the stone, assuming it has that unity sufficient to constitute it as an image, perceives its past and its future and is patient with respect to them; but it also is true that past and future are acted on by the image itself. This is an immediate deduction from the Principle of Relativity and the Ontological Principle.[27] To take a more

[27] *Supra*, 119–21.

obvious example, the past determines the settled conditions to which I in this moment must conform, and that same past and other contemporary images determine the relevant future. But the converse is also true. The character of the immediate present determines the *relevant* past, and present decisions determine in part what the future will be for itself and for others. This was the point of Socrates' martyrdom. Unless his drinking of the cup would determine, not just for himself, but for others, a higher and more philosophic life, it would be in vain. Insofar as an image is patient with respect to past and future, it participates in past and future; insofar as its decisions constitute a conformal necessity on past and on future, they participate in it. It is to be understood that in the above, past and future can be in the present only qua form—there must be conditions of continuity other than form, especially if we are to use such language as the "necessary conditions of the past to which the present must conform," conditions which have, for example, been rather overlooked by the existentialists.

Let us now look at the way an image stands to eternity. We have two cases to consider: (a) the way the image is as a result of form which thus provides a permanence (rest) in the flux of events; and (b) the way form is as a result of the image, and thus, paradoxically, is a condition of change (motion) for which the image provides a ground (rest).

The first case is easily dealt with, for it is what has generally been known as participation, and its formal characterization has been the subject of much of this book. The following will summarize our arguments for the ideally simple case of an enduring object. An enduring object is itself the successive reiteration of a form in a linear sequence of images, each of which is formally identical with its predecessor. Let us call this sequence x_1, x_2, x_3, . . . , x_n and the definite form X. The form X will be wholly in each instance, each will be same with respect to it, but as a possibility it will be wholly other, a potential for other images. If X lacks complexity, then it may recur in other linear routes, though this statement may mask, rather than solve, a problem; but

by hypothesis it can certainly define images within the same linear strand. This is the way Being (qua ideas as Rest) is in Becoming, constituting formal conditions of identity.

The second case is based on Plato's answer to the idealists (*Sophist,* 248E), who were forced to concede that ideas were indeed acted upon by images. This leads to the paradoxical predication of Motion to Rest. What are we to make of this case? We have to assign active agency (motion) to the image and examine the possible types of purely formal relationships this will produce, if "produce" is indeed the correct word. These are changes which are grounded in the image, just as the previous case grounded changes in the image in the ideas. This symmetry is required by the Principle of Relativity and the Ontological Principle.

Let us survey the schema of participation, both in order to see what has been done as well as what we have yet to do. So far, we have tried to show how a given image may participate in other images and in ideas. We have tried to show that these two forms of participation mutually entail one another. It would seem that any case of the participation of an image in an idea is in virtue of the participation of that image in other images. The full complexity of this problem is disheartening, but even more complex are those having to do with the way an idea participates in other ideas and in an image. Indeed, Plato was rather well advised to leave these matters at the level of myth and to provide the *Timaeus* as his statement of them; and in the final chapter we hope, through an account of some of the issues in that greatest of all of Plato's works, to give a more adequate and symmetrical account of participation. But it is necessary to give a preliminary characterization of the way ideas participate *inter se* and in images, if only to round out our picture of participation and to prepare the ground for the final section of this chapter which has to do with the relation between actuality and possibility.

The primary instance of the participation of the ideas *inter se* concerns the way God effects a valuational grading of the totality of pure possibility (we may think of this as an ideal for the actual world) in virtue of some sensitivity to the actual status of images (in theological terms, creatures). William James has somewhere

given us a useful image of a God who is like a perfect chess player and, as such, knows all the possible moves of chess. God does not know what moves his partner (in our account, any image) will indeed make; but once a move has been made, he knows the next appropriate move and the proper response. This knowledge of the "next appropriate move" is what we have called a valuational grading of possibility. His knowledge of what you and I do is his sensitive apprehension of fact. Secondly, since God is good and thus suasive, not compulsive, Becoming can indeed constitute structures which are not preordained. Thus the parametric form, the one of the mingled whole which is the image in question, serves as a limitation on the field of possibility, grading the relevance of these to the image in question. In this way the image imposes a form on ideas as pure possibilities. But this is the problem of the way the soul, in virtue of the principle of reason (whereby ideal possibility not uniquely specified by fact is nevertheless rendered relevant and perhaps congruent to fact), exercises its freedom. This exercise depends on its capacity to envisage alternative routes through immediate history and to shape ideal ends through which these routes may be judged. The way the soul shapes ideals and judges, and the way it stands to the judgments of God, will concern us in the next chapter. We can leave these august topics, God and the soul, with the remark that just as participation among images and their participation in ideas mutually entail one another, so too does participation among the ideas *inter se* and their participation in images. In virtue of the Principle of Relativity, the Ontological Principle, and the Principle of Mingling, any analysis of Being will disclose four modes of participation: images *inter se*, ideas *inter se*, images in ideas, and ideas in images. While special interest will specify particular modes, in the interest of coherence all must be taken into account.

Actuality and Possibility

The paradigm case of the way Becoming acts upon Being is to be found in those deliberative acts which characterize rational choice. To be sure, we usually and quite correctly speak as if

to deliberate were to give heed to the demands of reason and to let these demands shape our act, and it is clearly here if anywhere that Being acts upon the flux. But in those contexts wherein we deliberate the converse may also be true, for the situation (*this* time, *this* place, *these* people, *these* circumstances) may itself be important in shaping the relevant ideal which reason provides.[28] How this claim of contextualistic ethics can be stated will elude us if we insist on thinking of possibility as if it were there, laid out all finished and done with in its own neat heaven, and as if the present situation were a sort of light moving with time through which we see now these possibilities in just this way, then those, and so on and on. We and our little light add nothing to what is really there. But perhaps this is wrongheaded; perhaps the present is really creative, not just with respect to novel fact, but also in terms of novel increments to the idea realm itself. If this is so, we have two possibilities to consider. In the first place, it could be that the form of the immediate image brings into being and orders relevant possibility, as a *schnitt* orders points in Dedekind's model of the real line. Let us call this the continuum hypothesis. The second case (and this has been suggested by our view of the unitary form of a mingled whole having certain conditions supplied by the participation of the given image in other images) is that whereby the present image gives to timeless and ideal Being its own unique moral and aesthetic relevance, in virtue of which the multiplicity and disjoined array of empty possibilities assumes a vivid and immediate connection, as a unitary system, to that image. Thus in the present the many possibilities become one. It is just this unity which is "created" and is an addition to the scheme of things entire. This, which we may call the atomic hypothesis, can be imaged in the metaphor of the aviary (*Theaetetus,*

[28] Aristotle's "deliberative model" is especially useful in this connection. In *Ethica Nicomachea* we are told that deliberation is in the sphere of the variable (1139A 7), and is for those things within our own power (1131A 11). The right rule of action which is sought lies in a mean (1108B 15–35), which is not absolute, but is relative to the situation (1106A 14–1007A 25). Whether his ontology supports this model is another matter but it is an elegant attempt to show how structure, in this case that of obligation, is a function of Becoming.

197E ff): each time the hand is thrust into the cage for a bird, and deliberating and choosing is such a thrust, the birds fly about in new formations and in a novel order.

We may (1) assume that mingling does not create new form, and thus that the realm of form is absolutely infinite. If we deny this and (2) assume that form may be engendered, then we have the following alternatives: (a) new form originates as the outcome of the combination of forms which are relatively prime to the form in question (atomic hypothesis); or (b) new form is the consequence of a cut, effected by the present, in the formal continuum (continuum hypothesis).

(1) One may indeed deny that mingling is in any sense creative and hold that definite possibilities have real Being apart from any reference to fact; but this would render the form world top-heavy with meaningless and empty abstraction. This was a morass Socrates feared to enter (*Parmenides*, 130D), and so too might we, for consider what it entails. Ideas are supposed to be simplification of facts, a one for the many in Becoming, and not a more complex reduplication thereof; and if there were a form for every possible communion, for every possible participation and relation, for everything which could possibly be, then the excess ontological baggage which the universe would be required to tote about would, by comparison, make Cantor's transfinite cardinals appear the creation of a miser.[29] Either we must go back to separation, where we can explain every image as a partial reflection of the real idea and dismiss difficulties occasioned by variation of individuals from the norm as contingent on our point of view and thus illusions, or as due to irregularities in the reflecting medium, or we can call in the acute Occam. But just how he is to go about his barbering may be a difficult matter to decide. Neither the continuum hypothesis nor the atomistic hypothesis is without internal difficulty, but to give either up is to abandon important insights about the nature of possibility. The dilemma of all who have had to choose among antinomies, as is well known to the

[29] For Plato's argument against proliferation, see *Parmenides* 130B–D; also Aristotle, *Metaphysics* 990B 1–8.

students of Zeno, Kant, and Bohr, is not to be envied. Fortunately, we are not required to make a choice and can rest content with what we take to be a statement of the case.

(2a) Let us consider the atomic hypothesis. We begin with the assumption of forms of some lowest type n (and with the strong presumption that there are forms of type O which are truly atomic) combine to produce forms of type n+1 (*Phaedrus*, 270D, 277B–C). We assume a set of forms of lowest type, $a_1, a_2, a_3, \ldots$, and that any two or more of these may combine to produce a form of next highest type, A_1. We now assume that A_1 is not just $a_k+a_l + \ldots +a_n$; that is to say, the characteristics of the form which results from mingling are not reducible to the characteristics of those of the base set which mingled to produce it. Were it so reducible, then it would not be a form produced by the base set, but a mere summation of their characteristics. But since by hypothesis mingling is creative of new and novel form, in this case A_1, then we have to reject reductionism. Plato himself has faced up to these difficulties in the myth of the elements (*Theaetetus*, 201E–206C), and his arguments, together with the more recent contributions of Ryle and Wittgenstein, would seem to count heavily against reductionism under even more generous assumptions relative to the status of the resulting form.[30] But the assumption that we can generate novel form through the mingling of relatively prime elements of lower type is subject to ever greater difficulties. If we hold that the resulting form, say A_1, is novel and irreducible, then it would seem to entail that it too was atomic (*Theaetetus*, 205D); but then we face the problem of intelligibility of A_1. We want to say that certain base elements mingle and that A_1 is an emergent, but now we want to say just which elements are the creative conditions for A_1. If given these we could deduce A_1, then it is difficult to hold that A_1 is novel: but unless deduction

[30] Ludwig Wittgenstein, *Philosophical Investigations*, sec. 46 ff; Ryle, "Plato's *Parmenides*," 136–41; also Gilbert Ryle, "Letters and Syllables in Plato," *Philosophical Review*, LXIX (1960), 431–51; with respect to this latter article, see the criticism by D. Gallop, "Plato and the Alphabet," *Philosophical Review*, LXXII (1963), 364–76. One of the most useful critiques of logical atomism is J. O. Urmson's *Philosophical Analysis* (Oxford, 1956), 1–98.

were in some sense possible, then how could we show that they were necessary for A_1? Unless we desire to adapt a metaphysical positivism and to say, "That is just the way it is," then this situation will not do. How can there be any justification of the hypothesis, in the light of Plato's usual assumption that higher order form is ontologically prior to that of some lower level and that the whole somehow presupposes the parts? This is certainly a major Platonic thesis (*Phaedo*, 92B).[31] If forms are forms of functions, then they presuppose one another. Furthermore, in case A_1 is parametric, we want to say that its occurrence is compatible with the occurrence of a variable range of more primitive elements, and on this atomic thesis no sense could be made of this doctrine. Even if these difficulties could be overcome, and it is probably true that they can, there remains the problem of interpreting the atomistic base of the system. What are we to take these atoms to be? Sense objects? The geometrical elements of the *Timaeus*? The problem is analogous to that one encounters with the "objects" of the early Wittgenstein: and while the system may make a kind of sense, its phenomenological interpretation is obscure. We either lack a proper criterion for the correlation between the various form levels or, given that, a way of making sense of the results; and with this we might well turn to the continuum hypothesis.

(2b) If there are good reasons in Plato for considering the atomistic hypothesis, there seem equally good reasons for entertaining that of a formal continuum. Something like this seems to have been attributed by Aristotle to Plato in the final book of the *Metaphysics*; and it may be the point of the famous, if obscure, discussion of the classes of Being in *Philebus* (23C–27C). *Peras* limits *apeiron* in virtue of the good to yield the derivative mix-

[31] The distinction between the accidental and the substantial is, in part, worth preserving; for it seems obvious that certain formal increments do not entail change of "subject" while others do. Variations not involving change of subject are permissible within the context of parametric form; but on the present "creative" view of form, where the whole is a function of the atomic parts, it is difficult to see how this can be maintained. I am uncertain as to the effect of this critique on the continuum hypothesis.

ture; and this suggests the manner whereby Dedekind was able to generate the real numbers through *Schnitte* of a line. If we ignore Russell's attempt to define continuity in terms of the properties of a discrete series,[32] a discussion which seems to have presupposed continuity, perhaps we can apply this model to the idea realm. Perhaps the entity defined when an image cuts a formal continuum is novel. Charles Hartshorne has given an impressive account of the advantages of this assumption:

> Are eternal objects ingredients in the composition of a compound individual? If so, then what becomes of the unity of the latter? For individuals as ingredients are only relatively distinct from other ingredients: but eternal objects must be absolutely distinct from and independent of any given individuals, since they definitely antedate the latter. The only way to escape from this antinomy is, I believe, to deny that eternal objects have individual natures as ingredient and as not ingredient in a single individual. How then will they have the same qualities in the two cases? Because before ingression they will be less definite, that is, more general. This means that in their eternal aspect they will be completely general, i.e. categories, and that all such specific characters as robin's egg blue are emergents at a given time, *created* rather than 'selected' out of the primordial potentiality. In this way, eternal relatedness will be limited to relation of future to past. Universals as independent of instances are anticipatory and more or less vague. The truth that essences form continua (colors, for example) seems to demand this doctrine, since by Whitehead's own method of extensive abstraction continuity is treated as the possibility of endless division, not as the totality of products of such division. Externally there is just the unitary vague field of quality, not a set of point-like determinate qualities.[33]

[32] Bertrand Russell, *Principles of Mathematical Philosophy* (London, 1956), 97–106.

[33] Charles Hartshorne, "The Compound Individual," *Essays for Whitehead*, 217. The chief difficulty with Hartshorne's thesis from the point of view of this enquiry arises from the view we have taken of the image as a *mingled* whole; for unless there were definiteness conceived as transcendant of that locus of enactment, the consequence would be that Heracliteanism described in *Euthydemus*. If individuals enjoy relative continuity, the idea constituents must be distinct. Conceivably this distinctness could be assured by deity, in a sense to be clarified in the following chapter, who might effect a *schnitt* in the constitution of the regulative ideal. If, as *Philebus* 16D holds, there is *apeiron* and *peras* in all things, this might be the happiest solution.

Professor Hartshorne presents an alternative to our theory of the image, through which we meant to provide a model of participation. We have been led to conclude that an image is a mingled whole and that ideas qua possibles must be distinct, for otherwise we risk making Becoming a Bradleyean whole of internal relations and thus appearance; while Hartshorne has suggested that primordial possibility is a continuum (suggesting a mingling at the level of ideas) and that there is a relative individuality of distinct forms in the compound individual (image). One thesis is the reverse of the other. If we may ignore the adequacy of Hartshorne's position for an account of participation, it can be shown that it is probably unsatisfactory as a thesis about Becoming, in spite of its admirable simplification of the problem of possibility.

It is undoubtedly true that possibility is potential to the actuality of Becoming. What we hope to show is that the Aristotelean thesis, which Charles Hartshorne derived from Peirce, that potentiality implies continuity cannot be applied to possibility. Peirce tells us that the aggregate of all possibles is potential where "potential means indeterminate yet capable of determination in any special case."[34] Given a primordial potentiality of possibility, Peirce shows how the Platonic ideas can themselves be derived.[35]

It is a logical truth that potential is correlative with actual, so that to speak of potential is to imply that some actuality is involved as supplying conditions for that something being potential. If those conditions are themselves eternal (or sempiternal), then the possibilities are said to be eternal; while if these conditions are supplied by a specific actuality (an image or a nexus of images), then the possibilities will be said to be real. In either case, actuality supplies the continuum of possibles with relevant order-relationships, since order is assumed in the definition of a con-

[34] C. S. Peirce, "The Logic of Continuity," in Charles Hartshorne and Paul Weiss (eds.), *Collected Papers* (Cambridge, Mass., 1935), 6.185. I am obligated to Dr. Hartshorne for this reference to Peirce and the subsequent distinction between real and eternal possibility, though he should not be held responsible for the definition and use I make of these terms.

[35] *Ibid.*, 6.194.

tinuum.[36] These conditions of order, which have an analogue in Kant's "axioms of intuition" and "analogies of perception," are defined by the geometrical conditions of the Platonic receptacle, which we will discuss in the following chapter. If we may anticipate our subsequent discussion, we can assume that they are rooted in the "construction" of psyche (*Timaeus*, 35B–36C), the eternal conditions for eternal possibility being supplied by the world psyche (or the Demiurgos itself) and those for real possibility deriving from psyche in its embodiment in a specific image (or nexus of images). The question now arises as to whether either of these two types of possibilities can be considered to be in fact continuous.

The greatest difficulty with the continuum thesis arises from the nature of real possibility as supplying alternative projects for the decisiveness of the image. To say that indefinite possibility is made definite by the act, analogous to choice, of an image is to confuse that whereby it structures its act with the extensive conditions of that act. Consider, for simplicity, the case of a monadic image deciding where it shall go. Its actual route will indeed atomize the spatial continuum, which is, of course, infinitely divisible by possible routes. This continuum of potentiality is infinitely divisible; and these potential routes, projecting from the actual locus of the image, do indeed specify what possibilities may be relevant to choice, for the choice is made with respect to just *this* continuum. But our monad chooses from among definite, specifiable possibilities as to how the atomization of the continuum is to take place, as to where it is to go. Its future projects are specificities, not generalities. The possibilities of its route relative to the given situation and the extensive continuum are definite, informing *whats*, entertained with respect to specific aims and purposes. As Plato pointed out in a somewhat similar context (*Philebus*, 12D–18D) wherein pleasure is treated as a continuum (*apeiron*), pleasure cannot be pursued as an end, but rather requires definite limits (*peras*) which can specify it in various ways.

[36] *Ibid.*, 6.188.

In general, *peras* limits *apeiron*. One chooses the limit, which prior to choice serves as a possible aim. One hardly chooses from generality, but rather from atomic possibilities.

The second difficulty one encounters with respect to real possibility, on the Peirce thesis, concerns the availability of a real possibility, as defined by a prior cut in the continuum, to other images. Clearly a given possibility, robin's egg blue, transcends its locus of initial enactment, and it would seem that it transcends it as a specific definiteness. Suppose robin's egg blue just occurred for the first time in cosmic history. Surely it can recur. Unless it were available as potential for recurrence in all its specificity, then the conditions for its definiteness would be referable to an image. That means that the image qua actuality would define just this possibility. But this is Aristotle's position, which denies novelty (except as a mere accident) and creativity and which makes form immanent. The possibility of the creative advance requires that form be a novel increment in at least some cases and thus that possibility be ontologically prior to specific conditions of actuality. Thus our recurrent possibility must be definite. Suppose then that it is available to a plurality of images as a possible definiteness and is thus now determinate. How are we to preserve its definiteness? We can have recourse to the "memory" of God, wherein after its initial occurrence it would be preserved as a potential for multiple participation. As primordial, possibility would be continuous; as subsequent, discrete. But this falls to our first objection, for the initial realization of the given quality is now in question.

The case for treating eternal possibility as a continuum may be more promising. Again taking advantage of a perspective provided by the following chapter, let us assume that the primordial continuum of eternal possibility is atomized by God in virtue of which some segment appears as a graded range of real possibles. This divine act is presumed to occur in concordant harmony with given, actual states of affairs. The grading is effected through the regulative idea. But if we are to show how an eternal generality becomes a set of real, distinct possibles, we meet just that difficulty we encountered when we assumed that a real possibility was ef-

fected through the decision of an image. Can we understand how even God could choose from a mere generality and thus supply a range of specific possibilities for the decision of actualities in Becoming?

Perhaps the continuum hypothesis admits of ready solution; but as matters now stand, there are as many difficulties in admitting a simplification of possibility as there are in accepting a Cantorean range of atomic possibilities of every possible grade. What structure we are to grant in the idea range must, within the limits of this inquiry, remain an open problem. Henceforth we shall assume an actual infinity of forms, but with no great assurance that this assumption is warranted. It certainly does not conform to the Platonic ideal of Beauty.

Whatever view we take of real possibility, it seems to involve reciprocal action among ideas and images. It might well be the case, however, that this mutual immanence of the two realms is contrary to Plato's intentions, for there is one very important text which might be thought to count against it: "Form is always the same, uncreated and indestructible, never receiving anything unto itself from without, nor itself going out to any other . . . " (*Timaeus*, 52A). This particular text has been taken to be a repudiation of the thesis that ideas are immanent; and on its basis such distinguished scholars as Edward G. Ballard, Harold Cherniss, and R. E. Allen have sought to preserve some version of the "likeness" theory which we understood Plato to have abandoned in the Third Man Argument (*Parmenides*, 132D–133A).[37] But if we take the transcendentals seriously, there is nothing in our view of participation and the generous view of possibility which it permits (as against the restricted versions appearing under the continuity and atomistic hypotheses), which could not be rendered compatible with the thesis that ideas neither "go out" nor "receive." Ideas qua transcendent possibles are other than images, even though same or present therein. These others are; and as

[37] Cherniss, "Relation of *Timaeus*," 36 ff; Ballard, *Socratic Ignorance*; and Allen, "Participation and Predication," 48–60.

such, being in and of themselves, they "never go out to any other." Furthermore, if we do hold that an image is not a creative factor in the coming to be of novel form, and if we are profligate in our ontological commitment, admitting forms for every possibility, then ideas and mixed classes of ideas can be understood as same and other, and we can define communion so as not to require "going out" and "receiving anything into."

The question remains as to how we might avoid the prohibition of *Timaeus* 52A in a more stringent ontology. The difficulties may rest in the accounts we have given, which perhaps suggest a more univocal interpretation of Motion–Rest than is strictly necessary. Ideas cannot go out anywhere, but of course images can; and space-time is an expression of their travels. It may be that a too literal rendering of this transcendental pair is the source of our difficulty; but at the present time we have to confess that we can see no way to relieve Plato from a top-heavy ontology, though there are indeed ways of bringing relief to one following on him.[38]

We have discussed the way in which Being, in the old-fashioned Parmenidean sense of the absolute *isness* (Rest) of the ideas, may participate in Becoming. This completes the desired demonstration of the nature of participation. It has been stated for images and their temporal order and for the ideas. As far as we can see, we have made a systematically complete application of the transcentals to this problem of the way an entity is and is characterized through others, with due limitation to the purely formal factors therein involved. We have to bring "life and mind and soul" into the picture as well as desired conditions for phenomenal continuity; but the above is posited as a Platonic solution to the problem of participation which led us on this lengthy inquiry. We

[38] Just as discreteness (*peras*) and continuity (*apeiron*) are characteristic of Becoming, so too by the Principle of Relativity they may well characterize the form world per se. Whitehead's concept of the "relational essence" of an eternal object (*Science and the Modern World*, Chap. 10) may well provide the requisite conditions of continuity, just as the idea (eternal object) itself provides definiteness.

hope that it is likely. In developing our thesis we have made many assumptions, especially relative to our principles. No philosophical issue is final, least of all this, but we do hope we have raised what was common knowledge in the classical era to something approaching contemporary relevance; that we have done it badly we know all too well. It is easy to progress through what one takes to be the mistakes of others, and in the previous chapters we had considerable assistance from many worthy critics and commentators. In this chapter we had to venture forth in a speculative fervor that was perhaps inane; we can only promise something even more senseless, but perhaps interesting, in the next chapter, which is still more speculative.

V THE SOUL AND THE WORLD

THOSE who look for a "theory" of the "self" in Plato may well look in vain. This is peculiar in one who, with the unknown Biblical chronicler of King Saul, created the personal as a recognizable literary type. The adequate expression of the person, as we daily encounter it, perhaps had to await Descartes, Luther, Augustine, or even Kant, for the self as the center and integrative focus of its world is not a classical ideal.[1] Indeed Whitehead somewhere said that it represents the only major metaphysical discovery since the Greeks.[2] Whatever the limitations of Greek metaphysical theory, Socrates as he emerges from the dialogues

[1] One of the limitations of the classical Greek tradition lay in its failure to make a proper appreciation of the role of feeling (pathos) in the economy of psychic life. The Sophists made a promising start; but the intensional character of feeling, my feeling *of* something, was interpreted so as to make the object of the feeling a function of the feeling itself. The consequence was epistemological and moral relativism. In Plato and Aristotle the object is restored, and feeling is given a criterion which measures it; but an excessive moralism leads to a distrust of all feeling that is not aimed at the ideal. This teleological interpretation is correct as far as it goes, but it overlooks the formative character of feeling whereby subjectivity itself is originated. It is only with Hume that the constitutive role of feeling, whereby both selves and objects are distinguished on its basis, is recognized; though it must be confessed that Hume was unaware of the import of his own discovery. It is with Bradley and Whitehead that feeling begins to assume its proper role in philosophy.

[2] Though his concern with the mystery of the human person is centered on that of the Christ and thus obscures for him the emergence of this as a literary type in both King Saul and Plato's Socrates, the most impressive contribution to this topic has been made by Jacques Maritain in the first chapter of his splendid *Creative Intuition in Art and Poetry* (New York, 1955).

is wholly and fully a person; and this personal existence, so rich and so deeply loved, is the constant datum against which Plato checks all of his speculation. It is this "literary" discovery which, as much as anything, makes Plato a contemporary and his philosophy a source of insight.

We have remarked that it was perhaps a concern for the fate of Socrates which led Plato into separationism, but it was the concrete reality of that life that led Plato into a critique of his own soul theory. It will be recalled that in *Phaedo* he identified the human soul with the ideas; and so in virtue of the realistic principle, it came to be associated with the ideas and separated from the body. But Plato realized that this hardly does justice to the facts of lived life; and with some considerable irony, he put the statement of what must have been his own theory into the mouth of Simmias, the Pythagorean (*Phaedo*, 91E–94B). The ontology of the middle, or separationist, dialogues has no room for "life, and motion, and soul" (*Sophist*, 249A); and the critique of Simmias, who had identified psyche with the idea of harmony, has all the irony of self-criticism. Indeed, Socrates' praise of philosophy over *philodoxia* and his faith in her, rather than in his own hopes and arguments, may well be the most moving movement in any of the dialogues (*Phaedo*, 89D–91C). If the human soul is identified with a mere form, say the form of man or even the individual Socrates, then it can hardly (1) be the actual focus of memory, sense, and "recollection," (2) integrating these to order, move, and to regulate bodily life (3) in such a manner as to create a type of life subject to judgment by the Gods[3] (*Phaedo*, 91E–94B). But in saying what soul is and must do, in repeating Socrates' arguments against Simmias, have we not stated the major cosmological

[3] The self as an integrative agency constitutive of "experience" is a "discovery" which becomes explicit only with Kant (who borrowed the notion from the Leibnizean monad). But the concept is implicit in Aristotle's *De Anima* and in Aquinas, and its root lies in the objections Plato has Socrates make to the thesis that psyche is to the body as a harmony is to a lyre. Harmony cannot act, cannot shape melody, but the soul acts in and through the body, ordering it to ends in virtue of which it is judged. If mind is not yet active synthesis, certainly soul is.

themes, have we not shown soul to be the agency in mingling? This argument, as sketched above, entails a recognition of the difference in ontological type between the image and its informing order; it seeks to account, via the choices of the soul, for the way order becomes ingredient in fact; and lastly it seeks to account for the valuations over the nexus thus constituted. We must seek to bring these matters to clearer light.

The agency of soul is an unmistakable consequence of the *Phaedo* argument, an agency which comes into full and explicit recognition in *Phaedrus* (245C), *Timaeus* (34C ff), and *Laws* (893B–896E). In its most general sense, psyche is that whereby transcendent Otherness becomes assimilated, and thus Same, with the immanent necessities of life purpose. Whether we are talking of the replication of bodily tissue, growth, sensation, play, understanding, moral valuation, or any life function, this seems to be the pattern and character of life. Some assimilations, perhaps all, require specialized organs, but above all life is the activity of mingling. Basically this is what participation is all about: it is the way transcendent Otherness comes to play a role in Becoming. All other meanings, in virtue of the Ontological Principle, are derivative from this. The agency through which this comes about is psyche.

It is perfectly obvious that this represents a rather bold speculative generalization, for we have assumed that psyche is a cosmological principle, ingredient in all Becoming. That this deployment of terms is bad philosophy is a current dogma ("How would you verify the belief that everything has a soul?") which may well be true; but, for better or worse, it is the way of philosophy. Though he himself denied that "all things have a soul,"[4] Aristotle based his analysis of first and second act on his psychology, and thus his whole philosophy was rooted in psyche. Without mentioning the idealists, subjective, Kantian, or linguistic, we can see that the specific sense of this metaphor has been the basis of such philosophers as Leibniz, Peirce, and Whitehead, to men-

[4] *De Anima*, 411A, 7–23.

tion only a few.[5] And, of course, it was the way of Plato, as we see in the master image of *Timaeus*:

> Let me tell you then why the creator made this world of generation. He was good, and the good can never have jealousy of anything. And being free from jealousy, he desired that all things should be as like himself as they could be. This is in the truest sense the origin of creation and of the world, as we shall do well in believing on the testimony of wise men: God desired that all things should be good and nothing bad, so far as this was attainable. Therefore also finding the whole visible sphere not at rest, but moving in an irregular and disorderly manner, out of disorder he brought order, considering that this was in every way better than the other. Now the deeds of the best could never be or have been other than the fairest; and the creator, reflecting on the things which are by nature visible, found that no unintelligent creature taken as a whole could ever be fairer than the intelligent taken as a whole; and again that intelligence could never be present in anything that was devoid of soul. For which reason, when he was framing the universe, he put intelligence in soul and soul in body, that he might be creator of a work which was by nature fairest and best. On this wise, using the language of probability, we may say that the world came into being—a living creature truly endowed with soul and intelligence by the providence of God.
>
> (*Timaeus*, 29E–30C)

In virtue of the principle of isomorphism or formal identity between part and whole (*Timaeus*, 30D), we can say that each proper part of the world is by nature (which has the sense of immanence) besouled. The universe is a plurality of moving and living creatures whose act is mediative between Being (that which always is) and Becoming.

It will be immediately evident that not any mere Otherness will be relevant to a besouled image. There are vast stretches of

[5] In this connection, Peirce's comments in Hartshorne and Weiss, *Collected Papers*, 158–59 have a special interest: "I hear you say: 'This smacks of an anthropomorphic conception.' I reply that every scientific explanation of a natural phenomenon is a hypothesis that there is something in nature to which the human reason is analogous; and that it really is so all the successes of science in its application to human consciousness are witnesses. They proclaim that truth over the length and breadth of the modern world. In the light of the successes of science to my mind there is a degree of baseness in denying our birthright as children of God and in shamefacedly slinking away from anthropomorphic conceptions of the universe."

cosmic history which are Other in an absolute sense to any given image, stretches which never determine its mode of Being or serve as possible routes of conduct for it. I know that the possibility of my ever being a musician is forever closed for me, and even my very best friends may well be persuaded that I will never be a philosopher. For participation to take place, for realities to mingle, there must be some sort of community between them in virtue of which relevance for participation can be established. These conditions are both "formal" and "material."

Formal conditions are specific conditions of sameness and otherness, conditions which determine formally the parameters within which participation operates. Lest this sound overly strange, let us hasten to recall that a characteristic of post-Pythagorean Greek thought is to define structure in terms of ratios and proportions; and a proportion, or analogy, is a way of saying that entities are, in specific respects, same and other with one another. We shall see that soul in Plato is constructed in accordance with same and other divided by harmonic and geometric ratios (*Timaeus*, 34C–36D): this, to speak in a more modern mode, is to state the fact that there are mathematical conditions to which any interactive transaction must conform. Material conditions, as the name suggests, are conditions whereby a connected sequence of loci can be defined in virtue of which an image can be said to be "same" with its own past and other than the past of other images. These material conditions are those in virtue of which the separation, the coordination, and the self-identity of images are possible. Material conditions are related to what we ordinarily mean by space and time, though Newtonian habits of thinking these "phenomena" must be held in abeyance if they are to be properly understood within the Platonic context. In order to give more adequate treatment of these conditions of relevance, let us, beginning with the material conditions, consider them in further detail.

The Receptacle

The receptacle is the fundamental condition of extensivity, but it must be understood that to speak at this level is to speak at a

higher level of abstraction than Plato would perhaps intend. We may assume that Plato did not wish us to think of the material condition of receptivity, the receptacle which is informed by the "productive" act of the Demiurgos, as having an existence prior to that act, being, as it were, a primordial condition for the situation of images. Neither the Demiurgos, the lion who walks in the desert eradicating its tracks, its past, with its tail, nor the receptacle are without one another. What is symbolized by both is cogredient in the actuality of any Becoming, in the analysis of the image. This accords with the Ontological Principle. All reference to random motion aside (*Timaeus*, 30A; also 52D–53B, 69B), Plato was no Deist whose God imposed order on pre-existent stuff; nor did he assume a prior space and time in the sense of Newton as a condition for the coming-into-Being of the cosmos. The cosmos is created and in a process of creation (*Timaeus*, 28C). The receptacle, suasive agency, and form are among the factors necessary in the analysis of the fact of Becoming. Certainly to think of the receptacle or random motion apart from Becoming as it is, always has been, and always will be is a feat of vicious intellectualism foreign to the concreteness of Plato. Just as Aristotle thought of primary matter as having no real or separate existence in itself, but rather knew it as an extrapolation from concrete substances of primary grade (earth, air, and the like) guaranteeing unity to their substantial transformations, so too, the receptacle is, with form, cogredient in the total metaphysical situation. If it is to be thought, however dimly (49A), it must be in the context of images and their Becoming.

We labor these points, for certainly they are open to debate. Ours is the traditional way of reading Plato; and to those who, however ably, like Biblical fundamentalists insist on literalizing obvious myth, perhaps no really convincing counter-argument can be given.[6] Whether through prudence, good sense, or mere stupidity, some minds simply will not ascend to the anagogic. But certainly the *Timaeus* myth is in large measure a generalization of common experience; and if we permit ourselves to dwell on its obvious analogues in daily life, then what may appear at first as poetic moonshine may become clear and relevant. Of course we must remember that Plato's is not a common mind; and thus his analysis of common experience may disclose quite unobvious and hidden fact, as well as a deeper cosmological relevance.[7] Thus the notion of a creative God who through rational suasion seeks to inform recalcitrant fact may be based on something less than occult insight: it may reflect the experience of Socrates in life and his apotheosis in the Assembly as well as the more mundane experience of us all. Relative to Reason and its apprehension of form, pure and wholly compelling in its Beauty, that which is seen and is Becoming is disordered; and this is doubtless something each has encountered when in sweet reason he confronts the hard facts, a Dean, a disgruntled student, or a wife, in the encircling world. This is an experience of random motion, disordered and, in the light of higher form one sees and knows, perhaps even "evil." Do we not all know that with respect to ideal and regulative possibility, that which is posited as the sphere of action is disordered; but then considered in itself, it surely (we must charitably agree) manifests the persuasive results of reason, a kind of order, and an aim for higher purposes. One must admit this to be true of Deans, students, and even wives.

The point is that cosmological myth is meant to reveal the grounds of order and the way it comes to be the form of fact. However that ingression be conceived (as the design of YHWH or the progeny of Ti-amat and Apsu), it is represented as an action having temporal and sequential form involving a series of progressively articulated stages. The narrative form of myth imposes

[6] Gregory Vlastos has ably defended the non-mythical view in two articles, "Disorderly Motion in the *Timaeus*," in Allen, *Studies in Plato's Metaphysics*, 370–99; and "Creation in the *Timaeus*: Is it a Fiction," in Allen, *Studies in Plato's Metaphysics*, 401–19. See his articles for an appropriate bibliography.

[7] One might cite Peirce's reflections on habit or Whitehead's analysis of the phrase, "United Fruit Company," as well-known instances of this poetic capacity. Sensitivity to fact is a characteristic of all great philosophers, who really do see rather more deeply than the general run of us; and to those who insist that philosophy is merely conceptual analysis one might well suggest that they have not seriously read much philosophy.

obvious necessities on the exposition of cosmological insight, so that what is ontologically primary may appear as a mere phase in the developing story. Plato himself calls attention to this in his genesis myth; and he warns us that even though in the order of his exposition body may appear prior to psyche, the converse holds in the real order (34C). We can assume that neither the God who introduces order, the "works of reason," nor the randomness which he encounters are "temporally" prior to Becoming.[8] The ontological principle is sufficient to establish this.

The positivist flavor that encumbers our understanding of myth, whereby it is apt to be seen as a kind of proto-science, will certainly wreak havoc with our understanding of Plato, who consciously creates philosophical myth. If we are to grasp the sort of insight which his practice conveys, then we should begin with what archaic thought sought to represent in its mythical forms. Admittedly this remains obscure and the final elucidatory chapter is yet to be written, but perhaps the most promising line of contemporary inquiry, represented, for example, by Eric Voegelin and Mircea Eliade, is that whereby myth is seen to convey cosmological insight.[9] Eliade suggests that the general pattern of archaic myth and ritual is that of providing a means through which the participant is able to effect a passage from some temporal, historic situation to its eternal archetype. Though a way of overcoming history, it is in no sense an escapist or "scientific" under-

[8] Vlastos, who assumes pretemporal motion ("Disorderly Motion," 389) and thus denies the mythical and existential form of Plato's expression, concedes that in the phrase, "all that was visible" (*Timaeus*, 30A), Plato presupposes the existence of fire, itself the cause of vision ("Creation in *Timaeus*," 404). But fire is itself an image, an instance of the informed receptacle (*Timaeus*, 53C–57C). In this latter article, the use of the term "fiction" is invidious and aims to prejudice the issue in terms of that positivism which is latent in so much Anglo-American scholarship. A myth is not a fiction. If one assumes, with Plato and archaic understanding, a distinction between time and eternity, then myth is a mediative mode of discourse. This may be bad philosophy, but it has nothing to do with "fiction."

[9] Eric Voegelin, *Israel and Revelation* (Baton Rouge, 1956), and Mircea Eliade, *Cosmos and History* (New York, 1959).

taking. It reveals the "primitive's obsession with the real, his thirst for being."[10] Myth brings the participant into the realm of the exemplary model which conveys meaning to the mundane, and it is also "the abolition of time [and space] through the imitation of archetypes and paradigmatic gestures."[11] To us, for whom reality is historic, this may seem strange, but we must remember that our view is a recent interjection into the way man has thought his world and may itself come to seem equally gauche to those who through the passage of time have become more sophisticated, if not wiser, than we.

But the import of Plato's mythologizing in *Timaeus*, if not in *Phaedo*, is not that of more archaic modes. Certainly it connects contemporary and constantly given fact with eternal and primary realities, with their principles, elements, and causes as Aristotle would put it, and this is of critical importance; but the aim is not to abolish time, to make history a mere epiphany or sign of higher things, to overcome the illusion of empirical fact: it is rather that of showing history to be that for the sake of which eternity with all its exalted implications exists. This is the converse of archaic mythical modes. *Timaeus* is a myth about nature and is the outcome of rational inquiry, not a myth about the gods and itself the datum from which all thought must take its direction and authority.

There is far more to be said about Platonic myth, about the way it leaves inquiry open rather than closing it in dogma; and surely far more to be said as to whether it is a satisfactory ploy in the business of getting at what it is; but our task is to seek the material grounds for the connexity of images; and to do this we have had to invoke a certain understanding of myth. To the understanding of the receptacle we must now turn.

In the first place, we should understand that the receptacle is an extraordinarily rich concept, one containing within itself a

[10] Eliade, *Cosmos and History*, 11.
[11] *Ibid.*, 35.

host of meanings. Perhaps James Joyce's symbol of Molly Bloom[12] is more adequate than "matter" or "space" as an expression of what is conveyed by the concepts of the "variable cause" (48A), the "receptacle," "nurse," "mother," and "matrix" of all Becoming.[13]

The concept of the principle of extensive connection is expressed in a variety of terms and images: "Variable (or errant) cause" (48A), receptacle (49A) necessity (49A), "nurse of Becoming" (49A), the principle of "this" as against "such" (49D), the analogy of gold (50A), the analogy of the perfume base (50E), the "mother" of images (50D), "partaking in some puzzling way of the intelligible" (51B), place (or room) (52B), "apprehended by a kind of bastard reasoning" (52B), and, finally, a winnowing basket (52E). We shall employ the term "receptacle" as an index for this complex concept, which obviously expresses a considerable mass of doctrine. It is highly unlikely that we shall be able to domesticate, in our mundane way, all that Plato in his divine madness meant and understood by this term[14] but, whatever he did mean, it is rather apparent that it was neither space nor matter; but rather something more complex for which these terms may be thought to give a partial explication.

[12] James Joyce's *Ulysses* may be read as a generalization of the *Timaeus* myth, which seems obviously intended. The famous last chapter, with its lack of punctuation, best expresses Molly as the "matrix," the "nurse and mother of all Becoming."

[13] Taylor's remarks on the receptacle (*Commentary on Plato's Timaeus, passim*) are far more suggestive than those of Cornford (*Plato's Cosmology*, 177 ff). Had Taylor had the later work of Whitehead available, especially *Process and Reality* and *Adventures of Ideas*, he would have given a less Cartesian analysis, though one can see that he too is moving from the nexus of events of *Concept of Nature* towards the "extensive continuum" and the doctrine of "feeling." Cornford is less apt to confuse the receptacle with proto-space-time, but he loses the dynamic character of the concept which Taylor correctly expresses in the event language he adopts from Whitehead.

[14] We have seen how the unpacking of a term such as *eidos* (idea) can lead to a complex doctrine in Plato. In *Timaeus* something of the converse takes place, for a term ("receptacle") is loaded with meanings. Behind it lay, no doubt, the hylozoistic apeiron of Anaximander, the flux concept of Heraclitus, and the like. The father-mother imagery suggests the theogonic myths of an even earlier era. The construction is not random, but no doubt proceeds within the architecture of myth and the earliest philosophy.

In the first place, let us look to the image of the gold, the most likely candidate for matter in the above list. We are told the receptacle is to form as an unceasing remolding of statues is to gold: "If you were to point to any one of them and ask what it was, much the safest answer with respect to truth would be to say 'gold,' and never to speak of any of the other figures which are coming to be in it . . . ." (50B). Gold never becomes intrinsic to any of the forms, never enters into their formula as expressing their potential as a "substantial" being in Aristotle's sense. The receptacle is not a constituent in an image, is never an expression of the potential being of that thing. Aristotle gives an analogue to this in his distinction between "art" and "nature," for in art matter is the situation of the form, but the form never effects the being, the potentiality, of the matter as such. In nature the case is otherwise, for matter is intrinsic to *ousia* and form cannot be apart from it: substance is a functional unity, and form the act of such a unity. Indeed, Aristotle's analysis of *ousia* in *Metaphysics* Z, 7–8, seems to have been written with an eye to this analogy of gold and the immediately preceding distinction between "such" and "this" (49D). Plato refuses to take "matter" up into substance, while Aristotle takes great pains to show why he believes this to be necessary. For Plato "matter" is always a *that*: for Aristotle, insofar as it is a constituent in substance, matter is a "thaten," its character being modified by its "such," so that the composite is a "such-thaten."[15] His complaint is that Plato does not think within the substantial mode of analysis, but always within the partitive modes of matter *and* form, as one thinks in *techne* but not nature. Aristotle contends in *Metaphysics* Z, 10, that partitive analysis yields parts which are not proper parts. Such parts could only be accidentally conjoined, not brought into a real unity, a whole whose act (form) is just the act of that potentiality (matter). Aristotle would thus hold that Plato's account yields a loss of integral individuality. But perhaps something positive and even closer to the truth is latent in Plato. Perhaps Plato did not mean "matter"

[15] In connection with this, see Aristotle, *De Physica*, II, 1.

to be the principle of individuation, so dear to the Aristoteleans, though it may indeed have that derivative result. Nor did he mean it to be the principle of potentiality, and form that of act: as Aristotle perhaps saw, he held the opposite position. The "receptacle" is not a "can be"; it is not taken up into *ousia* and thus "limited" by its form. It takes on form, but it is also transcendent of any formal "limitation."

The critical importance of this latter point warrants most careful consideration. The fact that the receptacle transcends form has two major consequences: (a) an image, our term for an instance of the informed receptacle, derives its act from that receptacle, not the form, and thus form has the consequence of being a self-limitation; and (b) the concrete connectedness and interaction of things is through the receptacle, which thus provides a ground for immanent conditions of order. Both of these contravene the well-known Aristotelean principle that act derives from form. Form constitutes a *specific* limitation on possibility; and therefore the potential relations which any given instance of *ousia* can entertain with respect to the rest of nature are a consequence of its specific form. The thesis of "specific limitation on possibility" is one gladly entertained by most philosophers, who are scandalized by pure possibility; but its consequence, that prevalent conditions of order through vast historic regions exhibiting a variety of specific forms can have only an *ad hoc* explanation, might well make them have a second thought, had not positivism blinded them to philosophy and the need for explanation. Where material conditions can produce only accidental variation—the "sports" of Aristotle's biology, which lie outside of "science" and where sheer individuality has somehow to be the ground of connexity with others, which is again accidental—the only legitimate solution can be that of Leibniz and his windowless monads whose continuity with one another is through God. This is a heroic procedure, but it is not likely to win rational assent. The truth would seem to be that one must reverse the way western philosophy has read its evidence since Aristotle and, following the suggestions of Plato, Marx, and Whitehead, rethink the foundations of finite

individual fact.[16] Let us take these matters up in greater detail.

In a brilliant essay on Plato's concept of matter, Leonard Eslick has shown that for Plato, as for Whitehead, "matter" is the principle of creativity.[17] Eslick has approached Plato largely in terms of an Aristotelean analysis of the relation of Unity to Being and through the criticisms which Aristotle made of what he took to be Plato's attempt to derive ideas and then images from the univocal One. Eslick has shown that if this indeed be what Plato intended to do, then his account of matter renders the One impotent.[18] Whatever be the merits of Eslick's approach, which raises issues far beyond the task to which we have set ourselves in this inquiry, its supreme merit is to make it apparent that for Plato matter (the "receptacle") never enjoys substantial *inseity*. It is thus "separated" from essence and is the condition for the occurrence of essence in fact. The "flux" of "suches" does not have its ground in formal conditions (49D), but rather in what Plato has described as the winnowing activity of the receptacle itself (52E).

Because it is not limited by form, matter (the "receptacle") has the tendency to "expand," to pass beyond the confining and determining ground of given form, which is a sort of extrinsic denominator. But this "expansion," the "variable motion" (30A, 52D–53E) which organizing reason confronts, is itself the activity of self-selection, the winnowing or selecting of forms. It begins to look as if "matter" had some of the properties of psyche, for by this motion and this selectivity we have come to know what soul is (*Phaedrus*, 245C–246A; *Laws*, 893B–896E). Leaving aside such implications for the next section, we can see that the receptacle is the condition for the occurrence of form, for the ingression of

[16] The rationale for the appearance of Marx on this list is tenuous, but its ground is found in the first of his "Theses on Feuerbach." Hitherto, Marx contends, only the idealists had made the connexity of nature intelligible, for matter was not the sort of thing which could effect synthesis. It is this "defect" in materialism which he proposed to correct, though it can hardly be said that he carried out the promise of this proposal.

[17] Leonard J. Eslick, "The Material Substrate in Plato," in *The Concept of Matter in Greek and Medieval Philosophy* (Notre Dame, 1965), 39–54. For his remarks on the creative role of "matter," see especially 50–54.

[18] *Ibid.*, 54.

pattern into nature. But there is, as we previously suggested, another sense in which the receptacle transcends any limitation placed upon it by the enactment of an instance of form; for as *chora* (place, not space)[19] it signifies the nexus of relations which the given image has to those others which constitute its effective environment (52B). It is at this point that we can discover a similarity to and a fundamental difference from the role which this concept plays for Aristotle and his followers. The similarity is obvious, for to talk of place, as against space which is the mere possibility for "distance" and relevant coordinate transformations, is to talk of concrete facts of real relatedness, of intimate connection with the environing world. To be in *chora* is to share certain conditions with that world of others, who provide barriers and open options, to be, in short, partly explicable through the given arrangement of things. This is certainly in keeping with the account Aristotle gives in *De Physica* IV, 1–5. But since for Aristotle form is the principle of act and thus of real relatedness to others, the mere place a thing occupies may be wholly accidental and its relations to others not intrinsic to its mode of being: real place is telic, and thus in virtue of the essence of the *ousia*, it has a real relation ("locative power" as Aquinas calls it) to only one plăce.[20] Such is the tragic consequence of making form the integral agency in *ousia*, for it is no longer possible to see the thing as interactive with, as determining and being determined by, the given concrete world.[21] If the receptacle is not the *inseity* of Aristotelean matter, then it can be understood as expressing the possibility of there being concrete facts of self-transcendent connectedness which are relevant to the actuality of the given image. *Chora* is an expression of the possibility of field conditions being internally and externally relevant to the given image: it is the grounds for the possibility of physical geometry. How substance can relate to other substances is a problem central to Aristotle; and that it can have in the end any such relation is a mark of its deficiency qua substance. God is wholly act and wholly substance and the only real relation is to self, the act of God being that of thinking himself. Limited *ousia* can have in virtue of its form a real relation to place as *telos*, but its other relations to present nature are accidental, in virtue of a matter which is not wholly taken up into form.[22] Put otherwise, the physical field, the field of surrounding agencies, is not integral to substance as such; and thus for substance to be situated in and modified by that field is therefore possible only through deficiency, through not being substance wholly. Hence the *scala naturale*. This is surely a very curious way for a biological naturalist to regard the world; it is certainly an indication that he fell into an error which he thought Plato had made, that of identifying reality with transcendence. But Plato was trying to say something quite different, for it is only within and through the immanent necessities of *chora* that an image can be and be itself, and such transcendence as it enjoys

[19] Both Cornford (*Plato's Cosmology*, 192–97), and Taylor (*Commentary on Plato's Timaeus*, 343–47) translate, I think unfortunately, *chora* as "space," and fail to take account of the way this "image" stands to the other "images" with which Plato characterizes the "receptacle" and thus sees an argument as an exposition of a doctrine. Heidegger's notion of the world is closer to Plato's thesis of *chora* than is the concept of space. Indeed his "Being" is similar to the receptacle.

[20] The most revealing discussion of telic or natural place in Aristotle is found in *De Physica*, 254b 8–255b 32.

[21] The isolation of individuals as conceived within Aristoteleanism is brought out elegantly in the following quotation from Aquinas: "Beings in act are not united except by being, so to speak, bound or joined together . . . ." *Summa Contra Gentiles* I, Chap. 18, sec. 2.

[22] In fairness to Aristotle, but at the price of further confusion, there is a sense in which matter is not taken up into substance but remains as mere potentiality, as substrate. "For my definition of matter is just this—the primary substrate of each thing, from which it comes to be without qualification, and which persists in the result" (*De Physica*, 191a 31–33). Thus there seems to be a dualism in composite substance between matter qua substance and matter qua substrate, between what is *in se* re *ousia* and that which "as potentiality does not cease to be in its own nature, but is necessarily outside the sphere of becoming and ceasing to be" (191a 24–26). The problem of how matter as expressing field conditions, as potentiality, is relevant to the act of substance is thus internalized, but now it appears that substance suffers fission of its unity and is a real other to itself. The Hegeleans can begin their dialectic at this point, but common understanding will recognize contradiction (properly, incoherence) for the scandal that it really is and seek a more rational account of *ousia* itself. It is hoped that this essay will exhibit Plato as a useful guide.

is that in time, in Becoming. If one indeed is going to stress individuality as the mark of the real and is to mean by individuality integral act, act following from the integrity of that nature alone and referable to nothing else, then Leibniz provides a reasonable answer. This is the route Aristotle should have taken, for it most adequately expresses his own metaphysical demands. But for Plato participation was a central issue; and it would follow that individuality is through the mingling of same and other and not through the repudiation of real otherness. Self-being is what it is only through the real relatedness with the otherness of the environing physical world; and the receptacle, conceived as *chora*, provides us with the extensive conditions whereby this connectedness can be made explicable. If we look at space in this light, then we can see how to avoid the sterility of the Newtonean tradition, as well as its Humean and Kantean variants, which confuses the geometric abstraction "space" with the physical continuum.[23]

We have suggested that the creative role of the receptacle follows from the "separation" of matter from form, from the fact that matter (if we may use that term) is a restless otherness that is never taken up and transformed, or domesticated, by form. It is that in virtue of which form comes to be realized. Plato expresses this engendering role through the image of "mother" (50D). We should recall the odd sexual pathology of the classical Greeks, for it is the female who erotically yearns for the male (*Symposium*, 203B). To borrow an insight from Aristotle, which must have its roots in this section of the *Timaeus*, "what desires the form is matter, as the female desires the male and the ugly the beautiful."[24] The receptacle is the principle of creativity, but

[23] Pre-Socratic philosophy faced, in a far more critical manner than did Newton's successors, the relation between geometric space and the space of physical body. Zeno paradoxically showed that geometric of "punctal" space cannot be identified with physical body, for while more or less matter determines the size of body, more or less has nothing to do with geometrical size if space is thought of as a manifold of geometric points. Thus space for Plato is never a mere punctal manifold but is an abstraction from bodily occupancy. Analogous considerations hold for time. Images are not in space-time: space-time is rather adjectival on images and their forms of interconnectedness.

[24] *De Physica*, 191a 20–25.

creativity is not mere random entertainment of possibility. It is also necessary to account for the massive conformity of an image to its relevant past. To put it otherwise, nature is not, as Lucretius would have it, the mere accidental collocation of random happenings, but its pervasive feature is that of enduring strands of order, of lasting things. Nature is not prodigal in her effects, but is a "nurse" (49A) through whom things grow and come to be, the pre-Socratic *physis* within which things grow to be what they are. In another great metaphor, that of the perfume base (50E), Plato expresses the sheer endurance of character; for a good base is just the sort of thing which holds the scent, which makes it an enduring quality.[25] The receptacle may be perpetually selective of novel form, but it is also that which conserves form ingredient within it. If we combine with this image that of the erotic mother, then we have something which resembles the concept of *conatus* which characterizes the finite modes in Spinoza.[26] An image, as an instance of the informed receptacle, is an enduring character (a *such* that may remain same in the other and other of time) which has, in virtue of being just the sort of thing which it is, appetition for novel form. To put it otherwise, in virtue of its enduring qualitative suchness it performs a certain sort of winnowing motion and exercises a certain sort of selectivity, so that those forms which are retained, as well as these which are incremental, are determined by the given pattern of act.[27] With respect to the receptacle qua receptacle, all forms are equally possible, but as informed by determinate character a limitation is placed on possibility in virtue of which only certain forms (potentials) are

[25] Here again Plato makes the point that the receptacle is not taken up into the image, for the base does not contribute its own quality of scent to the perfume.

[26] Spinoza, *Ethics, II*, XLX, scholium.

[27] It is evident that the model employed is that of choice. The notion of a radical choice (chance) factor in the universe presents us with a cosmology remarkably similar to those of Peirce, James, and Whitehead. It is the existence of these process cosmologies in contemporary thought that renders unnecessary a labored interpretation of Plato, for we are well aware of the nature of creative, evolutional, probabilistic accounts having essentially a psychic model which have arisen in the effort to achieve a view of the world compatible with biological and physical evidence.

probable.[28] But it is to be understood that the future of a strand of order (a linearly ordered set of images through time) is never certain, is never uniquely determined; and the reason for this is apparent: the receptacle, as we have insisted, transcends form. Thus, as Plato insists, the method of physics is the method of probabilities and the ideal of logical exactitude, of nature as a pure deductive system, is irrelevant (29D). For Plato the world is in a process of creation (28C), or passage from non-Being into Being (*Symposium* 205C); and the receptacle is the poet, the creative factor in nature. It is indeed the nurse, the loving if somewhat unpredictable mother of all creation. Through it images fit into and express a common world; but this is not the world of common matter or mere space, but one which expresses the creative eros. It is through form that specific types of connexity are expressed and enduring types of structure realized. The receptacle is the condition of this realization, but not *what* is realized. The receptacle is also the principle of natural necessity (48A). But this is hardly the necessity of Democritus and later mechanism, for whom all change and process and creation is a ghostly spume somehow cast up by the blind surge of the absolutely dominating form of the past on the present, which is then in turn the conformal necessity on the future. Nor is it the "hypothetical" necessity of Aristotle, the means to an end effectively imposed by active form, as the craftsman might impose his notion of a bed on wood.[29] Necessity, we are told, somehow partakes of the intelligible (51B) and is subject to persuasion by mind (48A). Thus the receptacle has its own eros and its own *telos*; and if mind is to effect her, it must be a kind of seduction, not a mere imposition. Necessity can thus respond to the lure of form, can be persuaded

[28] An interesting example of this is provided by a study of possible combinations of amino acids in a protein. Synge has calculated that for a hypothetical protein with a molecular weight of 34,000 which contains only 12 different amino acids with 288 residues there are 10^{300} isomers possible. If one molecule of each of these existed on earth, the total mass would be 10^{280} grams. The total mass of the earth is only 10^{27} grams, so the existence of all possible isomers need not be considered. (Abraham White, Philip Handler, Emil Smith, *Principles of Biochemistry* [New York, 1964], 144–45).

[29] *De Physica*, 199b 34–200b 9.

to assume alternative forms of order and new and novel creative routes.[30] How this is so is not difficult to see. Insofar as the receptacle "partakes" of the intelligible (51B), it may be thought of qua image, the form of which serves as a parametric limitation on pure possibility.

Let us now consider the minimal case, that of an ordinary "material" object such as a stone which remains pretty much itself from one century to another. What is possible is just what has been, so what it can be is what it was; and the result is the reiteration of self-identical character from moment to moment through vast stretches of history. But it is obvious that this "necessity" is hardly absolute, for in virtue of the receptacle further possibility may be conceived to be latent. It could respond to the lure of other possibilities; but since it could not take up flute playing and the like, these would be in general defined by the most stable or field conditions operative in the general environmental region.

There is one basic structure, earth, whose triangular moduli (which make up its cubical form) will not undergo transformation into the other elements, air, fire, and water (56C).[31] It may be that this is not an *ad hoc* restriction; but it does indicate constant endurances which do not fit with the "evolutionary" role we have assigned the receptacle, which is always other (that is, not *in se* with respect to) than any form. Even in air, fire, and water, the basic triangular moduli are invariant, though transformation of one element into another is possible since these moduli are shared

[30] If there is a master image in Plato, playing the role that *techne* plays for Aristotle, it is perhaps that of the Athenean Assembly and the rhetorician; and if this is the case, then perhaps the *Phaedrus* is an important clue to the later metaphysic. Indeed even Aristotle does not place such reliance on *techne* as do his later followers, for he finds in nature, as against art, a suasive as against a compulsive role, his God being most properly understood as final, not efficient, cause. Perhaps the chief difference is that suasion can only lead to self-development, to the unfolding of what is potential with respect to the species, as against the creative novelty which love of God would engender in Plato.

[31] The importance of these regular polygons is itself worthy of separate and detailed study, for quantum mechanics, organic chemical structure, and Buckminster Fuller's architecture everywhere exhibit them. Surely Plato did not attach too much importance to the role of regular polygons in the economy of nature.

by each. Such transformations define a process, but it would appear to be cyclical, rather than linear. We may be sure that Plato intended us to assume that there are invariant structures in change, but one might assume that this could be achieved by making the construction of earth uniform with that of the other elements. This would be sufficient to establish the concept of natural law, as we shall see in the following section when we shall attempt to give these transformations a group theoretic interpretation. Apparently Plato felt that some base conditions for all becoming, symbolized in the myth by the role of earth, should exhibit only rotational symmetry, not the assymetry we associate with linear (creative) or cyclical (water into air and air into fire) processes. If this is so, perhaps earth symbolizes the base conditions we associate with space, while the other types symbolize those having to do with moral and physical discourse respectively. If this is the case, then the restriction on earth's transformations may not be purely arbitrary and would provide the image of a constant geometrical form presupposed in all inductive arguments wherein time may be assumed to be irrelevant, a principle expressed by Newton in his philosophical concept of absolute space.[32] This is to be contrasted with Whitehead's epochal interpretation of geometrical conditions which, as evolutionary, may present epistemological problems.[33] Plato's procedure would assure that elementary physics would have a deductive form.

[32] The analogy with Newton should not be carried too far, for in Plato geometric conditions are abstracted from images, while in Newton they constitute the a priori form of nature.

[33] A further difficulty raised by the receptacle as continuously "that" in all transformation should be apparent. Does "that," like *hyle* in Aristotle, stand substratally outside of time and change, and is the real push and strain of things a mere interplay of images, the offspring of realities to which it stands as mere appearance? This is certainly one reading of *Timaeus*, based on the supposition that regardless of the "third man argument," Plato went blithely on to talk of shadowy "likenesses." Or is the notion of the continuously "that" a concept about the categorical (or univocal) character of all statements about the receptacle, which is everywhere one and the same? If this be the case, then we have real change in nature, the Becoming of continuity, and the possibility of rational cosmology. On the other hypothesis this is impossible. This consideration has governed our interpretation.

Assuming then that the receptacle is never wholly domesticated by form (beyond those moduli, whose symmetrical transformations it is necessary to assume if nature is to be intelligible), then it is capable of receiving a radical otherness, one not uniquely determined by the dominant form of inherited order. Necessity is not absolute, but is subject to rational suasion. One can imagine a gradation of images, on an analogy with Leibniz's monads, such that each level in the hierarchy would exhibit greater and greater freedom. We may understand this freedom in two senses, for a higher form implies more complex sub-parametric forms and thus greater variation (and since mental life seems to be a super-parameter in the appropriate sense, this freedom can be associated with growth in mentality), and a greater capacity for "spontaneous" response to lures not uniquely specified by that given structure. This later form of freedom in man has found expression in certain non-Augustinean forms of the doctrine of Grace, wherein the formal increment received is incommensurate with the form as initially given. Such considerations may be relevant, but it is of course more usual, as in phase theory, to associate this freedom with less complex structures, which may be said to present a higher degree of randomness. We would want to associate freedom both with variation within a parametric range and with spontaneity; but how this is to be done must remain outside the scope of this inquiry and in the hands of wiser men.

It is perfectly evident that our analysis has been concerned with something which is very much like the soul, or at least as in Aristotle, with that part which even in concept cannot be disjoined from the body. Certainly this is what we have been led to expect, for the receptacle is nothing less than the immanent necessities of organic life together with those components of that life which express how it is that transcendence enters into and modifies these immanent forms. That "transcendent" component, which we have discerned as selective of form as lures, will concern us shortly. We have been discussing the conditions of order, which Socrates, criticizing Anaxagoras, thought irrelevant (*Phaedo*, 97C ff); and it now behooves us to consider just what "geometric conditions,"

the lowest grade of form, are operative in both the internal act of an image and with respect to its complex external and internal relations to its environment. To state these is to see the term of this inquiry, for these are the formal conditions whereby images participate in one another.

The Mathematics of Psyche

In the previous chapter we attempted a purely formal account of participation through an analysis of the way in which the transcendentals conjugate. We have just seen how the receptacle provides a "material" or extensional condition for sameness and otherness and that its act, expressed through the self-limitation of novel formal increments, brings the "other" (qua possible) into the pattern of immanent necessity, shaping that necessity through suasion. If soul is indeed the instrument of activity and suasion, then it would be a reasonable consequence to assume that what we have called an image is indeed besouled.[34] Soul is the principle whereby mingling is effected. But participation is a relationship between forms, either (1) as immanently given in nature or (2) as in the case of choice, entertained as transcendent possibilities with respect to a given formal nexus.[35] The receptacle is that "constituent" of an image in virtue of which a relevance can be effected. It is the activity of relatedness which makes participation a real, rather than a nominal, relation. There are, in general, two ways in which this relevance is realized, corresponding to the two modes of participation mentioned above: (1) insofar as that relevance holds between a given image and its environment (as in the sequence, sensation, appetition, and finally nutrition), then the receptacle as *chora* expresses the possible types of extensive *facts* of internal and external relatedness in that environment; and (2) as "winnowing basket" (principle of agency, choice, and randomness), it is that which is selective of transcendent form, mingling this with the residual necessities. Stated in its starkest simplicity, these are modes of making same other and other same. But if this relevance is to be possible, there must be formal conditions in terms of which this relevance can be expressed. To put it otherwise, if an image can participate in the others, of whatever ontological type, then these others cannot be wholly and purely other, but must stand somehow internally (same) related to it. Since these formal conditions must range over all images and all possibilities, expressing how they are same and other with respect to one another, they must be abstract. The meaning of abstract is, in this instance, expressed in the concept of the variable in mathematics; so that, in short, these conditions will be mathematical. By mathematics we mean the general science of order, irrespective of *what* is ordered.

This brings us, if in an artless way, to the greatest achievement of Greek mathematical theory, the discovery of the nature of ratios and proportions. It was this Pythagorean discovery which provided Plato with the model for his formal conditions of participation. Quite obviously a proportion is a model for a same-other relation. If a:b::c:d; then though a and b are other than c and d, the relation between a and b is the same as that between c and d. The formal description of any situation which is an instance of participation will be in terms of ratios and proportions (analogies). If then psyche is both agent of participation and the informed necessity responsive to that act, whereby the other becomes

[34] In describing psyche, we dissect a unitary act into two phases, that of selecting a possibility as an element of purpose and that of persuading the given necessities into a conformal pattern of act. In fact, however, to choose is to act; even if one is described in terms of reason and the other will, a voluntary act involves both components as necessary phases of its unity. Plato tells us (35A–B) the psyche is the unity achieved in binding together "reason" and "necessity." Indivisible Being, Same, and Other and the "unsociable" Divisible Being, Same, and Other are bound together. The terms of the initial triad designate, in the paradigm case, the idea realm, and those of the second triad the extensive conditions of the receptacle. Thus we speak of a selective act and a suasive act, but properly these are aspects of a single act, that of the image qua image.

[35] For simplicity, we will consider at this time only those modes of participation whereby an image participates in other images and in ideas. The other modes, whereby ideas participate in one another and in images, will be discussed later in this section through the role which God plays in effecting a valuation of images.

same, its structural relations, of whatever type, will be describable in terms of various types of rational order. In particular, this description will entail arithmetical, geometric, and harmonic proportions. These constitute the "geometry," the possible transformational forms, which an image can in its activity express. They are the bonds which, if taken in the large (36B–37A), gather all Becoming into the unity of a common set of relations,[36] that make possible a common world. If taken in the small, from the standpoint of the image itself, they determine how it can stand to the whole.

If the language of proportions seems archaic and lacking in contemporary sophistication, we may counter with the observation that Plato's insights would be best conveyed in the language of group theory, which is the language of contemporary physics. This theory is concerned with transformations (other) of certain types of entities wherein some invariant (same) character is preserved. The most immediate example would have to do with the rotational symmetry of the regular solids, which represent earth, air, fire, and water (54C–57D). A more sophisticated instance, involving change, has to do with the transformation of water into fire by means of air as a mean proportional (31B–32C). It might be noted that the elementary triangles are invariant in any such transformation. But the symbolic import of Plato's position is

[36] The point of Plato's astronomical speculations is to show that the most general conditions within which a universe is possible are defined by proportionalities, which are the formal conditions of the most abstract type expressed in all instances of participation. Put otherwise, these are geometrical conditions in virtue of which every extensive physical relation is possible. Given participation, it is possible to define the most general conditions of order inhering in the cosmos. Never has rationalism made a bolder claim; but since this claim is expressed in a myth, we may assume that the actual mathematical details belong to the "symbolism" and not to the substance. That some such form must inhere is the force of the claim, but the actual characterization of this claim is an open matter. Thus the contemporary physicist and mathematician would be able, presumably, to find a more adequate symbolism, which may well lie in the theory of groups. Mr. Stephen Utz has made an interesting observation: the great cosmic circle of the same may refer to harmonic reiteration while that of the other refers to the forms of novelty which are relevant to endurances (same).

even more important. If we assume that any physical process can be represented as a group, and with certain restrictions as to the assymetry of time this is possible, then if its transformations together with those of other analogous processes form a group, the invariants of this group of transformations define what we mean by natural law. From such a group of transformations we can deduce the conservation laws and the symmetrical conditions of all natural process, expressed by Plato in the image of the whole as a perfect sphere (34B). Thus group theory relates macroscopic and microscopic principles, just as Plato by proportions relates the construction of the psyche to that of the heavens and the universe as a whole. Image routes may be treated as groups, and the group of all their transformations may be expressed as the cosmic bond, the great circles of the same and other (35B–37C). Plato has represented the general mathematical conditions within which any change is to be understood in itself and in its relations to the remainder of nature.

This could be the most suggestive chapter in the history of the relation of philosophy to science. Our contemporary tendency is to impose upon nature an *ad hoc* mathematical convention and to justify this imposition pragmatically. "It works" as a final justification for any theory is itself the failure of justification. The appeal to positivism, as a description of the way things are, and to conventionalism may satisfy those who have not begun to reflect and have yet to do philosophy; but Plato's suggestions should be a model for all who would take her seriously. Before there were scientific descriptions and conventions, and this is a matter of chronology, Plato seems to have exhibited the base of all description and mathematical "conventions" in his theory of participation, in his analysis of Becoming and the ingression of form. Never was Whitehead closer to Plato than when in *The Concept of Nature* and related studies he was concerned to arrive at the form of mathematical description from an analysis of the passage of nature.[37] One is constantly reminded of the ancient Greek proverb,

[37] On the status of physical geometry in Plato, see Appendix B.

perhaps invented by Scott Buchanan, that "whatever road you take, you will meet Plato coming back."

If our account of participation is likely, then it can be readily seen that Plato's account of the constitution of psyche is virtually a deductive consequence:

> And he [the Demiurgos] made her [psyche] out of the following elements and on this wise: From the Being which is indivisible and unchanging [form as that 'which always is and never is Becoming'] and from the kind of Being which is distributed among bodies [receptacle], he compounded a third and intermediate kind of being [psyche]. He did likewise with the same and the different, blending together the indivisible kind of each [the indivisible same is the form in which the image participates and the indivisible other is the relevant range of pure possibility] with that which is portioned out in bodies [internal and external facts of relatedness qua receptacle]. Then taking the three new elements [the blends of each type of Being, Same, and Other], he mingled them into one form [the 'besouled' image], compressing by force the reluctant and unsociable nature of the different into the same.[38]
>
> (35A)

This is an account of the construction of the world soul. But in virtue of the principle of isomorphism between the living whole and the living parts (30C–D), this account applies with equal force to the image itself; and the parenthetical commentary is meant to express this fact. The division of the world soul into parts

[38] One must call attention to a major difficulty in our interpretation. We are told in the last sentence of this quotation that the Demiurgos uses force to effect a mingling of the derived types of same and other. We can understand this as persuasion, not as necessity. There will indeed be a future and the same will necessarily be other; and for "living creatures" of the lowest grade (earth, fire, etc.) suasion will doubtless have the sense of force, since the type of possibility these structures will in general define will be that of self-reiteration. If force have any other meaning, then perhaps this account is so far inadequate. Since we know from *Sophist* that falsity or error is through the other; and error, if acted upon, gives a novel shape to the future, perhaps this unsociable blending is relevant to the creative advance. Perhaps we should not attribute even a "royal lie" to God and must content ourselves with the realization that too often the world responds unsociably to his redeeming novelty.

(35D) will preserve this form, known to medieval writers as the macrocosm-microcosm relation.

But since the world soul is constructed in accordance with geometrical, arithmetical, and harmonic proportions (35B–36E),[39] or modes of being same and other, then these proportions will by "division" express the mutual participation of images in one another and in ideas. How the form of the whole can be replicated in each part, and be compatible with the relative uniqueness of that part, requires recourse to God. This role Plato assigns to the Demiurgos.

God and the World

In the parenthetical remarks on Plato's account of the construction of the world soul, we associated with the notion of the indivisibly other the concept of pure possibility. That psyche can apprehend Being in the mode of pure possibility seems to be the import of the myth of recollection, for what can be is not merely what is given in and through the necessities of nature but, at least for some types of images, amounts to what is given in virtually a transcendent act of vision. The account of the psyche in *Timaeus* 35A is meant to assure us that this radical otherness, this disjunction of possibility from the nexus of actualities, is nevertheless capable of becoming same with that nexus. The expression of a same-other relation of this type is effected by a proportion. Let us examine this further.

When we discuss possibility in its relevance to the given, it is evident that some sort of valuation is involved. Some possibilities are excluded and some included, some are rejected into otherness or embraced into sameness, and these latter either disrupt or en-

[39] For accounts of this construction, especially insofar as it constitutes the common form of all Becoming, see Catesby Taliaferro's "Foreword," *Plato, The Timaeus and Critias*, trans. Thomas Taylor (New York, 1944), 9–34; and Brumbaugh, *Plato's Mathematical Imagination*, 209–29. The commentaries of Cornford and Taylor contain a great deal of useful material. One of the most suggestive modern treatments of this problem is to be found in Josiah Royce's *The World and the Individual* (London, 1901) II, Chap. 2.

hance the aim of the given image. The perspective in terms of which this grading of possibility is effected is either that of the given image as it "sees" its own prospects, or it is that of a wider purview which entertains these aims and prospects along with those of other images and judges what is best. What is best would constitute the communal ideal for the future, wherein individual purpose would cohere and would be productive of a common good. To entertain the possibility of a system wherein each image enhances both its own existence and that of others, wherein they together participate in the "joy of the kingdom of heaven," is to see the world *sub specie aeternitas*. The notion of an ideal which measures individual attainment from the standpoint of a larger whole involves recourse to deity. Such an ideal must arise from the actual conditions of existence, to which it must be same, but it must also propose for that existence an ideal other which is its measure and its goal. Obviously it can be frustrated by individual obtuseness. Providence is not the "invisible hand" of laissez faire economic theory which identifies the actual with the ideal, nor is it the "cunning of reason" which maliciously works itself out towards its own greater glory in the despair and suffering of men: it is the concern of a God whose purposes depend on the freedom and creativeness of creatures and who can thus suffer perpetual frustration and failure. Theology aside, we have in the above been invoking the concept of the regulative ideas.

A regulative idea is the measure of the actual synthesis of elements, a synthesis which is more or less what it should be. We know, as a consequence of the studies of Buchanan and Hammond,[40] that regulative ideas, as measures, involve an isomorphism between different elements, a proportional sameness and otherness. Plato apparently developed this concept through reflection on the musical discoveries of the Pythagoreans.

Let us now attempt to show in somewhat greater detail how regulative ideas function in the self-productive activity of an image. It is assumed in certain schools of contemporary value

[40] *Supra*, 37.

theory that no categorical demands can be adduced from the description of a given image or set of images.[41] Granted this, it follows that no image can constitute for itself an obligation with respect to which it is the measure. This self-measuring would be sophistic. Of course it is possible to define relative satisfactions from the standpoint of presumed individual purpose, and this entails that each image can select from possibility as such just those possibles which are relevant to it. Let us call possibilities so entertained a relative ideal. But if we are to avoid sophistry, there must be a wider ideal which can in principle be irrelevant to a given relative ideal. We may assume that though the image regulates itself by its own ideal, it is nevertheless the case that its relative ideal is graded with respect to an ideal which it *should* entertain and strive in its eros to bring into the light of day. Such an ideal would be relevant to the actual status of the image and to its purposes as these embrace a wider community of real existences. The first condition is necessary within the context of a philosophy of Becoming, for images are creative and there can be no standard and categorical ideal operative in all possible contexts. A Kantean ideal, universally and necessarily binding on all possible worlds, presupposes something like a substance philosophy, one holding that the essential form of entity is invariant. If we with Plato insist that the image is creative, really capable of self-constituting of novel form which in turn is a conformal necessity on the future, then value imperatives must "adjust" to these new and novel progressions of form. The ideal of one era can be trivial with respect to that of another. This is especially evident in the case of art.

There are evident advantages in the "separationist" ontology of the middle dialogues. For one thing, it preserves Socratic ignorance, the distinction between wisdom and knowledge and right opinion, and the clear possibility of moral ideals; but the price was too great for it led to incoherence. It is evident that the concept of the "regulative ideal" preserves these advantages and is

[41] R. H. Hare's *The Language of Morals* (Oxford, 1961) is perhaps the outstanding representative of this position.

metaphysically more sophisticated.[42] That it entails a theology is perhaps a disadvantage, though Plato would perhaps find it less troubling than certain other inconsistencies and howlers with which we may well have saddled him.

In the previous chapter we showed that Being can indeed participate in Becoming. It follows as a consequence that new types of order can emerge from the self-selective route of images.[43] Since such a route gives rise to the concept of an "enduring object," we can for simplicity speak of that object (image-route) aiming towards the realization of some relative ideal which constitutes its intended form, either for its self or its world. If we are to avoid sophistry in such valuation, if there is to be a regulative form within which is possible a wider valuation both with respect to the actual image which has become just what it is as well as the relative ideals of the many others, of all types and grades, which make up the relevant environment, then the formulation of that ideal requires aesthetic and moral sensitivity of maximal grade. That by which each item of flux measures itself must itself suffer judgment in terms of that which is sensitive to the whole, which can out of chaos provide a model for a common world (*Timaeus*, 28B). What is required is a "relative" omniscience of aesthetic sensitivity in virtue of which a categorical ideal can be constituted out of primordial possibility and the nexus of given actuality. This is evidently the primordial role of the Demiurgos (28A ff). In the popular religious imagination the expression "the will of God,"

42 Allen in "Participation and Predication," 52–56, argues that if form is treated as a commutative universal, dialectic is wrecked, "degrees of reality" become unintelligible, and the qualification of the particular by incompatible characters becomes unintelligible, all of which is saved if form is treated as a separated exemplar. Without going into details implicit in Professor Allen's claims, some of which on any account we would surely reject, we have shown (Chapter 1, *supra*) that exemplarism does not necessarily entail separationism, and the desirable features of that doctrine can be read out of the concept of a regulative ideal.

43 An image route is a sequence of images (for images are "perpetually perishing") whose loci with respect to the receptacle are linear. A series is linear if it is assymetrical, transitive, and connected. For further elaboration, see Russell, *Principles of Mathematical Philosophy*, 105–106 and Whitehead, *Process and Reality*, 50–54.

if divested of its traditional omnipotent absolutism, perfectly conveys the categorical demand. We require an agency, the Demiurgos, who can, on looking to the relative chaos of unique and individual purpose, formulate for each image and for the whole an appropriate ideal. Such an ideal is the good which is a categorical demand, an absolute imperative, on each decisive act, on the way each image self-selects its private route. God invokes an ideal of absolute harmony applicable to each image; but He does not compel, except as the beloved elicits the incipient eros in the lover. The response to this love is the binding ideal of harmony. But ideals and love are betrayed, and relative chaos continues to reign. In response to the wayward and sequential decisions of an image route, new ideals have to be continually invoked. God, the psalmist says, "neither slumbers nor sleeps."

The role of God is not invoked to satisfy pious demands, but rather seems to be necessitated by the Principle of Relativity.[44] The particular form given to the divine nature by this theory is through a recognition of the regulative ideas in a philosophy of creativity. The Platonic concept of God may not serve all theological or even rational demands, but on the whole is quite as good as any other. Our interest is that of effecting a likely account of the proportional structure within which the regulatives can serve as real measures of Becoming. If it does involve an overburdening of deity, who must respond to the whole ensemble of image routes and whose act is that of effecting ideal limitations on pure possibility, then we can say that his job is rather less exhausting than that assigned him in all philosophies who do invoke him, with the exception of those of Epicurus and Aristotle.

It is through the proportional structure of the universe that all

44 If we grant ideas, Becoming, the Ontological Principle, and the Principle of Relativity, it is a relatively simple matter to construct a "new" proof for the existence of God. The argument of this section and that of the previous chapter will easily provide such a "proof," though it would be tedious and irrelevant to spell it out in detail.

It is in accordance with the ontological principle that we can identify possibility with the divine *Logos*, for God is the actual entity in whom possibility is grounded. This provides a basis for the expression, "the mind of God."

forms of participation, as defined by the Principle of Relativity, are possible. But it might be useful if we could descend to an instance and show how these structures are operative. The relevant point of view is that of the living organism.

Just what does the psyche do? To begin with, it constitutes a set of moduli, themselves wholes, into the relative unity (of intermediate grade) of animal life. An organism is neither a sheer unity nor a mere multiplicity. What is thus constituted is a pattern of relative stability involving real parts of the informed receptacle, which in turn is capable of various types of proportional deformation with respect to its own purposes and the necessities of its own environment. Such a pattern is a recurrent harmonic proportionality (sameness) in the other and other of time. The roots of the soul lie, we are told by Plato, in the divisible same, divisible Being, and divisible other (35A), represented at the lowest grade by the primary organic unities, the regular polygons, which divide the receptacle. Types of deformation, involving nutrition, growth, excretion, movement, sensation, death, and the like, can be defined by various types of proportions involving this basic harmonic pattern and the pattern of various types of other images. The proportions of the soul are various ways of expressing its own self-connectedness, as well as its relations to others. For instance, growth is defined as the otherness of food becoming same with the structure of the body in a geometric proportionality in virtue of the self-activity of this structure.[45] Sensation seems to involve harmonic proportionalities between the organic body and the sensed thing. As Aristotle puts it, the sense object must stand in ratio to the sense organ; and if this is exceeded, permanent deformation ensues (67E ff).[46] Soul is that which integrates otherness into the relative stability of bodily pattern, psychic or physical, and in higher organisms it operates on a principle of desire (eros). Through desire, as defined in the *Symposium*, the body is related to its necessities or to higher purposes, and this presumes

[45] Aristotle, *De Generatione et Corruptione*, 320a 10–322a 15; *De Anima*, 415a 15–416b 30.

[46] Aristotle, *De Anima*, 425b 26–31; 426a 25–426b 7.

some proportion between the psyche and each of these realms. In each case, however, otherness becomes same and relevant to life purposes (*Timaeus*, 64A ff; 86B ff; 89D ff).

The immanent or recurrent patterns of elements (the lowest grade of which are the regular polygons) are harmoniously functioning, besouled necessities; defining, in virtue of their harmonic form, the possible modes of participation. How an image can participate in others is a function of its nature. In this way, through the intermediate synthesis of divisible Being, Same, and Other, which is the formal characterization of the unity of action and reaction, animal life is realized. Since the modes of participation involve desire, a minimal evaluation is possible with respect to the sort of synthesis which is achieved. For example, the otherness of the sense object can provoke animal purpose leading to a synthesis of the "object," say eating, and a resulting satisfaction. Animal life is the same becoming other and the other becoming same, as defined by the Being of the given organism.

But soul is more than the maintenance of the relative stability of animal life in a world of things. We are reminded of its proportionality with the undivided others, the pure possibles, and through this it may have a genuinely creative role. This aspect of its life involves a perspective on the intelligible order per se (35A, 90A ff). In this sense it enjoys a community of being with that "which always is and never is Becoming," the undivided Being, Same, and Other. Through the types of novel constitutive and regulative forms which are integral, in virtue of its construction, to its own life, new types of lived order and concrete unity can be achieved. To say more is to tell again the story of Socrates.

Creation

Though we have assumed throughout that Plato's is a philosophy of creation and have construed "participation" to elucidate that thesis, "creation" may be approached more directly through a dialectic of various cosmological theories, theories which will in turn further clarify the meaning we have found for "participa-

tion." Creation is that through which the several modes of participation are realized. Participation, in the primary sense, expresses the derivation of images from ideas and other images; but the how of participation, expressed in the proportioned acts of psyche, is not itself wholly derivative, for Becoming is creative (*Timaeus*, 28C, *Symposium*, 205C).

This enigmatic concept deserves scrutiny. Our age finds singular satisfaction in "creation," whether expressed substantivally or adjectivally, flaunting it everywhere to proclaim its freedom from the past. Whenever we do what we are doing for its own sake, however trivial it may be, we seem to enjoy a creative immediacy and are as gods, thumbing our nose at all time and eternity. To be creative, we say, is to derive from nothing, is to dismiss reason and constraining necessity and to be an act from and through ourselves. In a word, creation is the way freedom expresses itself.

The sense our time gives to "creative" and its cognates cannot, I think, be wholly dismissed; and if what expresses itself gives rise to the cheap and vulgar, and not at all to a "birth in beauty," it remains highly likely that if the publicist, advertiser, and even "Pop" artist can so engage us with this term, it may well express some deeper sense of things, and that sense we must now search out.

Creation has to do with the origination of something, such that both the existence and character of that creature are through a ground. In the popular myths whereby God is said to have created the world, the tendency is to think of the whole of things as both coming to be and to be definite, ordered, through the act of deity; but in a process philosophy, wherein "creation" is the primary category, the only propositions concerning the whole are formal, having to do with the mathematical conditions of mutual immanence and the like; and thus creation, if the issue is an actuality, has to do with the contemporaneous relation between that issue and its ground. Creation is Becoming. It must be acknowledged that this is not foreign to the sense of our religious tradition; and Descartes' recognition that duration is creation and that "my existence depends entirely on Him in every moment of my life" reflects the experience of all who encounter the Holy.[47] Whether it has ontological import is another matter.

Let us begin our dialectic by denying that "creation" is meaningful. If we may assume that "creation" minimally means "derivation," then our account should begin with a cosmological model wherein no thing could be said to have originated another or to have been originated by another, and this is readily available in the philosophy of Hume. "Tis easy," he says, "for us to conceive any object to be non-existent this moment, and existent the next, without conjoining it to the idea of a cause or productive principle."[48] What we conceive as an originative connection between events is merely a psychological phenomenon, a "habit" of viewing distinct phenomena as if they were really related. To deny any sense to origination is to deny "sufficient reason," which is the usual way of expressing the fuller and more important concept of "participation." Generations of phenomenalistic positivists have rested happy with this odd doctrine and nothing we could say would disabuse them; but if reason is to be content with more than arbitrary connection,[49] and is not itself a human vanity, then perhaps we can begin to understand creation through a model which makes this connection real.

The minimal position which asserts a real connection between events can be found in classical atomic mechanism. This connection, first realized by the Stoics in their "concretization" of implication as "necessary causal consequence of," would entail that what now is, the present, is a necessary consequence of the past. The description of *this* occasion could be deduced from descriptions of previous occasions; indeed, it is what it is in virtue of the conformal necessities imposed upon it by the past. (Such statements are possible in virtue of the identification of formal and material modes of speech.) Such novelty as may appear in the

[47] Descartes, *Meditation III*.

[48] David Hume, *Treatise of Human Nature*, Bk. 1, Pt. 3, sec. 3. The idea of a dialectic of creation was suggested to me by a lecture Professor W. S. Weedon gave in 1948, and an earlier, though somewhat different version, may be found in my article, "Speculative Language."

[49] David Hume, *Enquiry Concerning Human Understanding*, Pt. IV, sec. 1.

present is the consequence of the lawful derivation of that arrangement from arrangements in the past. Obviously something which is not an arrangement, something which is absolutely prime, is presupposed, and to that is given the name of "atom." Just because that given arrangement is other than what it was, its appearance is that of a novelty; but given the initial atomic forms and the laws that relate them (for example, Newton's basic laws), we could deduce that present configuration, quite in the manner of LaPlace's omniscient physicist. In a word, reality is Parmenidean; and what we take to be change and the integrally given is itself the mere appearance of a law, everywhere one and the same. One might object and say that perhaps the present is a shadowy image of the past and that the past is real; but then every past was once a present and once an image, and so the whole series is then an image of the laws. One might protest that the laws can be reduced to the motion and shape of the atomic entities, which we would then assume to be limited in kind and eternal. Oddly enough, this Epicurean position looks very much like an inversion of the common way of reading Plato and his idea theory, wherein what we sense is taken to be the mere appearance of the really real; and it is to be rejected for the same sort of reason that Plato rejected the analogous position supposedly his own. To say, for instance, that Socrates is the mere appearance of an idea is to say that Socrates in the end can make no difference to the whole of nature, whose form and reality is transcendent of given fact; but if anything can make a difference, it is just such individuals, who alone can act and are the stuff of history. In this sense, classical atomic materialism must treat the present, the *now* of given time, as like an individual, and past and future are in part a function of its nature. But the mere *now* has no unity as such, except that it may be counted as one, unless that which is now can act as one, and this act is impossible in that now whose unity is that of collocation, which is the only unity possible to a set of externally related primes. If origination means bringing to be, then what comes about must *be*, and that in the sense of

the Ontological Principle. But whatever the inadequacy of this position it does point to the necessity of a generality of conditions which must be exhibited in all phenomena. What we have called the geometrical conditions, in the account of the mathematics of psyche in *Timaeus*, does satisfy this demand. Creation, if it is to make sense, would then seem to presuppose some unchanging set of conditions, for otherwise it would be unintelligible, reducing to Hume's case. Furthermore, something must be created, and that something must be like psyche, possessing an integral act of Being. These two principles are the parameters of a dialectic of creation, and in them we meet our old friends *same* (conditions) and *other* (integral act).

The dialectical examination of atomic mechanism leads immediately to deism, which makes explicit the hypothesis that nature is the image of form and, what is more, has a sophisticated grasp of what is required of nature that it be the proper subject of discourse, namely, that it be a universe, a cosmos. That this is lacking in the present theory will be evident if we consider the basis upon which it is most generally criticized. That criticism has nothing to do with the uncreative character of the *now* and the illusion of change, but rather with the recognition that mechanism depends on the assumption that nature is ordered, but demands we stop at that observation and ask no further questions. But once we permit reason to come upon the scene, once we permit questions about origination, then we can hardly stop with the outrageous assumption that what is given can be explained by what is not given (the past). Furthermore, to make this form of mechanism go we have had to make many "mentalistic" assumptions which are denied by the theory itself. We want to raise questions about the"atomic kinds" and the status of order within nature, and it is at this level that we again meet the positivistic claims that "this is just the way it is, and it is our business to describe it as it is, nothing more." At least Lucretius was more honest and gave a reason which would forbid further question, for he said it was by chance that the atoms should have a limited number of

shapes, in virtue of which recurrent events are possible, and that chance alone accounted for the swerve from uniform right motion, the normal motion of atoms. We want to assert a nominalism, to avoid a "foreseeing mind" which might have introduced order into the system,[50] and in doing this, appeal to something like the ideas, the atomic shapes. Nominalism is an attempt to avoid the complexities of an hierarchical ontology and a protest on behalf of the uniqueness of the individual, but that uniqueness is that of an act, and an act without structure is without meaning. Nominalism can live only as a protest against some form of realism; and once it becomes self-critical, it is lost.

Before we move, as we must, to deism, we should realize that in chance we have, as Plato, Peirce, and James realized, given room to self-organization, to freedom. It is hardly necessary to labor this point of the errant cause (*Timaeus*, 48B). The Lucretian theory of chance errs only when it denies the implied doctrine of real possibility (the only real possible for this mechanistic system is doing what one has been doing, namely moving uniformly downward in a right line) and the consequential teleology. Furthermore, we see in this system a linkage of facts, which implies the transmission of immanent form, which is again missing in deism. These are certainly features we found in Plato's cosmology and will count against deism as a "final" solution.

It is not customary to think of being creative as involving the coming to be of something that is, for to do something freely seems quite enough; yet we see in a philosophy of creation that a creative act presupposes relation to an origin, and unless each successive image is creative, none is. It is this linear linkage, at which mechanism hints, which is missing from deism. As we have said, deism assumes nature to be the image of a unity of law. This unity has its origin in the thought of a God, who works up matter in accordance with his general plan. The advantage here is that for the first time we can talk of an embracing unity, which is indeed the strength of any form of idealism. This role Plato

[50] Lucretius, *De Rerum Natura*, I, l. 1055 ff.

assigns to the Demiurgos, and certainly this concept was of inestimable heuristic value in the early development of science.[51]

The critique of deism parallels that given of the separationist doctrine of form, especially in the image of the "two worlds" (*Parmenides*, 133A–135B), and it would be tedious to repeat it. The master metaphor is that of *techne*, creation being understood as making. If deism is essential to the enterprise of early science, it promotes a mood of misplaced concreteness and obliterates fact for the sake of mathematical form; but if this making is understood in terms of "regulative participation," the constitution of a suasive ideal, then it is a profound image for any mature cosmology.

If creation when understood as the imposition of form on another presents difficulties of a separationist type, then perhaps it is to be overcome by the immanentization of form and a denial of the separation between creative ground and creature. This neo-Platonism, as represented in Plotinus and Spinoza, is a profound and moving effort to overcome bifurcation; but its consequence is to deny the integral act of the creature and to make nonsense of value theory. Deity, if value is applicable, is a principle of limitation, not plenitude. We do have for the first time the sense that existence, and not merely its formal characterization, is the real issue in creation; but this is an existence that lacks the Scholastic concept of integrity, for-itself-ness. Creation which can only express itself is not creation: creation must issue in a real being.

In Plato this immanentization of the creative role is assigned to the receptacle, but the consequence is an image, itself creative. Origination for deism means origination in another, for neo-Platonism origination from itself, while for Plato it seems to mean origination of another. This is usually what is meant by *ex nihilo*; and to claim for Plato this Judaeo-Christian thesis may be a heresy, though in this ecumenical century perhaps even this may be admissible. Each image is *ex nihilo*. Its act, which constitutes its unity, is that of choice, and a derived choice is hardly

[51] Austin Farrer, *The Glass of Vision* (Westminster, 1958), 100 ff, gives an excellent critique of the role of divine "archetypes" in the history of science.

a choice. Indeed this act qua act is *causa sui*, an act of self-origination within the context of the imposed necessities of the past and the lure of ideal possibilities. It is underived, though the conditions which render it intelligible are the various modes of participation within which functions of psyche are alone possible. That act seems to be a creative projection of Becoming itself, a moving image of eternity. One might compare this with Sartre's well-known thesis that the self is nothing and that through choice it makes itself to be, but this idealistic dialectic of the *pour-soi* and the *en-soi* has no place in Plato. It is only within the physical conditions that self or psyche can be conceived. Plato is anything but a dualist. For Plato existence is above all an act, an exercise of power, and not a state of consciousness. Perhaps, as the Christians tell us, *ex nihilo* creation is a mystery, but it is a mystery that does seem to illuminate, not obscure.

We have in a hasty and sketchy manner tried to show how the *Timaeus* does indeed reflect what is positive in all theories of creation, and with this we bring our inquiry to a close. Plato's result may be silly, or it may be among the most profound and original creations of the human intellect. That this response to the lure of Plato is itself creative, that it has issued in a tenable philosophy, is quite another matter. We have come to it through a difficult route and by unfashionable streets and have seen many difficulties and harsh realities along the way. It can hardly pass as a final view of Plato, for too much has been ignored or brusquely passed over. We are certain to be haunted by our folly and blindness. Perhaps it will encourage others to do better.[52]

52 The fuller sense of this mystery—and so much that we should have liked to have had the skill and wisdom to say—has been said by Edward Ballard in his *Socratic Ignorance*.

Appendix A

SPECULATIVE DEMONSTRATION

I. Syntax and Sensa

The most obvious and highly exploited connection between phenomenalism and semantics lies in the supposed isomorphism between the elementary predicate calculus and the Humean cosmos of atomic sense characters. Indeed, the almost universal approbation enjoyed by the sense data theory in the 1920's and 30's was, like so many movements in recent philosophy, occasioned by the rise of interest in logic. One has only to inspect an ordinary predicate function, "— is Φ," to discover that its meaning depends upon clear and distinct characters which will satisfy it. The logical atomism engendered by this notation threatened to reconstitute the very nature of philosophy. Though now no one lives by this faith, it is not dead. The linguistic philosophy that has replaced it has abandoned the real problem of the relation of language to nature for a linguistic relativism reminiscent of Prodicus. This rejection may have been premature: there are other ways of doing phenomenalism than Hume's, and there are perfectly rigorous structures involved in language other than those suggested by propositional logic, to say nothing of ordinary usage.

Become for a moment quite naive, so untouched by the vast sophistication of historic philosophy that you feel again the uneasiness you first felt when you were told that yours was not a world of things, but only of sets of sensory data ordered by resemblance and contiguity. Logic can make a good case for Hume, but in the end is such a position really adequate? Can we really disregard, say, the notion of act, especially when the perceived entity is a person for whom we feel a moral concern? Aren't dispositional sentences really about potentialities? But whatever the truth

about these matters, we must hesitate to begin a purely descriptive phenomenalism with categories derived from metaphysics; if we introduce metaphysical doctrines, it must be the result of a philosophy of the thing as experienced. We hope to show that within this philosophy there are issues that traditional empiricism has been unable to resolve and that their resolution does entail important consequences for all schools. I refer to the penumbria of problems associated with the notion of extension. Just what is space and what is time, and how do these relate to the supposed originals of knowledge, the atomic sensa? What is the ground for the coexistence of sensa, for their enduring self-identity, for the mutual relevance of the several sets which factor our awareness of nature? We must not look for this in something beyond perception. It must lie within what is perceived and not in Hume's mentalistic habits or in Kant's a priori forms of the understanding.

Hume's failure to find a basis for connexity within the immediately given is particularly instructive. He admitted that space and time were ideas for which there were no corresponding impressions;[1] the relations are the way the mind works in its synthetic production of habits, which it then imposes upon the otherwise inarticulate data of sense. It then remained for Kant to recognize the metaphysical character of extension. He showed that if the primordial perceptual field is constituted by sensa, then the forms of extensive connection are products of mind.

These classical accounts of extension are open to two grave criticisms. In the first place, none succeeds in satisfying the empirical ideal. Each invokes something beyond the given to account for the way it is given or for the form of our anticipation of the given. Each introduces something like mind, explicitly or in the guise of habit, in its account of what is perceived. The august study of nature as what is experienced is replaced by an account of why nature is not as it appears to be, all in the name of empiricism. The only solution to this bifurcation is to put extension back into nature.

The second difficulty with traditional empiricism is that its demand for clear and distinct ideas is a vestige of rationalism. Only something like a pure Platonic possible has this character, and surely it is misplaced concreteness to construe the phenomenal field after the deliverances of reason. James, Dewey, Bergson, Bradley, and Whitehead each leveled his critical talents at refashioning empiricism so as to avoid the incoherence of bifurcation. Each sought to discredit the epistemic primacy of clear and distinct data. Each sought to reassert the natural basis of extension.

[1] *Treatise of Human Nature*, Bk. 1, Pt. 2, sec. 3.

But to the majority of contemporary philosophers these views have only an antiquarian interest. If empiricism is to accomplish its historic mission, the issue must be restated. We hope to show that, if we can show how language presupposes extension and how it relates it to the data of explicit perception, we can refashion empiricism and permit it to continue with its proper development.

I will contest the thesis that there is a multiplicity of clear and distinct ideas (qualities or physical objects) which exhaust nature, that these ideas await appropriation by sentience, and that minds operate properly only when they confront such data. Nothing could be further from the truth. And if nature does not in principle consist of lively, vivid, forceful data, then the usual route from the experienced many to the one name, ostensively given—according to Quine, a sufficient basis for logic[2]—can hardly be a satisfactory observance of Plato's great injunction: Do not go too hastily from the many to the one. If distinct character does not enjoy epistemic primacy, then the case for representing nature in a logical syntax is rather difficult to maintain.

There is no isomorphism, no identity of perceived form, between syntax and perceived nature. There is, however, a very close connection between how we come to see something and what we see, on the one hand, and, on the other, between the demonstrative and descriptive functions of language.[3] Our investigation of these connections will disclose some novel features in the relation between nature and language. We shall seek to demonstrate through certain forms of language the mingling of extension and distinction. Our demonstration will be speculative—that is to say, in the root meaning of these words, it will attempt to bring one to see. For we must never lose sight of that truth, common to such philosophers as Plato, Augustine, and Whitehead, that philosophy itself is a kind of seeing. And we must respect that opinion, so dear to the Platonist, that there is an isomorphism between the kind of seeing that discloses the world of sense and that which apprehends idea or form.

Our methodology is based on Professor William Weedon's presidential address, "A Theory of Pointing," to the 1957 meeting of the Southern Society for Philosophy and Psychology.[4] Dr. Weedon has performed the

[2] Quine, W. V. O., *From a Logical Point of View* (Cambridge, Mass., 1953) Chap. 4.

[3] For the distinction between demonstration and description, see Whitehead, *Concept of Nature*, 6; see also the image of the "two Cratyluses" (*Cratylus*, 432B).

[4] Weedon, "A Theory of Pointing," 20–35.

truly remarkable feat of formalizing the earlier Socratic dialectic through Whitehead's method of extensive abstraction.[5] His theory, called *demonstrative abstraction*, has been employed in the fourth section of this appendix to formulate our results more precisely.

II. The Factors of Demonstration

Until such time as the linguists provide us with an adequate theory of the genesis of language, we shall have to content ourselves with the observation of others, especially young children, and of ourselves. What we shall find is that language is largely demonstrative. By that I mean that it is used to call attention to some factor or entity to elicit concern for some type of order or arrangement in the discerned entities, or to promote the hypothesis or belief that there are such entities or forms. While there are other uses, such as the mere aesthetic enjoyment of language, I believe that the demonstrative is of unique importance and that most of the others can be obtained from it.

The demonstrative function is the most generally neglected area of linguistic philosophy. Now the frequent occurrence of such terms as "denotation," "ostentation," and "naming" in semantical treatises would seem to belie this thesis, but these seem mostly to cover a failure in analysis and not to express its *form* or its result. We shall seek to show that the demonstrative act involves the extensive character of nature and that the distinct character or form elicited by demonstration is the form or character of an extensive region. On the other hand, the recognition that accompanies a successful demonstration entails that this distinct character is a potential for the information of other regions. To recognize an entity is to attribute to it the character of a recurrent. Thus the elicited entity is both immanent within the region wherein it is manifest and

[5] Whitehead, *Concept of Nature*, and Whitehead, 60–61, 74–98; *Enquiry Concerning the Principles of Natural Knowledge, passim*. Our procedure will vindicate Whitehead from the well-known charge that the method of extensive abstraction involves that bifurcation of nature he sought to avoid. A theory of limits, it is said, is not among the factors of fact, and the effort to define natural elements by means of it entails a dualism of nature and mind. We shall show that this is absurd, for we shall use it to point out qualities and forms in keeping with the Whiteheadean closure of nature to mind. We shall make no mathematical commitments, though we shall describe our procedure using the theory of limits involved in the formalization of the method of extensive abstraction.

transcendent to any particular regional enactment. We shall seek to demonstrate these properties speculatively in the next section.

One notices a similar immanent-transcendent strain in Hume's account of the relation of ideas to impressions. Qua impression, a datum is a component in a set of qualities; qua idea, it is a potential for further sense manifestation and for thought. In more recent decades it appears in Whitehead's factor-entity terminology in his *Concept of Nature*; but the best-known modern version lies in Russell's thesis that names should be treated as descriptions and in the knowledge-of and knowledge-about distinction that is its basis. In its transcendent role an entity functions as a component in descriptions and thus makes true and false discourse possible.

We mean by demonstrative language any device or activity that is meant to elicit attention to some factor or form that transcends the activity itself. Language functions demonstratively when it acts or is meant to act to factor from among real or presumed objects, those which are of concern to the user. It aims at calling attention to some characteristic which, prior to discernment, is vaguely associated with some region, and it does so by delimiting the region within which the character is believed to inhere.

The means and techniques for demonstration are virtually unlimited. Besides the great systems of spoken languages, we have artificial languages, facial and bodily expressions, gestures, art forms, laboratory apparatus, and the like. None is so natural as to be universally communicable. However great the variety of means, there is a form common to all of them: (1) first one must have the intention (in the voluntary, not the scholastic or logical sense) to show or demonstrate something; (2) then one must employ a definite procedure for eliciting and directing another's awareness; and (3) finally there must be an entity to be demonstrated. Considerable confusion can be occasioned by our failure to appreciate the roles of these factors. For example, meaning is frequently thought to lie in the intention, when in reality the meaning (intension) lies in the object to be elicited. This confusion has its genesis in the notion that intention can operate apart from the limitations of a demonstrative scheme, that it can freely select an object and then construct an appropriate demonstration. But our intentions are frequently the result of a kind of reification of conventional demonstrative procedures, as philosophers since Bacon have delighted in pointing out; for the form of our world and some, at least, of its contents are determined by the syntax and terms of discourse. When language usurps the role of objects in the name

of empiricism—which seems to have been the situation in philosophy since the time of Locke—something more than a protest is needed. Our recourse is to dialectic, for Socrates, not the empiricists, taught us how to discover wind eggs.[6]

The standardization of demonstrative procedure, as represented by a natural language, introduces order and stability into our world. Elements of such a scheme can serve as definitions of elicited entities. But when the definition becomes a substitute for the things and is endowed with substantial being in its own right, as is the case in the ordinary-language schools, then philosophy and science face misplaced concreteness. The notion that a name functions apart from a demonstrative procedure we call the fallacy of simple naming.[7]

III. Linguistic demonstration

Our theory of demonstration must be adequate to concepts and descriptions. I use the word "concept," not in opposition to nominalism and realism but rather to express our capacity to recognize or entertain an entity which, like orange or electron, can have multiple stations in a contemporaneous environment. Granted certain conditions to be noted in a moment, a concept is a recurrent natural entity. The discovery of a concept represents a stabilization of nature, the many for awareness becoming the one for thought. This may also involve a stabilization of the monstrative process; and this in turn becomes the basis for description. The joint stability of these two factors provides a base for the discovery of higher types of identity.

Conceptual stability occurs when two or more demonstrative procedures successfully elicit the same entity.[8] If the schemes contain a common element *inter se* (which could be an entity stabilized by prior demonstration), such as a certain vocal noise, then this noise can serve as a standardized demonstration in its own right. This "name" calls attention to the inherence in a region of a factor associated with the noise. The demonstrative element *a* (the noise) is said to demonstrate the associated entity *x*, but notice that *a* tacitly describes *x* as "*x* having the potential for multiple stations." Demonstration and description mutually involve each other.

The insight that naming and describing are bound up with each other is due to Plato. Its best expression is in the image of the weaver, *Cratylus* 387A. Plato compares the demonstrative function of a word to a shuttle which points to form through a process of discrimination and separation, just as the shuttle separates the warp. But in the very act of separation a form governs the use of the shuttle, and this act contributes to the development of this form as it weaves out the immanent pattern of the woof. This act of drawing together or developing the form is in language called describing. Description mingles form, just as demonstration separates. In the end neither can be made primary. Language is dialectical, a combining and separating of form.[9]

Let us turn to an example, say the emergence of "red" as an item in my infant vocabulary.[10] Suppose that someone elicits my attention by pointing (assuming that I comprehend *that* language) to a certain region of my playroom and says "red." He means to direct my attention to the surface quality of a certain toy block. A number of things vaguely attract my attention in the indicated region. My quizzical expression prompts my informant to narrow the region by shaking his forefinger and then perhaps by handing me the block and saying: "It's red, don't you see!" "Red" is the name of an entity, but to name it is to factor an entity from a wider domain. "Red" is simply one element in a series of gestures, phrases, and actions that has the effect of progressively narrowing a larger region into smaller and smaller subregions, until finally the inherent distinct character, namely red, is elicited for my concern. Red is defined for me by this series of regions and subregions,[11] and "red" is simply one of the demonstrative elements that promote this factoring or definition.

[6] *Theaetetus* 150B.

[7] The parallel between this and the Whiteheadean account of the fallacy of simple location in *Science and the Modern World* is exact.

[8] In certain exceptional cases, especially in mathematics, only one monstrative effort may be required. Recognition of the demonstrated entity is sufficient. Notice that in Plato's *Meno* the slave boy recognizes a square and is led to the further recognition which is the solution to his problem. Contrast this with the irony of Meno's refusal to recognize color, 76A. The relation between demonstration and human nature and character would appear to be of great importance to morals and theology.

[9] *Sophist* 258 E ff.

[10] My own experience has been that children recognize generic terms like "color" before specific terms such as "red," "blue," etc. The ordering function of generic character is overlooked by reductionists.

[11] Red is related to the regions associated with the elements of a demonstrative set as irrational numbers are related to the series of rational numbers which define them. But one does not need Dedkind's theory in order to see how red is related to the regions which define it. As we said in footnote 5, the possibility of such examples does not seem to have occurred to the critics of extensive abstraction.

One can no more conceive of red apart from its capacity to inform regions than one can conceive of primary apart from secondary qualities. The noise "red" is meaningless apart from its potential as a demonstrative element.

But as we have said, one act of factoring the extensive environment in order to elicit a distinct character or form does not, in general, give us a name. In order to name, we must come to recognize that the given entity transcends the demonstration which elicits it and that it is enduring. My informant recognizes this and seeks to call my attention to another occurrence of red in the design on the wallpaper. He goes through another series of gestures and says, "Red, see there on the wall." And then perhaps he points to other red things, associating "red" with each of them. On the sometimes doubtful assumption that the entity demonstrated in each case was the same, we may say that the demonstrations are equal in abstractive force, or simply equal. A name is a common element in the several demonstrative sets. But equality is an ideal of discourse, for in many cases there is no reasonable certainty that the sets are equal or that any finite number of sets satisfies the intent of the user. I might mistakenly think, in the above example, that "red" meant "extended surface" or, from the exasperated tone of my informant's voice, "be careful." Inequality may ensue because of color blindness or because I possess finer powers of discrimination than my informant, for his "red" might for me be better described as "maroon" or "burgundy."

Our extensional definition of the equality of demonstrative sets depends on two principles, that of the transcendence of the elicited entity to its demonstrative scheme and that of recognition, which implies that the entity has the potency for recurrence. Thus the same entity can be elicited by different procedures. Those who would define the equality of sets (or the univocal signification of a name) by invoking the comparative notion of resemblance seem to have overlooked the notion of demonstration and to have rendered empiricism a disservice. And had they looked more closely at demonstration, they would have seen that extension is not an ideal character, something that is added by mind to the given data, but that it is presupposed by language.

The use of a standard element, i.e. the noise "red," in each equal demonstration has the effect of endowing that element with demonstrative efficacy when used alone. Names also describe. A description involves the idea of a predicate whose subject is an enduring entity and, in the case of indefinite descriptions, has multiple ingression into nature. Names are demonstrative and descriptive. Furthermore, names "participate" in

the conceptual character of the elicited entity. But since the name is also a recurrent character, it possesses conceptual status in its own right. A stabilized, almost nontemporal nexus of the name and entity is thus formed and seems to transcend the temporal character of both language and region. Words seem to possess a meaning above their flux; propositions seem distinguishable from sentences; and, to the unreflective mind, the word seems to be a character of the real world, a natural sign. These inherent tendencies can never be removed by a nominalistic critique, by the assertion that "meaning is use," but can be removed through the dialectical effort of demonstration.

If a "name" means anything, it does so only through the set of procedures employed to elicit a character inhering in a certain region. Through standardization it comes to stand for the whole set of elements of which it is a member. A name is bound up with the extensive nature of demonstration, for it will be recalled that it functions to delimit regions. The availability of equal demonstrative sets, each containing a common element (the name), tends to make us disregard the basic demonstrative character of language and to confine our attention to the common element. The diversity of the methods seems to particularize everything except the common element, while it seems somehow universal and applicable in each context. This results in the minimalization of demonstrative force in our standardized vocabulary and leads us to look for a "meaning" that somehow goes with the term. In reality the identity is the distinct character or form, the entity elicited abstractively by the demonstration. The theory of universals ought to be a theory about recurrent entities in nature. That the same characters are variously located in space time is the evident basis of thought and language. It also satisfies the empirical demand of "homogeneity of thought about nature."[12]

Once we have established a concept, it may be used in the demonstration of higher-order entities. We may treat the concept, following a suggestion by Wittgenstein, as a region within which the higher-order concept inheres. For example, one way of defining "color" would be through the element-entity nexus "blue"-blue, "red"-red, etc., these defining regions within which *color* inheres. Standardization of demonstrative procedure enables one to elaborate abstractive hierarchies. Given such a standardization of "color," one can speculatively demonstrate figure: "Figure is the only thing that always accompanies color."[13] The

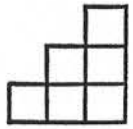
[12] Whitehead, *Concept of Nature*, 5.
[13] *Meno* 75 B.

simple phrase "red colored figure" represents the standardization of three demonstrative schemes ordered in an ascending hierarchy. The usual logical notation that renders this as a conjunction of three predicates is a travesty of the real situation.

The great bugaboo of semantics is represented by such expressions as "the present king of France." Such expressions are made up of elements of a demonstrative hierarchy, but the set as a whole is vacuous. The elements have a status in a standardized vocabulary and have the kind of "meaning" this entails. Together, however, they point to nothing. I suggest they be called "wind egg phrases."

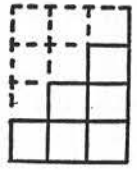
Now let us apply our demonstrative procedure to a mathematical example. If we can apply the same technique to both sense and mathematics, then some of the historic Cartesian grounds for bifurcation can be removed. "Consider this collection of cubical blocks. I want you to use them to help me to discover the formula for the sum of the first n integers. Now we can arrange these in any way we wish, but we must find a shape that will help us to see the answer."[14] Now we try various arrangements, finally hitting upon the following. The single block we leave alone; we arrange the pair so that one block is on top of the other and the triad so that we have a vertical column of three blocks. We arrange the remainder in similar fashion.

Each pile has a similar shape in that it represents the addition of one block to the preceding pile, but if we push the piles together, step fashion, we notice a new shape that the addition of vertical columns will preserve.



[14] This example is due to Weedon, "A Theory of Pointing," 21. He has shown that the slave-boy episode in the *Meno* involves a similar speculative demonstration.

If we will now look at the figure, the solution should be obvious. If a similar step-shaped array is inverted and applied to the first, one has a rectangle, (n) (n + 1).



Since the original array is half this shape, the solution must be n (n + 1)/2. Weedon summarizes this procedure as follows: "I start with a set of heaps in which the constituent entities correspond to the integers, taken in 'natural order.' I then shape these piles so that there is a similarity in one certain respect that obtains among them. Combining these shapes, I obtain another shape that has the property such that all greater and smaller shapes *obtained in the same way* are similar to it. This type of shape has a certain relation to its mirror image such that an expressible 'form' may be discerned."[15]

Before we give a more formal account of the method we have employed, let us note that the red elicited by our first demonstration is not enough for knowledge. As Weedon puts it: "This is Hume's, or more properly Santayana's conclusion [that distinct character exhaustively factors nature]; for Socrates seems clearly aware (*Theaetetus*) that these are vivid, precise, barren. The alternative to this is the quest for form. When the form, as opposed to the entities exhibiting it, is made the object of demonstrative effort, the principal division of the divided line has been crossed. Here the range of pure mathematics provides the grammar which has a certain stability to it in regard to demonstrative effort."[16]

IV. The Method of Demonstrative Abstraction

Let us call any device meant to call attention to some entity a demonstrative phrase. With each such phrase is associated a region. For example, someone pointed to a region of the room in seeking to elicit red, red was itself a region in the discernment of color, and the piling up of blocks in various ways was an attempt to discern form in the blocks qua

[15] *Ibid.*
[16] *Ibid.*, 34.

regions. Consider a set K of demonstrative phrases, $A, B, C, \ldots$, each of which points out an element $A', B', C', \ldots$, in a set K' of regions. Let the elements of K' be so ordered that any region Y' will be overlapped by some region X'. If X' overlaps Y', there will be some part of X' that is not a part of Y' and no part of Y' that is not a part of X'. Let us further stipulate that no region is common to every member of the set K'; i.e. there is no least region. The set K' converges to an entity that is not an element in the set, since the set consists of regions. Such a set has the property of greater specificity as one approaches the "small" end. A property that is vague in a higher element is more specific as one approaches the small end.[17] The property is in some sense immanent in the set K', yet transcends that set.

Let me illustrate this by means of our two previous examples. When red was pointed out to me, the speaker vaguely indicated the entity by a flick of his hand, encompassing a region rich in specifiable character. By successively narrowing the range of my vision by more precise demonstrative phrases, he called attention to a property that was preserved in each narrowing of that range, namely red, so that the K set of phrases, if ultimately successful, would have led to my discernment of red. But red qua entity-being-demonstrated is not a region. Red is not extensive, but the region it occupies is. Otherwise we would have to define extension by qualities, which is absurd. In our mathematical example, clearly $n(n + 1)/2$ would be "in" the blocks only if we could encompass an infinite array of blocks in a finite act of attention. In the case of a single block, the solution is completely vague. The act of adding columns (the set K) makes precise the region within which the property inheres. The lower end of the set K' which the demonstrative act of adding columns to the step-array designates, unambiguously denominates the inherent character. But ordinarily we do not know whether the character inheres in the lower end of a K' set. Socratic ignorance is still relevant. To take a trivial case, red demonstrated by abstraction may have satisfied the demonstrator, yet I may have gone away thinking that "red" meant "smooth." The issue may be narrowed by the employment of additional K' sets. Two K' sets M and N are equal if they overlap each other.[18] By definition of "overlap," they must define the same entity. Consider the subsequent demonstration of red on the wallpaper. The sets of phrases would in each case overlap, though *inter se* the elements might be linguistically heterogeneous. Also the equality may be only apparent. But in general the possibility of equal K' sets is what we mean by objectivity.

[17] Whitehead, *Principles of Natural Knowledge*, 85.
[18] Whitehead, *Principles of Natural Knowledge*, 83.

The rediscovery of Socratic demonstration by Whitehead and Weedon is an event of great importance. We hope that we have shown that it can provide a basic vocabulary for epistemology, while its adequacy for moral philosophy is argued in Plato's Dialogues. It has enabled us to consider the main sorts of abstraction encountered in language.

V. Recognition

"A region is definable as any area or class in which an intended being is present."[19] This raises Meno's question: "How can one, being ignorant, recognize the object of knowledge?" In one sense, the question is a sophism, for recognition does take place. One can still ask, in Kant's sense, how it is possible. What are the conditions under which it does in fact take place?

Demonstration presupposes an apprehension or the presumption that an entity is so situated as to be demonstratable. It also presumes that the recipient of demonstration shares with the demonstrator a community of language (phrase or gesture), feeling, or concern: any of these may serve as initial or primordial regions. There must, in other words, be a regional overlap embracing demonstrator, recipient, and entity to be shown. In the Platonic myth of recollection, this overlap is secured by the common, prior experience of the forms in some other life, while Ballard suggests it is secured through a common culture.[20] We make a less metaphysical assumption. We assume that every region, and thus every K' set of regions, which is potential for a demonstration, has an intrinsic property in virtue of which the set K' is possible. This reflects Plato's assumption that "all things have within their nature a conjunction of the limit (*peras*) and unlimited (*apeiron*)" (*Philebus*, 16D). Unless the intrinsic character, which is what is demonstrated, inheres throughout the regions in the K' set, demonstration, like induction in Bacon and Mill, would be a random affair, only accidentally successful in eliciting form. Demonstration begins with hypothesis or opinion, which is presumably

[19] Ballard, "On Being and the Meaning of Being," 251. Ballard's use of "being" for "entity" may be misleading, for according to our hypothesis, entities "inform" regions and make demonstration possible. The relation of a being to a region perhaps does not carry with it the technical connotations, as in Whitehead, of the relation of "entity" to "fact." This sense should be preserved.
[20] Ballard, "On Being and the Meaning of Being," 256–57, 261–65.

a vague recognition. Since the regions within a *K'* set may be infinitely numerous, one could not arrive at monstrative clarity unless the regions bore some trace, i.e. were significant of, the elicited entity. Of course we allow for false hypotheses, for regions empty of the relevant character.

The separated view of form and psyche entailed by the myth of recollection simply places the problem back one level. If recollection involves the pre-existence of the soul, then how did recognition previously take place? The argument seems to force us towards an infinite regress. If recognition is ever to occur, "knowledge ahead" is presupposed.[21] The vague regions of experience are informed by characters which dialectic seeks to render precise. The presupposition is that form is inherent throughout a region.

In his discussion of abstractive sets, Whitehead sometimes leaves the impression that the elicited entity *is* the *K'* set of regions; but it would seem that this would be possible only if the intrinsic property were presupposed and could thus inform the monstrative process. While an irrational number may be defined as a set of rationals satisfying some condition, to say that it *is* this set is misleading. It is the intrinsic character of the set, making the set possible.

This does not settle all of the questions which might be raised about "recollection." The ability to see an entity through a region assumes that the discerned entity is not simply situated at the limit point, but does indeed inform the region. The table *there* is seen by me *here*. Our appeal is to experience. If mind is not separate, but is that which can make definitions and see, then the problem of recollection is that of participation, namely the way structure is ingredient in Becoming.

VI. The Truth of Names

If "naming" is associated with a demonstrative procedure, then the curious thesis of the "truth of names" (*Cratylus*, 385C; 430D–431C) may have a larger measure of intelligibility than might otherwise be suspected. We are told that a name is the least part of a true proposition which is itself true; and when we realize that names in Greek—at least as examined in the long etymological section—are tacit descriptions which are generally episodic in nature, some of the strangeness is removed. But there is another sense of truth in names, for as demonstrative in nature,

[21] *Ibid.*, 253.

they enable us to see things as they are. The dialectician is one who determines the appropriateness of names (390C), for in the language of *Phaedrus*, it is he who divides, or cuts, nature at the joints (*Phaedrus*, 265E). A name is an instrument of cutting (387A ff). A name must be adapted to the joints; but the joints at which the Greek language aims, with its presumed Heraclitean basis (425C ff), cannot do justice to the real. Thus some names, or demonstrative schemes, are better than other. It is said by Germans that only Greek and German permit one to do philosophy, and the heavy burden carried by adjectives in English lends itself to the atoms of analysis; but an even better case is provided by the problem of dividing in Roman numerals, as against Arabic notation, or constructing computers in binary Boolian algebras as against those based on a modulus of ten. The problem of an adequate symbolism is overlooked by those who insist on the merely conventional character of names.

Appendix B

THE ONTOLOGICAL STATUS OF MATHEMATICAL FORM

To hazard an account of mathematics in Plato would be foolhardy; but since his imagination is so frequently structured by mathematical models —his theory of education in *Republic VII* based upon mathematical instruction—it provides the route for his most important demonstrations of form, and it provides *Timaeus* with the basis for an account of the structure of Becoming. To ignore Plato's implicit philosophy of mathematics would verge on intellectual dishonesty. Something must be said, even if provisionally.

Mathematics for Plato is primarily geometry. This is common to the Greek tradition and, indeed, to the West until Descartes; and this primacy was doubtless a consequence of the Greek way of expressing number as a collection of dots, i.e. geometrically.

In the first place, we have seen from *Meno* that Plato had a tendency to concretize mathematics, to think it through the conditions of fact. This is reflected in the "Platonic" definitions of straight line (definition 3) and plane surface (definition 7) of Euclid I, both of which suggest "perceptual" conditions and not that level of abstractness we associate with *pure* mathematics. Whatever the status of alternative geometries, which could not have bothered Plato, we see that his approach is rather like that of Whitehead in the *Concept of Nature*, whereby mathematical form is seen as informing regions and not as separated. For this reason, we may postulate that Plato gave mathematics an immanent status. The important exception is that of "equality" in *Phaedo* 74A–75B. If we may ignore this instance, which is at best confusing, we have a way of developing a theory by means of speculative demonstration, as outlined in our opening chapter, whereby we may arrive at paradigm mathematical forms. No separation of form from things is thereby entailed.

If this is granted, then we may assign to mathematics the role of constitutive form, but this particular class of forms differs from other constitutives, mud, hair, dirt, and the like. The members of this latter class can be or can not be and are thus (pure) possibles. As possibles considered in themselves, without recourse to those extensive conditions and images whereby they would be ingredient in the definiteness of the world, the ontological principle requires that they have a ground. That ground is provided by their participation in the nature of the divine. But mathematical forms have a different status as possibles, one which does not require their "separation" from Becoming. As we sought to show in our final chapter, mathematical conditions are the most pervasive conditions characterizing Becoming, expressing the structural characteristics of the receptacle in virtue of which it extensively separates, retains, relates, receives, and selects form. The relevant symbols of these characteristics are the triangular moduli characterizing earth, air, fire, and water, as well as the arithmetical, geometric, and harmonic proportions characterizing psyche and the connexity of the universe. Mathematics provide the formal conditions for the ingression of other forms. But mathematics per se does not determine *what* ingresses. The *any* and *each* and *all* of the formulae of mathematics range indifferently over the whole universe.

Mathematics is not about any particular thing. It is not mathematics per se which determines whether or not a particular shade of red shall occur or that it shall have a round or square shape. Thus the particular determinations of mathematical possibility depend on other factors, God or psyche. Mathematics provides the formal conditions for other types of participation. These conditions are not per se selective of what is specifically entertained by the receptacle, nor are they themselves retained, received, collected, and the like. Otherwise they would themselves be pure or contingent, and thus "causes" (*Phaedo*, 100B) for which still other conditions would have to be posited. In order to avoid an infinite regress, we must make mathematical possibility primordial and ground it in the systematic character of the extensive field.

The unique status of the mathematical (impure) possibility is a function of its role as supplying the most general conditions characterizing the receptacle. The occurrence of an impure possibility, a specific shape or form of order, must be related to the systematic nature of mathematics. If a particular shape, for example, can occur, then its occurrence qua shape (as an abstraction from what is shaped) is a consequence of the mutual entailment of impure possibilities. The mutual relations of entailment between impure possibilities can be expressed through their

relation to certain alternative key sets of conditions, from which they can be deduced. A privileged or key set of conditions is made up of the formally undefined entities and postulates of the system. The presumption is that these can be defined as inhering in extensive regions by the method of speculative demonstration. In virtue of the fact that the indefinite variety of shapes and the characteristics (*propria*) of every such possible shape can de deduced, or measured by what has been deduced, from the key conditions, we can see that geometrical possibility is characterized by mutual entailment and that it is systematic. If the key conditions do in fact inhere in regions, then so do all their possible consequences. We may express this by saying that the receptacle is a geometrical field of impure possibility.

Other (pure) constitutive possibilities do not enjoy the relations of mutual entailment; and apart from the mingled or synthetic status they possess relative to an actual image or the regulative ideals of God, they do not form a system. Constitutive forms (pure) qua ideal possibilities are relatively disjoined *inter se*, though not to the extent envisaged by Berkeley and Hume for whom a sense content has no relation of entailment to the rest of the universe possible or actual. We know that if red occurs, certain sub-parameters are thereby implicated; but these are themselves variables and range over a restricted variety of conditions, so that the conditions associated with red are not unique. Relations between pure possibles are not expressible as deductive necessities, as with impure possibilities, but are expressed in terms of contingencies or probabilities. For this reason, we say that among themselves pure possibles are relatively disjoined. Impure possibility provides the extensive conditions for the occurrence of pure possibles, the former set having its ground in the receptacle and the latter in God.

Given the ingredience of some set of key conditions, the entire range of mathematical possibility is analytic. For this reason, we do not need to separate impure possibilities from the world and to give them a ground transcendent of fact. But given the realization of some pure possible, an indefinite variety of impure conditions are thereby strictly entailed (which is not the case of the relation of a pure possible to other pure possibles for otherwise pure possibility would be a deductive system, that is, express necessities, and this is false). *This* red has a shape, and *this* shape enjoys systematic relatedness to the whole of impure possibility. In abstraction from conditions of mingling or synthesis, red is not systematically related to the entire totality of pure possibility. We may express this by saying that mathematical conditions are analytic, since

the satisfaction of some entails the possible satisfaction of all such conditions; while pure possibles are relatively synthetic, since the satisfaction of some does not entail the possible satisfaction of all. In this way we can hope to parallel Hume and Leibniz in their distinction between truths of reason (relations of ideas) and truths of fact (matters of fact).

Impure possibilities are immanent. Except derivatively, they do not entail valuative or regulative considerations. The realization of an impure possible does express the result of a decision and thus a valuation, but it is not itself decided on, drawn from pure possibility. The case may be otherwise in art.

Plato apparently did not have an epochal theory of geometrical order, the notion that alternative and incompatible geometrical structures could characterize successive phases of cosmic history. The existence of an epochal view might entail a separationistic account of the status of mathematics. In the discussion of the geometrical moduli and transformation forms in our final chapter, we attempted to show that here Plato's account was conservative and that the creative advance would not be expressed through successive geometrical conditions. If the alternatives characteristic of successive epochs could be related *inter se* by suitable transformations, then we could indeed hold a modified epochal theory and deny the separation of unrealized mathematical form.

If this account of the immanent status of geometrical possibility were to be granted, it would preserve the structure of the early dialectic. Speculative demonstration makes the assumption that geometrical conditions do in fact characterize the extensive regions of nature and make pointing possible. In *Republic VII* we are led to understand that mathematics provides dialectic with its syntax.

Can Plato's theory of number be given the same sort of treatment? I suspect that it can, but this is a far more difficult matter and eludes my effort at relatively precise statement. The tentative conclusion we draw is that mathematics presents us with a very special class of constitutive forms that express the necessities for any contingent, and thus regulative, participation. Whether it can be derived from more primary considerations, the "one" and the "indefinite dyad" together with the transcendentals or what have you, is another open question.

Appendix C

PLATO AND THE PHILOSOPHY OF LANGUAGE

Though to speak of Plato's theory of language may be improper—since Plato does not so much provide a ready-made theory as an approach or series of approaches to that end—in view of the linguistic turn taken by so many recent commentators on Plato, it is obligatory to remark on what appears to be the linguistic basis of his approach. In one way, to approach Plato through language is justified, but too often it is taken in ignorance or disdain for the insight that speaking is itself an instance of Becoming. It is one thing to analyze Plato's arguments in linguistic terms or to assume that he abandons the form theory for conceptual analysis and quite another to say that as a model for cosmology, analogous to the use of *techne* in Aristotle, language provides Plato with the paradigm case. Something like this seems to be going on in *Sophist, Philebus, Cratylus,* and *Phaedrus.* We might note that the latter also provides us with a theological model based on language; for Plato's God is persuasive, and rhetoric would thus be the mode of God's relation to the world.

The cosmological import of language or speaking as an instance of Becoming was recognized by Whitehead, as evidenced by his analysis of the phrase "United Fruit Company" in *Adventures of Ideas* (p. 234) and by his generalized theory of propositions in *Process and Reality* (*passim*). Further relevant insights are provided by Professor Jason Xenakis.[1] Though exceedingly skeptical of the metaphysical apparatus, he has shown that the communion passage (251 ff) and the truth-value passage (260 ff) in *Sophist* are equivalent. As he remarks, the communion passage is "all embracing: no matter what your subject matter or realm

[1] Jason Xenakis, "Plato's *Sophist*," *Phronesis,* IV (1959), 29–43.

might be, its terms or elements must exhibit some intermingling."[2] The generality of the communion passage is effected through the Highest Kinds, the transcendentals, which can be then interpreted as formation rules, or as a logical grammar, in the analysis of speaking. Thus the analysis of true and false speaking will exhibit the general features of Becoming, and linguistic philosophy will have its foundation in cosmology. The work of Dr. Xenakis is of fundamental importance in an understanding of Plato's philosophy of language.

The thesis that language is an instance of Becoming should not be confused with the assumption that it is a likeness of Becoming, a theory repudiated in *Cratylus* (432 ff). Linguistic philosophy has recently freed us from a similar assumption, that the structure of an ideal language is a picture of fact; but unhappily it remains a sort of linguistic Kanteanism or solipsism generally devoid of an appeal "to a standard which, without employing names, . . . shows us the truth of things" (*Cratylus,* 438D). The appeal is to speculative demonstration, to dialectic; and one may hope that it will not go unheard.

[2] *Ibid.,* 31.