CHAPTER ONE

—— *Squaring the Circle* ——

> There is reason to believe that human genius reached
> its culmination in the twelve hundred years preceding
> and including the initiation of the Christian Epoch. . . .
> Of course, since then there has been progress in
> knowledge and technique. But it has been along lines
> laid down by the activities of that golden age.
>
> <div align="right">A.N. Whitehead</div>

> A chief task of those who call themselves philosophers
> is to help get rid of the useless lumber that blocks our
> highways of thought, and strive to make straight and
> open the paths that lead to the future.
>
> <div align="right">John Dewey</div>

Western culture in its broadest, most effective sense was formed in two separate phases: first, in the period prior to the collapse of the Athenian city-states in the fourth century before the Common Era; and second, in that period characterized by the convergence of Hellenic, Hebraic, and Roman values and institutions. This latter phase effectively culminated in the fifth century in the work of St. Augustine. By that time we had come to hold as self-evident a number of significant propositions that have shaped and continue to shape our cultural reasonings and practice with respect to our aesthetic, moral, religious, scientific, philosophic, and historical sensibilities.

Such a stark assertion as the above, which does in fact entail the claim that the present status of our culture is in some sense a projection of its temporal origins, may suggest to some that we have con-

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fused the logical and temporal orders and have fallen into the "genetic fallacy." But such a suggestion would be plausible only if we were to claim that the present status of our intellectual culture is either *exhaustively* isomorphic with its beginnings, or in some important senses *inevitably* so. The dominant features of our culture, expressed in the form of broad doctrinal traditions which contextualize the most important meanings for our concepts and beliefs, exist alongside an inexhaustibly complex set of alternative ideas and practices the attenuation of which is, though partly the result of limitations of creativity and imagination, largely a function of the rise to dominance of an objectivist bias which leads us, above all, to search out "the truth of the matter," and to exclude what does not conform to that truth.

Thus, the lack of subtlety and nuance characterizing our inventory of interpretive tools, and the heavy-handedness with which they have so often been employed, is little more than the ideological consequence of that intellectual inertia which so often accompanies objectivist and dogmatic sensibilities. Far from supporting this consequence by seeking any transcendental rationale for our cultural development, we shall be arguing that this objectivist bias is in the truest sense a product of our peculiar history.

In what follows we shall dismiss any attempt to tell the story of classical Western culture *als zwar gewesen ist*, believing that to be the most fanciful of projects. A chief purpose of historical narratives is, after all, to make some sense of one's presented locus by responsible appeals to the past. In providing a narrative of the development of our classical cultural sensibility which is a distinct alternative to that offered by the familiar Enlightenment account of the movement from *mythos* to *logos*, we are, of course, claiming that our present is a post-Enlightenment present, one which is no longer informed by the assumptions that characterize our so-called modern age.[1]

Our claim is that there are as many distinctive and important accounts of the past as there are significant perspectives offered by the present. That we shall be offering a story of the rise and fall of second problematic, causal thinking is solely due to the fact that one of the most important perspectives currently offered us is that of a present characterized by a powerful, sustained, and thus far largely successful critique of second problematic assumptions.

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"cosmos" as the ordered or harmonious world. The idea of bringing cosmos out of chaos is at the very root of our conception of beginnings. But "cosmos" as applied to the external surround is a relatively late notion. The presumption of a single-ordered world was by no means authorized by empirical or logical generative criteria. "Cosmos" comes from the verb *kosmeo* (κοσμέω), which means "to set in order." This word carries primary associations of housekeeping, military organization, or cosmetic adornment. Thus *kosmos* describes a state of being ordered, arranged, or adorned. The term was long in such ordinary use before it came to be applied, ostensibly by Pythagoras (?582–?500), as a means of describing the external surround:

> Pythagoras was the first to call what surrounds us a cosmos, because of the order in it.[3]

Anaximander (?611–?547) believed that all things arose out of "the boundless (τὸ ἄπειρων)." He thus replaced the more materialistic sounding imagery of Thales ("Everything is water") with something without qualities or shape or structure, but from out of which all things with qualities, shape, and structure arose. For Anaximander, qualities were conceived to exist in pairs, as contraries, "hot and cold," "moist and dry." The indeterminate "boundless" could thus be determined in relation to a balance or conflict of opposite qualities:

> And the source of coming to be for existing things is that into which destruction, too, happens, "according to necessity"; for they pay penalty and retribution to each other for their injustice according to the assessment of Time.[4]

What is striking about this citation from Anaximander is that the world-order is analogized from the order of the law court.[5] Since, as we have seen, the ordering function associated with the Greek *kosmeo* was originally used to designate man-made orders, the analogy suggested here supports the notion that the very idea of cosmos was an invention.[6]

Not only is the status of the notion of cosmos as an ordered whole called into question; of equal significance is the fact that the singularity of world-order is itself controversial. Xenophanes believed that

> there are innumerable world-orders, but that they do not overlap.[7]

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not two worlds or an infinite number of them, but there is and ever will be one only-begotten and created heaven."[12] That the order of the world, particularly in its character as a single-ordered universe, should be in question might seem rather odd to us moderns, but the struggle suggested by the discussions of order in Plato was a real one. Many of the earliest thinkers believed in a plurality of worlds. These worlds were thought either to succeed one another in time, or to coexist in the vastness of unlimited space.[13]

Plato's struggle with "blasphemy" and "impiety" throughout his writings culminates in the Laws, wherein the penalties for those who assert that the world is "devoid of order"—that it is not ordered according to "what is best"—are set out as five years imprisonment for an initial offense, followed by execution and burial outside the gates of the city for a second act of impiety.[14]

On the principle that it is unlikely that such a fuss would be made over an issue unless the issue were of practical importance, we can plausibly speculate that the debate over the existence of a unitary cosmos was one of the significant debates in the ancient world. And, as we shall see, the fact that proponents of a single-ordered world won the argument in the West is truly a consequence of this view being more "reasonable." The irony, of course, is that this fact in turn is a consequence of the interdependence of the notions of "reason" and the belief in a single-ordered world. Thus, it is not just the contingency of the latter belief we are focusing upon; we mean to call attention to the contingency of the notion of rationality as well.

"Cosmos" is a metaphor, applied analogically to the world about us. Our ambiance was thought to be a complex manyness before it was held to be "one, single, and unitary." Indeed, quite apart from the explicitly Greek context, the Germanic-based English word, "world" (wer + ald, Ger. Welt) means the "age or life of man." Any association of orderedness besides that relevant to the arbitrary, contingent, human order is absent from this notion. In the beginning was chaos.

Three primitive conceptions of chaos have taken on importance in our cultural self-understanding. The Semitic myth of Genesis, related to the Babylonian creation myth, Enuma elish, tells us:

> In the beginning the earth was without form, and void, and darkness was upon the face of the waters.[15]

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There is no concern in Plato's myth for supporting a preexistent chaos; the only important consideration is that the divine persuasive agency reduces the threat of chaotic disorder (though, as the text suggests, not completely).

The reference to "rest" is interesting in that it advertises the view of the majority of the Greeks (Plato and Aristotle were chief protagonists of such a vision) that rest is the more perfect state, and that motion, therefore, requires explanation. Plato's version of this belief is, as we have seen, connected with the view that chaos is disordered motion, and any explanation of such motion must take into account that its origin is to be found in the disordered and the irrational.

In the *Genesis* myth, the origin of light from darkness, and the consequent creation of an ordered universe, consequences of *creatio ex nihilo*, are accomplished by a command, an *order*. Plato's cosmogony promotes an alternative explanation: Whereas power creates something from nothing, reason brings order from discord. Hesiod's *Theogony* describes the conquest of chaos by eros as a drive toward primordial unity. Thus, in all the senses of chaos rehearsed so far, the beginning of things involves an act of construal. Whether as non-being, as disorder, or as a separating gap, chaos is *overcome*.

There are certain Gnostic cosmogonies of the early Christian era which provide a radical alternative to the dominant cosmogonic myths. Many of the gnostics believed that the world is the product of a demiurge identified with the Old Testament God who is evil, not good:

> Whoever has created the world, man does not owe him allegiance. . . . Since not the true God can be the creator of that to which selfhood feels so utterly a stranger, nature merely manifests its lowly demiurge: as a power deep beneath the Supreme God, upon which every man can look down from the height of his god-kindred spirit, this perversion of the Divine has retained of it only the power to act, but to act blindly, without knowledge and benevolence.[19]

In the three types of myth rehearsed above, the ordering element was described as thought, action, or passion. Gnostic cosmogonies merely invert these alternatives by claiming that the creator's power is the blind and reckless power of an ignorant being with distorted emotion. Chaos is the consequence of an abortive attempt at creation.

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philosophical level, anarchy denotes the absence of principles as determining sources. In other words, anarchy bespeaks the absence of a cosmos, the denial of a cosmogonic act.

Chaos is nonrational, unprincipled, anarchic; it is the indefinite in need of definition; it is the lawless, the anomic; it is the unlimited begging limitation. Though we have secularized and demythologized the mythic themes that hide us from direct contact with the awe-ful character of chaos, we have only to look to our poets to recognize the fundamental attitude toward confusion, separation, and emptiness which we variously describe by the term "chaos."

For Ovid, Chaos is "all rude and lumpy matter."[23] Milton calls it a "wild Abyss, the Womb of nature and perhaps her Grave."[24] He explicitly identifies chaos as evil by making it subject to Satan's will:

>   Chaos Umpire sits,
> And by decision more embroils
> the fray by which he Reigns.[25]

We celebrate "the great morning of the world when first God dawned on Chaos,"[26] but nonetheless cannot but fear that chaos may return:

> Lo! thy dread empire, Chaos! is restor'd
> Light dies before thy uncreating word
> Thy hand, great Anarch, lets the curtain fall,
> And universal darkness buries all.[27]

Cosmogonic myths all seem to share a negative appraisal of chaos, either as "yawning gap," "confusion," or "formlessness." The importance of this fact in shaping our cultural consciousness can only be assessed after we have traced at greater length the cultural developments beyond the strictly mythopoetic age.

The most important conclusion one may wish to draw from this brief meditation upon mythopoetic language relates to the special character of cosmogonic myths. Mircea Eliade, one of our century's most prolific mythographers and philosophers of religion, thought all myths to be ultimately cosmogonic. Myths, according to Eliade are "etiological tales," "stories of origins."[28]

One can certainly challenge such an interpretation of myth, but, nonetheless, it is cosmogonic myths which are deemed most impor-

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a single-ordered world. Employing Western cosmogonic assumptions in the interpretation of the classical Chinese tradition can only result in an expectation that the modes of reflection and argumentation undergirded by these cosmogonic assumptions are shared by the Chinese. Such a resort to the "transcendental pretense" would lead, as it has often in the past, to a skewed understanding of classical China. [See chapter 3, sections 1, 5.3.]

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2. REST AND PERMANENCE

Though we shall be able to offer no final wisdom concerning the question why chaos comes to be construed negatively and why, therefore, beginnings come to be associated with victory over chaos, it is clear that the chaos/cosmos dialectic disposes our tradition toward what we shall call the "second problematic." Significant for the development of our traditional understandings of reason and rationality is the fact that this problematic urges us to accept the priority of rest and permanence over motion and change.

The ancient Greek preference for rest and permanence is best illustrated by appealing to the development of those mathematical and metaphysical speculations which led to the formalization of the idea of *quantity*. Enlightenment interpretations of Greek thought have underwritten this preference by providing a narrative of the progressive growth of rationality couched in terms of the presumed transition from *mythos* to *logos*. This narrative tells the story of how the Greeks came to provide responsible *accounts* (*logoi λόγοι*) of the world.

Three principal modes of "accounting" have been available to us from the beginning. These are *mythos* (*μῦθος*), *logos* (*λόγος*), and *historia* (*ἱστορία*). The privileged status of *logos* in our tradition has largely determined the manner in which we understand both *mythos* and *historia*. Further, when later in the tradition, mythical, rational, and historical accounts hardened into the disciplinary divisions of literature, philosophy (and science), and history, it was the rational mode of accounting which determined the relative degrees of respectability of the other modes.

pho. Of course, in both the epic and the lyric there is a reflection of the cosmogonic activity involving the construal of order from chaos. But through the epic, one is aided in finding one's place in the wider world of human action, while in the lyric, *mythos* offers a means of self-articulation, an ordering of affect.

With the tragic poets, who were able to draw upon both epic and lyric resources, the function of myth was both broadened and deepened. This took place by virtue of the addition of a *reflective* dimension. Models of actions and passions began increasingly to be resourced in the individual rather than the gods. With the increased sense of responsibility, one was urged to reflect upon one's actions and their consequences. Both Antigone and Creon, though from different perspectives, face conflicting obligations—toward the state, on the one hand, and toward their relative, Polyneices, on the other. And the fact that they resolve this conflict in different manners meant that they, too, are at odds with one another. The modes of deliberation that emerge throughout the *Antigone* are functions of the desire to resolve these conflicts.[31] Though the deliberations taking place within Greek tragedies do indeed take place in a world largely determined by *Moira* (Destiny)—a world wherein individuals may still be hounded by the Furies, unable to escape the evils sent by the gods—nonetheless, by the end of the epoch of Greek tragedy, mythical constructs had receded into the background.

> In tragedy myth severed its connection with the particular concrete situation. The human situations which it expresses are no longer, as in the archaic lyric, fixed in time and place by victory, marriage, or cult; they are universal situations. It is evident that this broadening of the situation marks a tendency toward philosophical generalization. Before long the problem of human action which is the concern of tragedy was to become a matter of intellectual cognition. . . . Where a divine world had endowed the human world with meaning, we now find the universal determining the particular.[32]

This backgrounding of *mythos* might better be termed a forgetting of the mythical sources of rational speculation. Philosophers, after all, have not really separated themselves from *mythos*. They do not simply implicate mythical structures into their thinking as necessary appeals to "likely stories" when reason has reached the end of its

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Philosophia (φιλοσοφία) and *historia* were closely related in the beginning. What Pythagoras later came to call "philosophy" was itself enquiry, *historia*. For example, Pythagoras called his mathematical investigations "*historia*." Aristotle's *History of Animals* employs the term *historia* in this sense.

According to the received interpretation of Greek thought, the purpose of the intellect is seen to be that of giving accounts. These may be the sort of accounts that appeal to the *logos* of *physis*, the meaning of natural phenomena, or they may be the *historical* accountings associated with the realm of human action and public events. Behind both of these accounts lie those of the *philomythoi* who tell of the origins of order from chaos, and those of the tragic, epic, and lyric poets who implicate these cosmogonic accounts into their creations as means of bringing order into human thought, action, and passion. Each of these types of accounting—*mythos*, *logos*, *historia*—privilege the notion of permanence, structure, stability, and law over that of process and change.

In her *The Fragility of Goodness*, Martha Nussbaum has significantly broadened the traditional understanding of Greek rationality by taking a chronological step backward and examining the work of the tragic poets. Her argument, briefly put, is this: In addition to the conception of rationality which envisions the intellect as "pure sunlight," stresses activity and control, places trust solely in the immutable, and defines the good life in terms of solitariness, there is an alternative conception which sees the intellect as "flowing water, given and received," stresses both activity and receptivity, is satisfied with limited control, trusts the mutable and unstable, and defines the good life as one lived among "friends, loved ones, and community."[34] Tragedy includes both norms of rationality, "criticizing (the former) with reference to the specifically human value contained only in (the latter)."[35] Plato offers a version of the former and Aristotle a version of the latter.

Nussbaum moves Aristotle rather far in the direction of the first problematic. Judged simply as an important alternative interpretation, her reading seems both viable and of real benefit for those who are engaged in the reconstruction of more standard treatments of ethical issues. It is essential to our task, however, that we first invoke the Principle of Mere Presence introduced in the first pages of this work, for this revised Aristotle is precisely *not* the one who has shaped our

sented by Nussbaum's work insofar as they enrich our own cultural self-consciousness, we are purposefully avoiding too much dependence on these constructions as material with which to pave a way to China.

The Enlightenment bias of the transition from *mythos* to *logos* involves the assumption, then, that the sorts of accounting which are to be privileged will be those which concern the *logos* of *physis*, on the one hand, or those that provide a structured narrative of human events, on the other. In either case, rational accounting comes to be associated with the essential, the universal, and the permanent rather than with the idiosyncratic, the particular, and the transitory character of things and events.

This fact is attested to at the very beginnings of what came to be called philosophic speculation in the sixth century B.C.E. Thales claimed everything to be *hydor* (ὕδωρ)—"water." What does it mean to say that everything is water? Perhaps nothing more than that since there must be (such is the intuition of those who seek a single principle of explanation for things) only one basic "stuff," the best candidate among the observable items of our world is a fluid medium that seems to be the most capable of taking on different forms (water, vapor, ice) and which appears to be the essential factor in maintaining the viability of living things. It is not so much Thales' own account which leads us to believe in his substantialist bias. It is rather the fact that his account will be increasingly understood in static, materialistic terms by later interpreters of his thought.

Anaximenes (fl. 545 B.C.E.) held that the basic stuff of which things are made is *aer* (ἀήρ), which carries something like our own common sense meaning of "air." Anaximenes introduced the concept of the "vortex," together with the notions of condensation and rarefaction, to account for the origins of things. Air compressed will solidify, and, when dilated, will rarefy. Heavy, dense matter is drawn toward the center of the vortex, while lighter matter drifts to the outside.

Aristotle, whose thinking serves as such a prominent source of our knowledge of the Presocratics, termed the Milesians the first "materialists." On his authority, generations of historians have repeated that judgment. But we should be cautious here. Aristotle's reference to the materialism of the Milesians was based upon his own doctrine of the four causes, which, by dividing matter and form, and activity and aim, managed to slice the pie in such manner as to make

he conceived the world to be a harmonious order, the relations among things (numbers) were such as to establish harmonies. This means that numerical relationships could be expressed as mathematical ratios:

> The so-called Pythagoreans . . . thought that the principles of mathematics were the principles of all things. Since of these principles numbers are by nature first, they thought they saw many similarities to things which exist and come into being in numbers rather than in fire and earth and water—justice being such and such a modification of numbers, soul and reason being another, opportunity still another, and so with the rest, each being expressible numerically. Seeing, further, that the properties and ratios of the musical consonances were expressible in numbers, and indeed that all other things seemed to be wholly modeled in their nature upon numbers, they took numbers to be the whole of reality.[37]

This citation from Aristotle is interesting because it focuses Pythagoras' discovery of the abstract quantitative character of mathematics. Thus when we count to ten, we do so without the necessity of fingers or toes, since we have "numbers" which serve to measure all quantifiable things. In the sums of ten apples or ten fingers or ten minutes, the quality of the apples or the fingers or the minutes does not affect the meaning of the number ten. Since mathematics is a quantitative science, we are able to add five hungry elephants and five bales of freshly mown hay and arrive at ten objects rather than five (reasonably) satisfied elephants.

Of course, it is possible to misinterpret this original interest in purely quantitative considerations. If numbers are things and their relationships form patterns by virtue of proportions and ratios, then we have a geometrical vision of number. It is this conception that underwrites the perfection of the soul vis-à-vis the body. Materiality is ultimately dissolved into the formal structure or pattern established by numerical order. Still, quantitative exactness is assured. Even, and especially, musical harmonies are consequences of reliably exact ratios.

We should stress that the Pythagoreans—and Plato, who will be greatly influenced by them—were always concerned to maintain the connection between quantity and quality, between numerical order and the harmonies or values that promoted normative human life. Indeed, the fact that Pythagoreans were a religious community and

and there can be no "nothing" from which Being could have come. Further, if Being had parts or elements, if more than a single Being existed, they would have to be separated by Not-being—a void, nothing. But if nothing separated beings then nothing would *be*, and Not-being cannot be. Further, if there are no parts, then there can be no moving elements. And Being itself cannot move since motion requires space, or "nothing," to traverse.

What Parmenides attempts to show is that any belief that would challenge the unity of Being would lead one into contradiction. Now, a logical contradiction can be expressed in the form "x is both F and not F." Parmenides argues that any employment of the idea of Not-being as existing would lead one into this sort of contradiction: the nothing from which Being might be said to come or which would be claimed to separate beings would be said both to be and not-be.

> But since there is a furthest limit, it is complete on every side, like the body of a well-rounded sphere, evenly balanced in every direction from the middle; for it cannot be any greater or any less in one place than another. For neither is there what is not, which would stop it from reaching its like, nor could what is possibly be more in one place and less in another, since it is all inviolable. For being equal to itself in every direction it nevertheless meets with its limits.[40]

In these doctrines, we can see the use of logical distinctions, probably derived in part from the mathematical speculations and constructions of the Pythagoreans, employed in the defense of a fundamental intuition concerning the nature of things. We do well, however, not to attempt too literal an interpretation of Parmenides' positive descriptions of Being. It is "like" the body of a well-rounded sphere. It is clear that resort to a positive description of what is entailed by the intuition of the unity of Being would get Parmenides into linguistic difficulties.

Some modern critics of Parmenides' "Way of Truth" have attempted to use logical arguments to overturn the conviction that "Only Being is." These critics claim that Parmenides has confused the existential and the predicative sense of the verb, "to be." To say that something is or is not round, is qualitatively distinct from saying that

the ideational and conceptual meanings associated with mind, which would continue to be influential even in those systems that did not stress such a dualism, such as Aristotelian naturalism. Third, the Parmenidean claim that "Only Being is" set up a dialectic between Being and Not-Being, and Being and Becoming, which privileged the notion of permanence.

None of these three developments had an important counterpart in the Chinese tradition. Chinese conceptions of "nature" (*xing* 性) are to be interpreted in dynamic terms which suggest a preference for processive over substantial understanding. Terms such as *xin* 心, usually rendered "heart-and-mind," indicate the absence of any mind/body dualism. This means that mentalist conceptions of the human being are not effectively present. And metaphorical and imagistic language is stressed over concepts which fix meanings, and in so doing privilege a static and unchanging sense of things. Finally, there was no Chinese Parmenides to set the dialectic between Being, Not-Being, and Becoming.

Specifically with regard to this last point, we should be alerted to the fact that differences between the Chinese and Indo-European senses of the verb "to be" will make for significant differences between the two traditions. It is clear that Parminides, among other Greek thinkers (Aristotle is the great exception), conflated existential and copulative senses of "being." Whether this is to be counted as a confusion, as is often said, is a matter of dispute. At the very least this conflation contributed to the tendency to think of Chaos (as "nonbeing") in a negative manner, investing it with suggestions of the Nihil, the Void, the Naught. By contrast, the absence of this kind of cosmogonic tradition in China may be considered both cause and consequence of the fact that the verb, *you* 有, "being," overlaps with the sense of "having" rather than "existing." If *wu* 無, "not to be," means only "not to be present," there is certainly less *mysterium* and *tremendum* attaching to the notion of Not-being. [See chapter 3, sections 1, 4.1.]

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Thus, we are allowed to see that Zeno's four paradoxes permit us to examine the consequences of believing in the reality of motion, given four different sets of assumptions about the character of space and time, the relations between which (s/t) provide our understanding of motion.

The four possible assumptions are:

1. Both points and moments are infinitely divisible.
2. Neither points nor moments are infinitely divisible.
3. Points are infinitely divisible, but moments are not.
4. Moments are infinitely divisible, but points are not.[41]

Infinite divisibility means there are no least units of space or time. Finite divisibility requires that some least unit be reached which is extended, but which cannot be further divided. Options 3 and 4 above require rather modern assumptions. The views against which Zeno intended to argue were likely those involving the assumptions of 1 and 2. The point to emphasize, however, is that Zeno provided a logically exhaustive set of arguments with regard to theories of motion involving the use of concepts of points and moments.

The simplest of the paradoxes is known as "The Bisection." The argument involves the simple claim that motion is impossible because to move one must move from one point to another, and to do that requires one to traverse half the distance between those points, and to do that one must traverse half of that half, and so on. If space is infinitely divisible then one cannot reach any point to which one wishes to move in a finite time. Just how one gets to the doorway seconds after hearing the shout, "Fire!" is something of a puzzle.

The second of the paradoxes is called "The Achilles." By tradition Achilles is placed in a race with a tortoise who has been given a slight head start. Achilles will never overtake the tortoise since *by the time that* Achilles has reached the point from which the tortoise began, the beast will have advanced some distance, and *by the time that* Achilles reaches the second point to which the tortoise has advanced, the tortoise will have advanced again (a smaller distance, of course, but some distance). This argument depends upon the assumption that time is infinitely divisible, but spatial units are extended.

A third paradox, historically the most influential, is called "The Arrow." Again, it is simply stated. One of the early recorders of the Greek tradition gives it this form:

unit had been traversed in a unit of time, or, alternatively, that it had taken one-half of an indivisible moment to move through some unit of space. But discrete units of space and time are by definition incapable of being physically divided.[43]

Zeno provided a number of puzzles other than those associated with the denial of motion. We might just mention his argument against place: If everything that exists has a place then it is clear that place too will have a place, and so on without limit. This argument is aimed at supporting Parmenides' notion of Being as placeless, since if Being had a place then "place" would either be, in which case more than one being would exist, or it would not-be, and we would be forced to admit that Not-being exists.

A later follower of Parmenides, Melissus, provided a series of arguments defending the Parmenidean position, but one of the ironies of the history of philosophy is that his argument against plurality contained within it the seeds of the doctrine of material atomism which will later emerge in direct response to Parmenides. Melissus attempted to refute the notion of a plurality of beings by the reductio ad absurdum argument, establishing that

> If there were a plurality, things would have to be of the same kind as I say the one is.[44]

Melissus thought such a conclusion absurd, but to Leucippus, the founder of atomic theory, it seemed a perfectly plausible doctrine and he proceeded to build the atomic theory on precisely that assumption.

The arguments of Parmenides and Zeno were to shape the character of the subsequent history of Greek philosophy in a most dramatic fashion. Three sorts of approaches to the problems posed by Eleatic philosophy will be tried by thinkers prior to Plato and Aristotle. One group of thinkers—Empedocles, Anaxagoras, and the Atomists, Leucippus and Democritus—will continue the Ionian tradition of natural philosophy by seeking to demonstrate that a consistent pluralism is possible. Each of these philosophers will respond to the Eleatic philosophy in a self-conscious manner.[45]

A large and divergent group of thinkers known as Sophists, for the most part rejecting speculations about the natural world, often in direct response to Zeno, will yield themselves up to varying degrees of skepticism about the power of reason to penetrate to the nature of things, and will examine the consequences of a relativist approach to

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of "velocity" in a physics textbook would yield a formula such as the following:

$$v = \lim_{t \to 0} \frac{\Delta s}{\Delta t}$$

Clearly the ghost of Zeno haunts such formulaic "explanations." Not only, out of deference to Zeno, are we forced to define velocity at an instant (that is, we must express it in terms of rest), we can do this only by recourse to the ad hoc assumption that the changes in time (the time interval) will only *approach* zero. That is, of course, the assumption of temporal continuity. It is precisely the dependence upon spatial and temporal continuity in relativity physics that is called into question by phenomena at the level of quantum physics. And though many quantum thinkers continue to affirm the continuity of space and time, the assumption is an ad hoc one, broadly inconsistent with much of the experimental evidence upon which their theories rest. For a theory which atomizes the apparent motions and other changes of microphysical phenomena would realize greater parsimony, not to mention coherence, if it acceded to the atomization of space and time, as well.

Such atomization was in fact an implication of A. N. Whitehead's mathematical interpretation of the physical world. Whitehead, Russell's mentor and sometime colleague, was led by his own philosophic intuitions to accept Zeno's arrow paradox as persuasive, with truly remarkable consequences. Whitehead quotes with approval William James' commentary on Zeno's arrow paradox:

> Either your experience is of no content, of no change, or it is of a perceptible amount of content or change. Your acquaintance with reality grows literally by buds or drops of perception. Intellectually and reflectively you can divide these into components, but as immediately given, they come totally or not at all.[48]

Whitehead agrees with James that (after removing those elements of Zeno's arguments which are the product of inadequate mathematical knowledge), Zeno presents a valid argument. Noting that the introduction of motion into the arrow paradox brings in "irrelevant details," Whitehead claims that "the true difficulty is to understand how the arrow survives the lapse of time."[49]

telling glosses on Plato, down to the present day, were occasioned by his failure to meet the principal challenge arising from Zeno's conundrums—namely, the challenge to accommodate the conflicting demands of reason and of sense experience.

One of the profoundest scandals of Western intellectual culture is the manner in which so many of our otherwise intelligent contemporaries have sought to discount the seriousness of Zeno's challenge. Ignored by many unable to understand the subtle problems his paradoxes entail, impatiently dismissed by others whose bad faith permits them to dodge the unresolved difficulties, Zeno's Cheshire smile continues to mock the entire subsequent history of Western philosophic speculation:

> It would, of course, be rash to conclude that we had actually arrived at a complete resolution of all the problems that come out of Zeno's paradoxes. Each age, from Aristotle on down, seems to find in the paradoxes difficulties that are roughly commensurate with the mathematical, logical, and philosophical resources then available. When more powerful tools emerge, philosophers seem willing to acknowledge deeper difficulties that would have proved insurmountable for more primitive methods.[51]

——— THIRD ANTICIPATION ———

The effect of Parmenides' and Zeno's speculations was to drive a wedge between reason and sense experience that even the cleverest efforts of subsequent thinkers could not remove. The effects of such speculations are unsurpassed in importance in the Western tradition. Almost all of the philosophical speculations and constructions of subsequent Presocratics were shaped by the need to resolve Zeno's paradoxes. Most importantly, the dichotomy between the realms of Being and Becoming was ramified by the Zenonian paradoxes.

Partly because there was no functional equivalent of Parmenides or Zeno effectively present in the Chinese tradition, classical culture in China developed without these hard and fast dualisms. A consequence of the absence of such histor-

The path up and down is one and the same.[55]

The soul has a *logos* which increases itself.[56]

Changing it rests.[57]

Literal or scientific language and the language of common sense are particularly adapted to rational discourse. Words may be construed primarily as names which tag objects in the world, so that words and the material objects named by them are seen to be in productive association. Likewise, if one believes with Pythagoras that forms, or pattern regularities, constitute the nature of things, then a discursive language of logic is well suited to explain the structure and character of the world-order. But if one were to agree with Heraclitus that reality is in flux, and that the world is "an everliving fire" in a continual state of change, it would be necessary to refrain from anything like univocal language in order to influence one's communicants to sense and feel the world as a process. As Whitehead has suggested, "That 'all things flow' is the first vague generalization which the unsystematized, barely analyzed, intuition of men has produced."[58]

The attempt to systematize or analyze that intuition leads to stasis, for words as names and propositions tend to function as snapshots. And while metaphorical, parabolic, and paradoxical language leads us to resonate with the world of flux and becoming, this resonance is possible only if we employ language as a medium through which to *experience*, rather than to *understand*, the world.[59]

We would do well not to attempt too discursive a commentary on Heraclitus' reflections. They are purposefully paradoxical in order to evoke a sense of change. In fact, Heraclitus' attempt to communicate his belief that the world is in flux led him to be dubbed "the Obscure One" by his contemporaries.

If some "thing" changes into some other "thing," there either must be some constant substrate that remains unaltered throughout the process, or not. If there is, and this is what in essence the Milesian philosophers were looking for in the their various concepts of *physis*, then there is in reality no radical change at all. But if reality is in its essence changing, then for something *A* to become *B* it must first be *A*-but-not-*B*, then it must be no-longer-*A*-but-not-yet-*B* (or both-*A*-and-*B*), then it must be *B*. The difficulty of change is that the intermediate state in which it is "neither" or "both" seems to confound

this obscure thinker is that, yes, things change according to a measure, but the important point is that *things change*.

Some might see Heraclitus' preference for change and becoming as in tension with his insistence upon the order of the cosmos:

> This world-order [the same of all] did none of gods or men make, but it always was and is and shall be: an everliving fire, kindling in measures and going out in measures.[61]

There is a disagreement among interpreters of Heraclitus as to the authenticity of the interpolation "the same of all." Some, with Gregory Vlastos, believe that Heraclitus is speaking of the single, unitary cosmos, the natural world experienced in common by all "waking men," as opposed to the private worlds into which one enters while sleeping.[62] Others, with G. S. Kirk, hold that the subject of these remarks is this present world-order.[63]

The important consideration, we believe, is to be found in the absence of cosmogonic speculation in Heraclitus and his stress upon the dynamic temporal changes associated with the oppositional alterations in the "everliving fire." These conditions strongly suggest that Heraclitus would be among those who believed in a plurality of worlds succeeding one another in time. For only by excepting the world order in its totality from these oppositional alterations could Heraclitus maintain that there is but one world.

But there is no reason to believe that Heraclitus would have made this exception, given his belief in the reality of change. After all, the preference for permanence and rest is allied with the affirmation of an ordering agency associated, in the beginning of Greek speculation, with cosmogonic acts. By describing the world in terms of an immanent dynamism requiring no transcendent agency, Heraclitus insures that his counterdiscourse of becoming is relevant not only to changes within the world but the change of one world into another.

Other proponents of process thinking, particularly those who expressed their ideas in reaction to Parmenides, never reached the level of Heraclitus' speculations. Anaxagoras, for example, sought to answer Zeno, and in the course of his attempt produced a rather compromised understanding of process and change.

Anaxagoras (500–428) was a protégé of Pericles, who brought him to Athens while he was still in his twenties. For thirty years he resided in Athens, where he fulfilled the role of what we would

The mechanistic cosmology which Anaxagoras accepted included views that were expressed in ways which, in the second quarter of the fifth century B.C.E., offended his Athenian audiences. Anaxagoras thought the heavenly bodies to be stones maintained in space by the velocity of their circular "motion." This view, of course, challenged the popular belief that they were, in fact, gods. As a result of theories such as this, formal charges of impiety were eventually brought against Anaxagoras, and he was forced to withdraw to the city of Lampsacus where he died, still a much honored man, at the age of seventy-two.

Not until the twentieth century will the intuitions of Heraclitus and Anaxagoras receive an extended treatment. Henri Bergson and, with some qualifications, William James will follow the Heraclitean path, while A. N. Whitehead, a professional logician and mathematician, will address the Zenonian paradoxes in something like the manner adumbrated by Anaxagoras. By far the majority of thinkers until then will opt for the view that the world is substantial and that there is some underlying substrate in accordance with which we must give our accounts of the world.

After the elaboration of the Eleatic philosophy, the primary problem inherited by later philosophers will be that of accounting for the complex relationships between the worlds of Being and Becoming. This will involve attempts to reconcile the competing realities of body and soul, and the conflicting claims of perception and of reason. For the most part, the conflict will be resolved by the presumption of permanence and the acceptance, therefore, of an underlying reality amidst the illusory character or penultimacy of change.

It is important to realize that this decision effectively closes the traditional philosophic canon to process understandings. This means, of course, that there will be less need for recourse to poetic or metaphorical discourse—which is, effectively, the language of process and change. For Heraclitus had shown that the distinction between mythical and philosophic thinking is not primarily a distinction between rational and irrational thought but between the claims of reason, on the one hand, and those of imaginative generalization grounded in the immediate experience of the world, on the other.

Though there are two strains of thinking in the Greek tradition, one espousing the reality of permanence, the other the fundamental character of change, it is clear that very early on, the substance thinkers came to dominate. One way of explaining this dominance

next how this process of rationalization led to the rejection of more informal modes of analogical explanation in favor of the formalized methods of analysis and dialectic.

—— FOURTH ANTICIPATION ——

The dominance of "substance" over "process" understandings in the Western tradition entailed the devaluation of the metaphoric and imagistic language in which "Heraclitian" intuitions perforce must be expressed. There is no more important development than this for our coming to understand the differences between Chinese and Western sensibilities. *Mutatis mutandis*, China is characteristically "Heraclitian." Correlative thinking in China is not dominated by the demands of rational or empirical "objectivity." "Han thinking," as we shall refer to the specifically Chinese mode of thinking, depends upon the acceptance of "images" and "metaphors" as the primary means of expressing the becoming of things. Marginalizing the language of process and change has led to a situation in which Western interpreters of Chinese culture either condescend to Chinese thinkers because they have not matured past a "proto-rational" level of discourse, or find their attempts to engage the Chinese sympathetically frustrated by the fact that the Western philosophic inventory is, with respect to methods of addressing the reality of process and change, seriously impoverished. [See chapter 3, sections 1, 4.1, 4.2, 5.3, 5.4.]

5. FROM *THEORIA* TO THEORY

5.1. The Fate of Analogy

The movement from *mythos* to *logos* which undergirds the Enlightenment understanding of the development of Greek thought depends upon a reconstruction of analogical thinking such that the subjective, human focus is disciplined, if not altogether omitted.

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Though this is certainly not Xenophanes' intent, the claim that God "senses" and is "rational" is unavoidably anthropomorphic, since reason at least is likely a characteristic peculiar to the human species which may be applied only analogically outside the human realm.

Ironically, the term "analogy" ($\dot{\alpha}\nu\alpha\lambda o\gamma\acute{\iota}\alpha$) originates in mathematics as "identity of proportionality," though it is already used by Plato in an altered sense of "conformability," "similarity." The principal sense of analogy was that of *ratio* or proportionality. Logic is itself rooted in analogies: Resemblance of relations or attributes forms the ground of reasoning. Argument by analogy receives wide support from mathematical operations. On the other hand, causal arguments are in the early stages quite obviously related to anthropic (the law courts) and anthropomorphic (the gods) contexts. Nonetheless, causal thinking soon comes to assume objective, rational status.

Though stipulated first, as in the case of Pythagoras, in mathematical terms, the mystical and aesthetic appreciation of number by Pythagoras and his followers suggests that there was something more than a strictly objective or detached vision underlying mathematical analogies. It is argument based upon meaningful relationships aesthetically construed that gives rise in both classical Greece and China to the mode of thinking we shall be considering under the rubric "analogical thinking."

The rationalization of analogy occurred rather quickly in mathematics, since the ratios and proportions assigned are, from the beginning, quantitative in character. But even with the more qualitative analogies, this movement is easily seen to be taking place. The suspicion of anthropomorphism evidenced in Xenophanes moves as far as possible in the direction of canceling the similarity relation purported to exist between the human and divine realms. Homer, and to a lesser extent the tragic poets, had depended upon this correlation to provide meaningful paradigms allowing for deliberation with respect to both action and self-articulation. Xenophanes' spare, faceless deity reflects not human passions and actions but the emerging rational intellect intoxicated with universality and oneness.

Both Xenophanes and Empedocles (fl. 440 B.C.E.) employed the Homeric meter. In addition, Empedocles seems even to have imitated the pattern of Homeric simile in formulating his analogies. As is often noted, Homer appeals to natural things—animals and plants—to illumine the specific actions of men and gods:

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in Homer by insisting that Homer is creating poetry while the philosophers are doing protoscience. But, of course, such a claim would merely enforce the point we are trying to make. We moderns are products of the *mythos*-to-*logos* dynamic. Viewed honestly, there can be no doubt but that Homer and Empedocles were both attempting to present the way of things.

We would, perhaps, benefit from these words of a contemporary philosopher:

> For my part I do, qua lay physicist, believe in physical objects and not in Homer's gods; and I consider it to be a scientific error to believe otherwise. But in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. Both sorts of entities enter our conception only as cultural posits. The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience.[73]

The antagonism to anthropocentrism will be softened somewhat with the eventual introduction of the Hebraic understanding of God as "Father" into Western culture. But classical science more and more will develop around the assumption that to provide the most accurate account of the world requires that one characterize it as it would be if the observer were not present. Likewise, speculative philosophy or metaphysics, presumably the most general science of order, will also attempt to avoid the sort of special pleading involved in arguing about the nature of things from a specifically human perspective.

Increasingly, however, critics of late twentieth-century science and philosophy endeavor to point out the anthropomorphic character of rational thinking. Thinking per se may turn out to be a form of special pleading in which cosmological and ethical visions are shown to be ways of entertaining a world presumed to be the sort of world it is because of the epistemological, ethical, and aesthetic requirements of the sort of beings we presume ourselves to be.[74] The issue is an important one, if only because it is the tension between anthropomorphic, and presumably "objective," accounts, which raises the question of the viability of analogical versus causal thinking.

Analogical thinking usually involves characterizing relations deemed meaningful from the perspective of the individual construct-

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engagement among thinkers and their tradition predicated upon the attempt to clarify, modify, or refute positions within that tradition. The dialogical or dialectical method that emerges from this process, and which will receive its most subtle expression in Plato's early dialogues, is developed from the mode of dialectic introduced by reflections of Parmenides on "Being" and "Not-Being," and refined by Zeno in his presentation of his paradoxes.[76] The *dialogical* method is a species of the *logical* method.

Unfortunately, one effect of conversation with the tradition is that overall there is less resort to constructive imagination. In our consideration of Heraclitus we claimed that the distinction between mythical and philosophic thinking is primarily a distinction not between rational and irrational thought but between the claims of reason on the one hand and those of imaginative generalization on the other. The resort to metaphor and imagery as constructive components of one's philosophic descriptions is threatened through the use of dialectical engagement which urges one to begin with the language of one's opponent. After philosophy becomes aware of its past, the constructive employment of imagination becomes questionable as a legitimate method of coming to understand the world. Henceforth, most claims to respectability will be made largely on behalf of a rational engagement with the doctrines and issues generated by the discourse of prior thinkers.

But as we said with regard to the thinking of Heraclitus, some sorts of experience of the world may in fact require the use of imagistic and metaphorical language. If such language is thought to be inappropriate in itself, apart from the specific things said by recourse to that language, then we have excluded possible types of experience from our field of speculation.

In the preceding section we saw how Empedocles added his weight to the rationalizing of analogical operations. The other side of the coin is that Empedocles was one of the last defenders of imaginative construction in ancient Greek philosophy. That Empedocles' imagination was fettered by rational constraints is in large measure the consequence of his having believed it necessary to engage the thought of his predecessors.

With Empedocles, philosophy becomes a self-conscious discipline. It seems clear that this thinker was consciously influenced by each of his principal precursors: Anaximander, Xenophanes, the Pythagor-

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In his *On the Nature of Things*, Empedocles provided a cyclical theory of the origins and demise of the human world in four distinct stages. The specific application Empedocles made to human history is still debated, but the principles are clear enough: A primordial unity in which Love reigns yields itself at the extreme to a condition of total Strife, a complete separation of the basic elements. Out of this dispersed condition emerges again the reign of Love. The human world falls in the two stages between the extremes of complete unity and complete dispersion:

> And these things never cease from continual shifting, at one time all coming together, through Love, into one, at another each borne apart from the others through Strife.[78]

Empedocles' stage of complete unity is of course a stage of harmonious plurality in which all four of the physical elements are balanced and united by Love. The primordial sphere is a Unity but not a One.

Empedocles' principles of Love and Strife were, as we have indicated, analogized from human experience. It was doubtless his view that the experience of the senses, including the actual feelings of love and strife, augmented by the imagination, provide a less restricted understanding of the world. The importance of imagination in Empedocles is to be found here: The imagination permits the breaking down and recombination of the evidences of the senses. For most of us, given to the acceptance of the five senses and of reason as the arbiters of evidence, we would find in the imagination an arbitrary activity divorced from any hard-nosed experience of the world. For Empedocles, however, imagination was a source of extended knowledge because he believed the world to be a dynamic interchange of the basic elements limited only by the possible combinations of these elements. Immediate sense experience must be augmented by imagination if we are to appreciate the vast complexity of things that come into being with the cosmic cycle determined by the interactions of Love and Strife.

The active resorts to imaginative speculation of the sort represented by Empedocles become rare in philosophical discourse as the self-consciousness of the philosophic enterprise increases. As thinkers increasingly depend upon the assumptions of other thinkers as places from which to begin, and increasingly depend upon the tools of dia-

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Though strictly speaking the ad hoc resolution of a problem involves dialogue or dialectic, the ad hoc method seriously truncates dialectical enquiry by simply refuting or rejecting one or more of the premisses of an argument or theory. A theory is developed which excludes the alternative and, therefore, forces a choice between views.

Atoms and the void are eternal. Motion produced by the collisions of atoms in the void is itself without beginning; there is no explanation of the vortex motion apart from the motion of atoms, which is produced by collisions. The point here is subtle but important: There is no explanation of any original motion. Anaxagoras had resort to the principle of *Nous* to explain the presumed motions of things. Democritus refers to the vortex as "necessity" since it is this motion, a consequence of the collisions of atoms, which determines all physical states of affairs.

Motion is a consequence of the random collisions of the atoms. Infinite numbers of atoms colliding at random create a vortex motion in which separation takes place "like to like," in accordance with what we would term centrifugal and centripetal forces produced by the resulting whirl.

Aristotle faulted Democritus for his failure to distinguish motion "natural" to the atoms from "unnatural" motions resulting from their mutual collisions:

> Leucippus and Democritus, who say that the primary bodies are in perpetual movement in the void or infinite, may be asked to explain the manner of their motion and the kind of movement which is natural to them. For if the various elements are constrained by one another to move as they do, each must still have a natural movement which the constrained contravenes, and the prime mover must cause motions not by constraint but naturally. If there is no ultimate natural cause of movement and each preceding term in the series is always moved by constraint, we shall have an infinite process.[79]

Here we see Aristotle summing up the general tendency of Greek thought which required recourse to agency (*Nous*, Prime Mover, God) to explain the motions of and changes in things. The priority of rest and the consequent need to explain motion is, as we have said, one of the primary determinants of the articulation of causal theories.

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of atoms and compounds. There is no reason why this or that occurs, except that associated with the causal factors in the immediate past. In order to explain the natural world it has been necessary to account for human beings in terms of atoms moving in empty space.

Democritus has defended our experience of motion and change adequately, but what of our equally profound sense of free action? That turns out to be as illusory as Parmenides claimed motion and change to be. Further, to be consistent, Democritus must claim that all knowledge comes from contact between atoms and compounds. Reason, of the type that allows him to make the claim that atoms and the void exist, must ultimately be explicable in terms of such interactions. That Democritus held to something like the possibility of rational access to the objective world of things is most likely; otherwise, he would be trapped in a rather significant inconsistency.

One might recall the similar problems often associated with other materialist explanations. Sigmund Freud in our century has been criticized for making knowledge the consequence of sublimated libidinal motivations, and then of attempting to except his theory from such an explanation. B. F. Skinner's claims concerning the origins of knowledge in contingencies of reinforcement in local environments provides no satisfactory explanation as to why his theory about such reinforcements, itself born of such contingencies, ought be accepted as "true."

The problem we confront in the analysis of ad hoc theorizing involves the basic issue of the function of first principles. An explanatory principle can potentially explain anything but itself. If we say, for example, as the Principle of Sufficient Reason holds that there is a sufficient reason to explain any given state of affairs, how are we to invoke that principle to explain the presumed fact that the world is such that this principle obtains without simply taking that principle for granted? Apparently, we cannot but beg the question with regard to first principles. Thus, if Democritus wishes to claim that all things come from necessity, he is not required (since it would not be possible) to explain the origin of necessity.

Nonetheless, the weight of the later tradition will connect reason and the "first principles" explanatory of motion. This requires resort to agency, which in turn privileges what Aristotle will term "efficient" and "final" causes. Thus "rational" thinking, as "causal"

from the openness of analogical understandings to the systematic, axiomatic closure based upon the need to confront one theoretical vision with another.

When Aristotle claimed that philosophy begins in wonder (*thauma* θαῦμα),[83] his words were perhaps more descriptive of the brief history of philosophical thinking to which he was heir than of the activities of the majority of later thinkers. For as we shall continue to note, the movement of Greek thought was away from the wonder associated with the original attitude of *theoria*, which involved the desire to celebrate the splendors of the world, and toward what we shall later associate with formal, theoretical understandings motivated by the desire for internal coherence, rigor, and consistency.

We often fail to realize that beginning one's thinking with *wonder* involves the thinker's senses, emotions, and imagination in such a manner as to ensure that he or she is the focus from which the speculative adventure begins. This is the primary source of that analogical thinking which accedes to the personal, subjective perspective. The quest for objectivity and certainty leads one to deny the importance of the personal and the human and, instead, to characterize the way of things by appeal to the apparently impersonal demands of reason. And though we have suggested that reason itself implicitly commits the thinker to a highly anthropocentric perspective, the history of rational speculation in the West is largely a story of attempts to deny that fact.

When, finally, we begin to discuss the Chinese sensibility, we shall find that something like the opposite development took place in classical China. Though there were numerous experiments in the development of logic and rational thinking, these were soon effectively abandoned in favor of concretely interpersonal exercises in analogical thinking.

—— FIFTH ANTICIPATION ——

The complete expression of second problematic thinking requires the presumption of an objectivity untainted by anthropomorphic and anthropocentric modes of thinking. In the West this led to the suppression of the origins of

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6. COUNTERDISCOURSE: THE SOPHISTS

As a model of high culture, Athens holds perhaps an unparalleled position in Western history. Art, drama, science, and technology provided thinkers a cultural context within which to expand and deepen both their constructive and critical insights. The commercial vitality of the Athenian city-state, and the fact that it was a meeting place for travellers from a variety of distant places, insured the exchange of ideas essential to valuable speculations. Thus, beginning with the second quarter of the fifth century B.C.E., politics and commerce combined to provide freedom of thought and action unprecedented within the Athenian society for that admittedly small percentage of the occupants of Athens who were designated citizens.

From the time of Anaxagoras, therefore, the story of Greek philosophy is essentially the story of Athens. Though it is said that Democritus complained that he travelled to Athens, but no one recognized him,[84] his thought, along with that of all the other important intellectuals, was examined and debated at length by prominent Athenian thinkers.

The character of Athens shaped the direction of philosophic thinking, as much as it was shaped by it. The persecution of Anaxagoras by the Athenians illustrated the continued influence of conservative opinion, a factor which is often an essential part of the tension involved in creative thought. It is with respect to the Sophistic movement, however, that we can best see how the cosmopolitan character of Athenian society served as both partial cause and partial consequence of a distinctive manner of thinking.

Two principal factors are usually cited as accounting for the rise of the Sophistic movement. The first concerns the changing social order of the Greek city-states. The second has to do with a crisis of reason associated with the failure of the philosophical elite to arrive at any sort of theoretical consensus regarding the important theoretical and practical issues of the day.

In the sixth and fifth centuries B.C.E. there was an emergence of new democracies in many of the traditionally aristocratic and oligarchic cities of the Greek world. As in any democratic society, status and privilege were not inheritable; they had to be earned. When status and power are functions of the desires of the majority, this situation

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plurality of beliefs and practices that characterized everyday life in
Athens. At the level of the intellectual elites the same intense plural-
ism reigned. Athens was the marketplace at which all the principal
ideas and theories were exchanged.

At both the theoretical and practical levels of Athenian society, the
plurality of opinion and action threatened civic harmony. The attempt
to confront the disequilibrizing consequences of a plurality of cus-
toms, beliefs, and theoretical visions provided the impetus for the
development of one of the most crucial of all the intellectual con-
troversies that occurred in the ancient Greek world. This was the
debate over the priority of *physis* or *nomos*.

We have argued that the *physiologoi*—those who asked after the
"nature" of things—were divided into those who tacitly or explicitly
accepted the existence of multiple world-orders and those who
affirmed the existence of a single-ordered world. All *physiologoi*
agreed, however, that the question of the *physis* of things was the
fundamental question one ought to ask. As Gregory Vlastos has said
of the *physiologoi*, "The cosmos they had to invent. *Physis* they found
ready-made in the inherited conceptual scheme."[86] This is why, says
Vlastos, they came to be called *physiologoi* rather than *kosmologoi*.

Another technical term which is well represented in the inherited
conceptual scheme of the sixth and fifth centuries B.C.E. is *nomos*
(νόμος). Its early meaning is something like "custom," but very soon
it takes on the slightly more formal senses of "convention" and "law."
When the more practical Sophists and the speculative *physiologoi*
begin self-consciously to diverge from one another, the debate about
the distinction between that which exists "by nature" and "by con-
vention" emerged as one of the most significant of intellectual dis-
agreements. In many ways this dispute represents a contest between
causal and analogical thinking.

The *physiologoi* would couch this debate in terms of the contrast of
"convention" (or "appearance") and "reality." When Democritus
said

> by convention are sweet and bitter, hot and cold, by convention
> is colour; in truth are atoms and the void . . .[87]

he was contrasting the world of senses, which gives rise to conven-
tion, with the world of reality. We have already rehearsed Demo-
critus' naturalistic explanation of the origin of human beings who

large measure because of the different customs and beliefs that shape their languages. Could it not be that the differences among individual understandings within the Greek world are themselves the consequences of distinctive beliefs and customs that have influenced the development of these theoretical modes of expression? And aren't the theories of the sort expressed so freely by the *physiologoi* nothing more or less than *nomoi*—conventional products of human beings attempting to express themselves in their most persuasive manner? And, could it not be that when Democritus says that, in reality, "there are only atoms and the void," he is agreeing that all theories, like language itself, are but conventional expressions since, if our thoughts are capable of reaching to the nature of things, they must not be altogether reducible to atoms? And if this is so, is not the "reality" Democritus describes in his theory itself but a product of convention?

The upshot of this way of thinking is that many of the Sophists came to believe that both what we as individuals and societies will find persuasive, as well as the arguments we will attempt to construct in order to persuade others, are matters of convention. There is no such thing as an absolute or final truth. It is society, and its most persuasive members, who decide what is true. This denial of any sort of objective standard by which something could be judged true or false, right or wrong, made of all of the important values, matters of convention. Those things which the customs and laws of a particular society dictate are to be accepted as correct. Issues which become controversial in a society, such as certain questions concerning the justice of this or that law, or questions of the guilt and innocence of an individual pleading his case before a jury, are decided by the courts.

The Sophistic view that "justice is what the courts decide" was responsible for the creation of a class of "lawyers" among the early Sophists. Indeed, the Sophists (Protagoras himself is credited with the invention of this technique) provided the basis for the adversarial system of justice which requires that a lawyer be trained to argue both sides of a case.

It is, of course, a short step from the claim that "justice is what the courts decide" to the rather cynical view expressed by Thrasymachus: "Justice is the interest of the stronger." For the power of persuasion may often be less a function of persuasive rhetoric and more that of

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It is important to note that standard interpretations of the Sophists often perpetuate the idea of causal thinking by substituting the causal efficacy of the human agent for that of natural agency. This individualistic interpretation is less representative of the actual character of the Sophistic movement than we have been led to believe. It is, perhaps, to be expected that those searching for the objective truth concerning the reality of things would be tempted to emphasize the potential arbitrariness and capriciousness of those who believe in the priority of *nomos* over *physis*.

It is more plausible to read the Sophists, as we are reading them, in a less dialectical manner. The chastening of rationality in the face of the intransigent variety of theoretical perspectives, not to mention the permanent embarrassment occasioned by Zeno's arguments, need not have led to the substitution of individual human action for the dynamism of nature as the foundation of "causality." We may as readily interpret the bulk of the Sophistic understandings as a return to the analogical activities of the first problematic thinkers. The aim of the most representative Sophists was, essentially, the same as that of all responsible intellectuals: to understand things in such a manner as to place oneself and one's peers within the world of nature and society in as harmonious a way as is possible.

When we approach the thought of Socrates next, we will see a shift of emphasis in his thinking away from the apparently unsuccessful attempts of the natural philosophers to answer questions about the nature of the physical world, and a turning toward the specifically human concerns associated with the discovery of those truths most relevant to the human situation. This response allies Socrates with the Sophistic movement.

This story of the emergence of the Sophistic movement is, admittedly, rather simplistic. It is essential that we note that the rhetorical and pragmatic character expressed by the Sophists is not only predicated upon a sense of the failure of reason, but continues an older tradition characterized by the poets and physicians.

The tension between the more experience-minded thinkers who maintain their roots in analogical thinking and the emerging philosophical rationalizers is captured in these words from the treatise, *Ancient Medicine*, presumably directed against Empedocles:

> I am at a loss to understand how those who . . . abandon the old method in order to rest their art on a postulate treat their patients

selected members of the Sophistic community.[93] This cannot but make the majority of them look as if they were theoretical relativists rather than individuals whose greatest concern was with the sphere of public praxis. The Sophists were practical thinkers in a way difficult for us to understand. We are accustomed to seeing philosophers involved in theorizing *about* praxis, but we seldom think of the truly pragmatic technicians of language and communication as philosophers. The Sophists must be seen as practitioners of an art of communication rather than as thinkers who sought understanding apart from relevance or applicability. They were among the first truly pragmatic thinkers.

Protagoras' "Man is the measure" (however one interprets that dictum) identifies thinking with analogical procedures that seek comparisons whose meaningfulness is a function of the perspective of the individual making the comparison, or the solidarity grouping from out of which the comparison is made. Thus, the human perspective, largely abandoned by the natural philosophers, is returned to a place of prominence.

The charges of relativity directed against the natural philosophers by their Sophistic colleagues required a renewed, if chastened, desire to attain truth in some more objective mode than that recognized by the Sophists. It is clear that with Socrates there begins the endeavor to counter the effects of Sophistic relativism by enquiring after objective truths concerning the nature of virtue. This is accomplished by seeking abstract definitions of terms.

A major consequence of this Socratic response, as we shall see, is that the rational, theoretical interests associated with the analytic and dialectical modes of thinking will come to reshape the area of intellectual activity which had formerly been the preserve of analogical activity. With the displacement of analogical thinking from those areas concerned with issues of value, the triumph of second problematic, causal thinking was assured.

—— SIXTH ANTICIPATION ——

Unlike the counterdiscourse of the Heraclitian "process" tradition—effectively moribund until revived in the twentieth century by thinkers such as Bergson and Whitehead —the counterdiscourse of the Sophists has remained a

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attempting to understand the Chinese in terms of concepts and principles drawn from the Western Sophistic tradition. Otherwise, we are certain to import both the relevant concept *and* its dialectical "other," thereby disposing us to see the sorts of dialectical tensions and contradictions extant within Western culture reflected in the Chinese sensibility. For, though the Chinese intellectual tradition is shaped more by "rhetorical" than by "logical" operations, the contextualization of these operations in each of the two cultures is distinctive enough to provide different shapes to these operations. [See chapter 2, section 3.2; and chapter 3, sections 3, 4.1, 5.2, 5.3.]

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7. SOCRATES AND PLATO: EROS AND ITS IRONIES

The contribution of Platonic thought to the culture of causal thinking begins with the concern of Plato's (429–347) teacher, Socrates (469–399), for the definition of terms. Socrates was notorious for asking after the meaning of "courage," "temperance," "justice," and so on. And his interlocutors are equally notorious for not giving him what he wanted—namely (in our contemporary language), connotative definitions which cite the properties common to all members of the class designated denotatively by the term. More often than not he was given examples, or lists which designated courageous actions or individuals rather than delimiting the essential properties of "courage."

If we are not cautious in our reading, we are apt to believe that in the early Socratic dialogues, Plato has set up some rather loosely packed straw men merely for the purpose of illustrating his argument. In these dialogues we continually confront what appear to be some rather slow-witted thinkers who experience supreme difficulty responding to Socrates' perfectly straightforward request for univocity. But this is to fail to recognize that, at the time of Socrates, saying what something is by giving an instance or instances of it was the accepted manner of proceeding. Resort to abstract nouns which serve to "define" concepts is, after all, precisely what Plato helped to

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gests that one learns about the meaning of virtuous conduct, or
health, or what it means to be a human being, by appeal to models
and exemplars rather than abstract principles.

On this view, morality is less an affair of understanding and
applying concepts and principles, and more one of recognizing the
concretely specific modes of conduct relevant to one's particular
community. The Socratic-Platonic vision is rational, while the tradi-
tion of the poets, physicians, and some historians is associated with
the analogical mode of thinking.

In spite of his insistence upon abstract definition, Socrates
remained skeptical of actually attaining knowledge. In fact, he claimed
to know but three things: (1) that he did not know, (2) that knowl-
edge and virtue are one, and (3) that he was an expert in love.[94] By
rendering consistent these three claims, one divines the essential
character of Socratic wisdom: Knowledge is the recognition of
ignorance, which is the fundamental virtue leading to open enquiry.
To recognize a lack of knowledge means that one acknowledges a
desire (*eros*) for knowledge. If, as was true with Socrates, one spends a
lifetime doggedly and systematically confronting one's ignorance, one
might indeed become an expert in *eros*.

Because of the impact of the received Plato upon subsequent gen-
erations of thinkers, this commitment of Socrates to enquiry has often
been suppressed. Nonetheless, belief in the erotic character of think-
ing as benignly skeptical and open-ended reflects the attitude that
open-ended enquiry, not the creation of systems or the promulgation
of doctrines, defines the philosophic task. The belief that the search
for truth is valuable even if no systematically certain truths have
yet been discovered, remains a continuing part of the philosophic
tradition.

The essential themes of Plato's philosophy are well known. His
dialogical understanding of philosophic thinking presented through
his characterization of Socrates is shaped in the beginning by the
presentation of Socrates as an open-minded thinker pursuing, but
never grasping discursively, the wholeness of truth. In the dialogues
of Plato's mature and later years this method seems to take on a more
rigorous cast, and Plato has been interpreted as moving in the direc-
tion of a complete philosophic system.

The element of the received Plato which makes the dialectic a viable
method involves positing eternal ideas or forms which exist as both

the Greek tradition is the manner in which he employs analogical devices in order (1) to fix the analogical relationships between the individual *psyche* and its social and cultural environs, and (2) to establish explanatory matrices which account for the character of right thinking on the one hand, while establishing metatheoretical criteria for the assessment of alternative philosophical visions on the other.

One of the most important consequences of reflections upon ancient cultures over the last generation or so has been the conclusion that self-consciousness is a historically contingent concept. In sympathy with this view, we would argue that the distinctive shape this notion took in the ancient Greek world was a consequence of the agencies of construal which may be associated, in the beginning, with the instantiations of *mythos* in the forms of epic, lyric, and tragic poetry.

There is a broad convergence of scholarly opinion to the effect that individuals in the Homeric period were in some important degree "selfless." Acccording to A. W. H. Adkins, "the early Greeks perceived the body as an aggregate, not as a unit,"[96] and, further, they "had not the conceptual framework to distinguish between a psychological function and an organ with physical location."[97] If this is so, neither the body/soul dualism nor the sense of identifying one's true self with the rational soul has any strict analogy in Homeric times. This view supports Snell's observation that:

> What we interpret as the soul, Homeric man splits up into three components each of which he defines by the analogy of physical organs. Our transcription of *psyche*, *noos* and *thymos* as "organs" of life, of perception and of (e)motion are merely in the nature of abbreviations.[98]

These three components, as we shall see, bear some analogy to the three functions of the soul in Plato, but it is important to stress, again in the words of Adkins, "Homeric man . . . has a psychology and physiology in which the parts are more in evidence than the whole."[99] It is left to Plato to provide a model for the unification of the soul and, thereby, of the self.

The problem of the *psyche* as Plato conceived it is construed in terms of a polar relation between the individual and society. The *locus classicus* for the consideration of the soul in these terms is Book 4 of the *Republic*, wherein Plato suggests an analogy between the state and

effective distinction in the soul and the state was between the rational and nonrational elements of the soul which were reflected in the theory/practice distinction as fundamentally a class distinction.[101]

Book 6 of Plato's *Republic* considers the path from less to more adequate forms of knowledge. Plato's hierarchical understanding of the various approaches to knowledge is itself a way of coming to know the world. The first level of knowledge, according to Plato, is *eikasia* (εἰκασία), the perceptions of the world of passing fact. Primitive knowledge of this sort consists of the unmediated perceptions of fleeting experience, and the content of myths and stories. This is unstable or indirect knowledge whose epistemological status is that of "gossip," or second-hand opinion.

The second level, that of *pistis* (πίστις) involves belief or conviction of the sort we would call "know-how"—that is, technical knowledge without any grasp of the principles which justify that conviction. Its object is the ordinary world of experience construed in terms of relatively stable objects. *Pistis*, based upon past experience, permits the manipulation of these objects toward certain ends.

Knowing how to perform certain actions to achieve specific ends does not yet constitute true knowledge. Knowledge truly begins only with the stage of *dianoia* (διάνοια), understanding. One cannot know unless one grasps the principles justifying a knowledge claim. *Dianoia* permits one to construe a particular fact in terms of the general or universal idea it instances.

This sort of knowledge is only hypothetical, however, for the abstract understandings involved have not as yet been contextualized by a system of propositions whose coherence is established by the veracity of each of its fundamental principles. "Knowing that" something is the case contrasts with "knowing how" to perform certain practical operations. This names the contrast between *dianoia* and *pistis*.

Knowing the "why" of things is superior to the knowledge obtained through *dianoia*. The fourth level of knowledge, *noesis* (νόησις), is the stage at which we come to know why something is the case. *Dianoia* must remain content with deductions from hypothetical principles. *Noesis* strives to evaluate *dianoia* by creating an explanatory matrix accounting for the specialized data upon which the knowledge of *dianoia* is grounded.

Scientific knowledge, in the sense of the knowledge of the specialized scientists, is based upon *dianoia*. The special sciences attempt

——— **SEVENTH ANTICIPATION** ———

Socrates offered two apparently contradictory gifts to the development of the Western cultural sensibility. First, his concern for definition challenged that manner of thinking associated with giving accounts of things by appeal to instances or models exemplifying that which was to be understood. Socrates understood the definitional activity to consist in the search for what we now term *objective connotation*. This activity undergirded the belief in objective "essences" or "natural kinds," a belief which becomes central to the natural sciences. Henceforth, the rational understanding would shun subjective in favor of objective connotations, and reason would seek closure by searching out essential meanings through the act of definition.

Paradoxically, the same Socrates who provided such an impetus to the search for closure insisted upon the openness of rational speculation which would postpone any claims to finality until such was demonstrably achieved. Ramified by appeal to the Platonic "eros" as the desire for completeness of understanding, this refusal to accept unjustified dogmas offered a means of placing real limitations upon the authority of closed systems over open enquiry. One of the unfortunate developments in Western philosophy and science was that Plato's claim that rational knowledge existed only when contextualized by principles defining the most general system of ideas led later thinkers to make unjustified claims to knowledge based upon their belief in the universality of the systematic theories they constructed.

In China, as we shall see, the construction of objective definitions did not become important. Chinese thinkers remained content with the appeal to "examples" to provide explanatory accounts and, thus, were disinclined to search for "essences" or "natural kinds." There was no hard and fast distinction drawn between "objective" and "subjective" connotations. Closure was sought by appeals to the authoritative elements of the tradition, while openness was maintained by the tacit insistence upon connotative "vagueness" which permits the copresence in a single term of a variety of

theoretical, practical, and productive modalities provides the epistemological rationale for that organization.

Theoretical sciences consider "that sort of substance which has the principle of its movement and rest present in itself."[103] Thus, the theoretical or natural sciences treat of natural kinds of things. The practical disciplines concern the cultural world of *action* expressed primarily in terms of ethical and political activities. The productive sciences are distinguished from the practical, as *making* is distinguished from *doing*—that is to say, the productive sciences are sciences which involve the production and appreciation of cultural artifacts.

Political actions and artistic products must be understood on other than theoretical grounds since the subject matters do not admit of the same degree of perfection as do those of the natural sciences. For Aristotle, the practical sciences of ethics and politics must be separated from the theoretical sciences of metaphysics, physics, and biology as well as from the productive sciences of rhetoric and poetics.[104] Thanks to Aristotle, Plato's *psyche/polis* analogy has now been characterized in terms of a relation between the human mind and its cultural expressions. The educated mind is in fact *culture in microcosm* and reflects generic patterns of thinking, acting, and feeling as cultural expressions.

Philosophers since Aristotle have sustained the interest in this analogical relationship to the degree that it has come to shape a general interpretive construct of our intellectual history. A principal illustration is found in the thought of Immanuel Kant (1724–1804), whose three critiques articulated the nature and limitations of reason in its theoretical, practical, and productive modes. *The Critique of Pure Reason*, *The Critique of Practical Reason*, and *The Critique of Judgment* reflect the Aristotelian modalities of the ways of knowing.

As we have noted, Aristotle recognized that one of the functions of a philosophical synthesis is to account for contrast, conflict, and contradiction not only within the soul or among the various elements of society, but also among those who are attempting to characterize the data of intellectual culture from a variety of philosophic perspectives. His doctrine of the Four Causes can serve to perform precisely this task.

According to Aristotle, a responsible account of any item of experience must have recourse to a complete "causal" analysis. Aris-

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physis (*fons*, *origo*) and *logos* ("account"). The cluster of connotations associated with *aitia*, *physis*, and *logos* leads to the interpretation of cause in terms of source, origin, principle, account.

As we have noted, the meanings of *physis* include "origin," "the natural constitution of a thing as the result of growth," "Nature as an originating power," "principle of growth." The Latin *natura* used to translate *physis* is related to *nascor* ("birth"), and designates the natural order of things, the world or universe, the state or condition of a thing. The search for the *physis* of things leads to the positing of an origin, source, or ground which provides an account (*logos*) of the state at the end of the becoming of things. Thus *physis* serves as the primary analogate in terms of which accountings (*logoi*) are to be given.

It was in the combination of the search for *physis* on the part of those later to be termed "philosophers," and the presentation of *logoi* ("accounts") of the public events by those later called "historians," that causal language begins to be privileged. The combining of etiological explanation with the agencies of men and gods gradually weighted the search for *causes* in terms of what will later come to be called *efficient* causes.[105]

We cannot determine precisely Aristotle's sense of *aitia* by reference to etymological studies, of course. But such analysis can sensitize us to the difficulty of understanding the term *in situ*. In this instance, it is necessary to recognize that both the logical and the *analogical* senses of cause are employed by Aristotle. Indeed, Demosthenes whose dates coincide exactly with Aristotle's, uses *aitia* primarily in its rhetorical, classificatory sense.

Aristotle's doctrine of the Four Causes is itself a classificatory scheme, of course, apparently born by analogy from Plato's Divided Line and from the sources employed by Plato himself—that is, the contrasts between rest (Being) and motion (Becoming), and between matter (body) and form (mind). Neither Plato nor Aristotle provided adequate logical arguments for the completeness of these distinctly analogical schemes.

Aristotle's philosophical scheme is most productively understood in terms of a primary analogate associated with the concept of biological organism. This suggests that Aristotle's causal scheme is less than value-neutral. The analysis of an organism yields the variables which ground the development of the specific causes employed in the

> All men seem to seek the causes named in the *Physics* [see Bk ii, 3, 7], and . . . we cannot name any beyond these; but they seek these vaguely; and though in a sense they have all been described before, in a sense they have not been described at all. For the earliest philosophy is, on all subjects, like one who lisps, since in its beginnings it is but a child.[107]

One may certainly take Aristotle seriously to the extent that there is an absence of sophisticated causal speculation among the Presocratics. But, in place of reading these thinkers projectively and programmatically as if they were doing badly what Aristotle will later perfect, we wish to recognize a persistent alternative tradition of analogical thinking which resists incorporation into the causal, rational mode. The coexistence of these two problematics in Greek culture permits us to recognize as quite articulate certain thinkers whom Aristotle believed to have been lispers.

Plato discovered inadequacies in alternative philosophies based on their various emphases upon less viable forms of knowledge. Aristotle *sees inadequacy in terms of an unbalanced emphasis upon each of the four causes.* In both Plato and Aristotle, we find a scheme of interpretation in accordance with which we can understand the nature of varying philosophic perspectives. Part of the cultural impact of the philosophic syntheses of Plato and Aristotle has been due, therefore, not only to their construction of the outlines of the human *psyche* and its relations to society and to intellectual culture, but also to their systematic explanations of conflict among various theories of the nature of things.

For all their vaunted differences, Plato and Aristotle share a significant number of dispositions that render their disputes family quarrels among the proponents of a common culture. Each believes in a single-ordered world. Both have faith in the efficacy of reason in searching out the laws which define the structure of that world and the relation of the human mind to that structure. And this faith leads each to defend the ideal of a philosophical system as a means of reflecting that structure and relationship.

Against the background of agreements such as these, their radically differing attitudes toward the importance of the phenomenal and of the priority of analysis or synthesis in philosophic thinking seem less dramatic. Though we cannot say of these two thinkers what Emerson

psyche) are inconsistent with the Chinese modes of organization. Further, concepts such as Plato's *eidos* (εἶδος) and Aristotle's *ousia* (οὐσία) have no real equivalents among Chinese thinkers. And, most importantly, the understanding of "cause" originating in part in the Aristotelian *aitia* and filtered through the Latin *causa*—particularly the notion of "efficient cause" as it has come to constitute a basic element in the classical scientific models of explanation—is not a category which may be relevantly employed in interpreting Chinese thinkers. [See chapter 2, Sections 3.2, 3.3; and chapter 3, sections 5.2, 5.3.]

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9. *HUMANITAS* AND THE *IMAGO DEI*

It would, perhaps, be convenient had the Platonic and Aristotelian syntheses culminated the development of the Western cultural paradigm, since, in that case, we would be able to close our account rather neatly with the end of the Hellenic period. But there was to be an additional, quite significant, development of our cultural matrix occasioned by the transformation of later Greek thought when filtered through Hebraic and Roman sensibilities.

One of the elements of Roman culture which will ultimately permit the extension of Greek rationality into the barbarian lands has little to do with Hellenic or Hebraic sources, but in many ways is strictly Roman. It is the theme of *humanitas*, championed by Cicero and elaborated in the *Aeneid* of Virgil (70–19).[109] This notion, along with the political concept of *imperium*, supports the sense of unity across ethnic and political boundaries. Neither the Greeks with their strong sense of provincialism vis-à-vis the barbarian world, nor the Jews with their sense of covenental relationship designating them as a "chosen people," could provide the practical social and political ideologies which would sustain the notion of *universal* human nature or *universal* natural laws.

Both Roman *imperium* and the more philosophic notion of *humanitas* suggest that psychological, social, political, and cultural orders define basic commonalities which are more important than

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Whether one sees the sorts of analogical relations that Augustine discerned is largely a function of the type of philosophical intuitions one owns. Augustine saw "the whole Trinity revealed to us in the creation"[113]—in the divisions of conscious certitude (of existence, knowledge, and delight in being[114]), in the tripartite division of philosophy (natural, rational, moral).[115] These are God's "footprints."[116] Such is Augustine's "natural theology."

When Augustine says "footprints" and "*imago dei*," he means that *God is reflected in nature*. If God is three-in-one, it is that image that is reflected in nature *insofar as we are able to discern it*. The fragmented understanding we have is a function of our fallen state. That is why we see the footprints and not the feet. The *imago dei* is not stamped on our foreheads but rather shapes our "personality."

Of course, the nature of Christian doctrine is such that it would be total heresy to split the trinity into separate and distinct faculties. It is possible, by virtue of man's fallen state, to note distinct faculties in the human soul. In the City of Man, one's soul is at war with itself. In the afterlife, when we achieve (qualified) immanence with the uncreated essence of the holy trinity,[117] enjoying the perpetual Sabbath that "knows no evening," the warring soul will be at peace, and will, presumably, have become harmonized to such a degree that it, too, will be "three-in-one." But a part of the imperfect representation of the *imago dei* in nature and human existence is that the trinity is "fragmented" in the fallen condition. The three parts of the trinity interpenetrate; not so with the three parts of the "soul at war." The undivided trinitarian elements may be identified with elements of the divided soul in its fallen state.

Thomas Aquinas (ca. 1224–74)—no stranger to natural theology per se—saw no such thing. Though he used the trinity as an organizing principle of his theological system, Aquinas thought it a truth revealed solely through scripture. Augustine's dialectical method drawn from the Neoplatonists allowed him to see the trinity as *imago dei*. Aquinas, more enamored by Aristotelian syllogistic thinking, had no direct means of deriving the doctrine. It is, as both Plato's and Hegel's methodologies demonstrate, the dialectical method which allows, or forces, one to see the tripartite structure of things.

The doctrine of the trinity is hardly resourced in scripture. The generation of the trinity comes as a result of the Platonic problem of mediation read in terms of the Christian Logos. Plato: How do the

understand volition as "the power of willing,"[122] can we see that the drive (*thymos*) which allies itself with reason against the appetites[123] suggests certain of the connotations of volition. It is this sort of association which Augustinian discussions of human and divine agency helps to further.[124]

Granted the contributions of the Stoics and others, until the Augustinian period the notion of a willing agent was vague at best. One would look hard and long for a notion of will as focus of agency and decision in the individual until this period. The primary importance of the attribution of volition to God is that it provided the means whereby the notion of human will was effectively invented. One can easily see how the concept of "will" would develop *pari passu* with the articulation of God as Creative Agent. "Self" comes into being by virtue of tensions with others. The volitional being is born through tension with the dynamic power of an omnipotent God.

As is the case with so many of the most important notions underlying our self-understandings, the Augustinian notion of "will" was clarified and ramified through the act of analogical projection in which the attribution is made first with respect to some element of the cosmological context and then later analogized downward to the human sphere. We saw this to be the case with notions of "cosmos" (κόσμος) and "justice" (δίκη), for example, which had their origins first in the human sphere but became clarified, and received transcendent ground, by the double analogical move which first projected them into a cosmological context, then presumed the mundane context to be a reflection of that transcendent realm.

By the time of Aquinas, who placed the capstone on discussions of "will" by integrating *voluntas* with the Aristotelian model of the soul, faculty psychologies are discussed at the most general level in terms of thinking, acting, and feeling (thought, action, passion). In discussions of these psychic elements, "action" is associated with will or decision.

After the Augustinian synthesis of Neoplatonism and Judaeo-Christianity, therefore, the analogical scheme relating soul, society, and culture has a transcendent ground in the trinitarian structure of the Divine life. In his *The City of God*, Augustine provides an analysis of the earthly and the heavenly cities by recourse to the relations of psychic, social, and spiritual structures.[125]

Augustine's *The City of God* is a latter-day *Republic*. In its provision of a paradigm that allows for cultural articulation and self-

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Plato before him, Augustine analogizes from the soul to the state, seeing the realization of the individual soul to consist in a proper relation to the body politic.

Yet how different is Augustine's view! There are now two distinct cities, driven apart by the prideful self-assertion of those who struggle against the Will of God. In the true *polis*, wherein salvation is offered through the gift of grace, the soul is seen only penultimately in terms of the state; it is the trinitarian virtues associated with the *imago dei* which are creative of the individuals and their historical destinies.

In spite of his insistence that the trinity was not revealed to reason, Thomas Aquinas used the trinitarian elements as the device for organizing the contents of his *Summa Theologica*. This work became a primary cultural resource insuring the perpetuation of the trinitarian structure as a principle of organization for social and cultural studies. The concepts of power and authority, law and sanctions, private and public existence, the nature of the state, and so on, contained in this and other Thomistic works have profoundly influenced subsequent philosophic constructions.

Beyond the middle period, the most influential theological synthesis was that of John Calvin's sixteenth-century work, *Institutes of the Christian Religion*. As influential on social and economic institutions as upon religious and theological speculations, the *Institutes*, like Thomas' *Summa*, employs the trinitarian elements as organizing principle.

Calvin affirms three separate functions within the economy of the one God:

> To the father is attributed the beginning of activity, and the fountain and wellspring of all things; to the son, wisdom, counsel, and the ordered disposition of all things; but to the spirit is assigned the power and efficacy of that activity.[127]

Despite the explicitly theological language, the importance of Calvinist thinking concerns the economic and social institutions as much as the theological. Weber's classic study, *The Protestant Ethic and the Spirit of Capitalism*, suggests something of the secular influence of Calvinism. Of equal importance is the effect of Calvin's affirmation of the need for institutional structures as means of rationalizing the will of God. "Institutes" and "institutions" are the proper mediators of God's purposes in the world. The development of schools, hospitals,

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In the developments surrounding Augustine's elaboration of the trinitarian doctrine as a tool of cultural interpretation, we can see how the Christian *mythos* comes to subsume both *logos* and *historia*. The triadic relations of these disciplining agents which originated among the Greeks and which yielded the richest possible analogies in subsequent cultural developments have now been articulated in relation to a narrative of sin and salvation.

Literature, philosophy, and history, which form the core humanistic disciplines, are tinged with the salvation problematic. And though the modern reactions against religion will recast the theological syntheses of the Middle Period, the persistence of the transcendent, progressive, moralistic interpretations of history and culture which originated with Augustine's theological synthesis will yield strange fruit when science, the secularized religion of the Enlightenment, takes hold of Western culture.

—— NINTH ANTICIPATION ——

Though the thematics of Greek philosophy pointed toward universalism, the effective expression of this universalist impulse emerged in the Hellenistic and Roman Empires with the employment of notions such as *imperium* and *humanitas*, and of the Augustinian understanding of Divine transcendence. Augustine's articulation of the analogies between the tripartite *psyche* and the trinity in the development of his doctrine of the *imago dei* absolutized and universalized the meaning of the human being. Further, Augustine's "invention" of the will, modeled finally upon the notion of Divine Agency, and his articulation of the meaning of history as an interplay of sin and redemption added distinctive elements to the Greek cultural synthesis.

Chinese culture is not shaped by any appeal to universal categories defining human nature and establishing "the unity of mankind"; rather, the Chinese refer to themselves in more provincial locutions such as "the people of the central states" or "the people of the Han." Thus, neither in their articulations of the meaning of being human, nor in their understandings of culture and history, do classical

contingent products of our peculiar historical development. Thus, in highlighting some of the important elements constituting our cultural sensibility, we shall, as we have insisted all along, be attempting to identify ideas, principles, and beliefs which, as historical products of our Western culture, may be employed in the interpretation of an alternative culture only with extreme caution. This is but to say that there is initially no strong reason to believe that the principal terms in our philosophic inventory—terms such as *nature, knowledge, freedom, law*, and so forth—have straightforward equivalents in alternative cultures. A fundamental reason for doubting such terminological equivalences lies in the conviction, which we shall be defending in chapter 3, that neither the sorts of theoretical constructs important to our culture, nor the means of accommodating the plurality of such constructs, serve the Chinese as principal media or means of cultural transmission.

Our insistence that we have provided a historicist treatment of the development of the Western cultural sensibility may seem paradoxical in the light of our endorsement of Whitehead's words just repeated, for Whitehead's historicism, if his views could be so characterized, was modeled on a cosmic scale. But we would contend that we have yielded none of our historicist method simply because we have chosen to highlight global features of Western culture as opposed to more specific ideas and practices. Tough-minded historicists are often disinclined to say anything about large-scale notions, finding it easier to do historicist analyses of this or that idea or institutional practice. But such a belief derives from those who seek to co-opt the term *historicism* for their own idiosyncratic ends.[132]

Precisely the same point is at issue in the discussion of putative wholes as for the consideration of any part. Claims about the "scheme of things entire" own the same historical contingency as does this or that particular doctrine or belief. Thus, we would claim that the interpretive constructs emergent from our tradition are no less contingent products of a peculiar set of historical circumstances than is any other idea, belief, or practice one might select.

Several strands of cultural development have comprised the threads of our narrative. Woven together, they form the fabric of our peculiar cultural sensibility. The first strand consists of the movement from Chaos to Cosmos, which sets the conceptual dominant for subsequent phases of Western culture. Cosmogonic myths as modes of

"What is x?" After Plato, responding to this query by merely giving an example of x was generally thought to be inadequate. A more appropriate response would be to give a definition which provides an account of what we have come to call the denotative and connotative characters of x. After the instrumentalizing of scientific rationality in the modern period, such definitions may include generalized descriptions of operations with, upon, or by recourse to x. But, in whatever way we seek to stipulate the meanings of a concept, we always presuppose a context of alternative notions which promote the understanding of the concept being defined. In other words, a definition which places limits upon the sense and use of a given term presupposes a *definitional context* which itself sets limits upon the degrees of variability a stipulation may possess within that context. Another way of saying this is that, with the development of a number of alternative theories, any given term will grow to have a number of alternative definitions. We can't, of course, use them all at once without falling into the sorts of contradiction we generally regard as undesirable.

The persistence of a plurality of meanings associated with multiple definitional contexts is largely due to the general demand that responsible thinkers be able to provide a context of justification, or a specialized theory, which clarifies the principal terms they employ, and of the de facto irreducibility of these contexts one to the other. In the most general sense, the broad traditions of thought, along with the family of formalized contexts of justification belonging to each, provide the theoretical resources of Western culture.

Within broad traditions of thought—such as we term *materialism, idealism, existentialism,* and so on—we must allow for limits to the sort of accommodation possible among the meanings of terms. Meanings of *nature,* or *freedom,* or *power,* or *causality,* or *law,* or *God,* may be stipulated in a variety of ways within each of the dominant traditions. Thus, we have a variety of distinctive materialist interpretations, and an equally large variety of interpretations which belong to the family of idealist theories, and so on. One way of attempting to sort out the disagreements between, say, Democritus and Plato, or Freud and Jung, would be to note the distinctive meanings each pair gives to putatively common terms, if any, and then to contextualize these differences by recourse to the more general patterns of thought to which each implicitly or explicitly appeals.

first ask after the material constitution of a thing. Efficient causes are then employed in conjunction with material causes to explain the organization and collocation of atoms by appeal to their essentially random motions.

On this view, all relations are extrinsic, and there is usually thought to be no room for human freedom.[135] Freedom is best understood as "freedom from responsibility." This psychological sense of freedom involves the recognition of the determinations of physical nature. These determinations, at the level of animal existence, involve the principles of pleasure and pain. We act, "by nature," to promote pleasure and avoid pain. Thus the primary analogate of this vision is *physical nature*, mechanically construed.

Materialism is a causal theory par excellence, since it is only by looking for determining causes that we are able to understand our world. Thus, in materialism, "the past" is the most important temporal mode. To understand is to construe the present and the future in terms of the past. Causal analysis is the primary philosophic method.

As we have noted, the classical Greek and Roman atomisms of Democritus and Lucretius were revived in the seventeenth and eighteenth centuries and made to serve as the basis for the newly developing physical and mathematical sciences (Galileo, Newton, Descartes), and the social sciences (Thomas Hobbes) as well. In recent times, the Freudian vision has employed the materialist paradigm as a means of interpreting the psychodynamics of human existence and behavior in terms of fundamental, unanalyzable drives or instincts. Freud's *Civilization and Its Discontents* provides a ready illustration of an interpretation of culture along materialist lines. Cultural artifacts, such as poetry and mathematical schemes, are sublimated products of repressed libidinal impulses. Civilization is a consequence of constraints placed upon behavior in accordance with the pleasure-pain principle.

Ludwig Wittgenstein's *Tractatus Logico-Philosophicus* became the bible of the positivist tradition by virtue of its analysis of language itself in terms of atomic facts, analogous to Humean simples, said to provide the means whereby we understand the world: "The World is all that is the case. . . . The world is the totality of facts, not of things."[136]

A second sort of philosophic vision is that of organic naturalism. Proponents of this view understand the kinds of things that exist to

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search for immortality beyond the world of becoming. The temporal mode of "eternity" dominates this view. The formalist vision persists into the modern age in all types of philosophical idealism, particularly Platonism, and in the psychologies of the sort represented by C. G. Jung, whose central notions of "symbol" and "archetype" suggest the ultimate reality of a world of forms.

The fourth vision is that of volitionalism. The volitional perspective affirms the dominance of efficient cause explanations associated with the actions of individual agents. To the question "What kinds of things are there?" the volitionalist answers, "There are persuasive actions," construed as expressive acts which presume the truth of Protagoras' slogan: "Man is the measure of all things." "Reality" is created by those individuals who influence their communities to accept their actions and constructions as models of understanding and action. Here one must accede to a "trickle down" theory of meaning and value.

The primary analogate of the volitionalist is "power." Thus all relations in the volitional world are power relations. Authentic individuals create themselves (and others) through persuasive expression. The power relations defining this world are both extrinsic and intrinsic, since the powerful do not need the weak, but the weak are dependent upon the powerful. Since persuasion is the goal of interaction, the volitionalist privileges present time, "the now." The Greek Sophists adumbrated this position; the modern movement of existentialism provided a variety of distinctive theories belonging to the volitionalist context.

The philosophic traditions emergent from these four distinct semantic contexts provide in a very general way the grounds for the variations in meanings of the important concepts of our intellectual inventory. "Nature," "knowledge," "power," "law," and so forth, are the notions which render possible full cultural self-understanding.

Now it seems obvious that, given the strong tendency of our tradition to seek the most comprehensive theoretical vision—the one that will ultimately be found "true"—attempts will be made to include the legitimate elements of the four semantic contexts in a more comprehensive and adequate theory. It is equally obvious, given the conflicting and often contradictory character of the terms stipulated within these semantic contexts, that there will be limits to the amount of accommodation that will be possible.

The effort to discover the truth of things through the construction

the trinitarian doctrine. As we suggested, the immediate impetus for the development of the doctrine of the trinity, however, lay in the need for mediation between a transcendent and an immanent realm.

These trinitarian elements, analogized from the *psyche*, become the ground of analogical procedures which led to the considerations of social relations as patterned by love, power, and justice. With this development, we are able to understand ourselves not only in terms of our internal psychic structure and its social analogue, but, as well, by reference to a transcendent realm paralleling our own.

A final strand of our cultural paradigm, though nascent in the Platonic and Aristotelian notion of the *psyche*, reached its full development only in the modern age. We refer to the articulation, beginning with Immanuel Kant, of the value spheres of art, morality, and science, and the consequent development of autonomous cultural disciplines grounded in these interests. The Aristotelian notions of theoretical, practical, and productive sciences, analogized from the tripartite *psyche*, served Kant in his articulation of the autonomous value spheres. Kant's three critiques (*The Critique of Pure Reason, The Critique of Practical Reason,* and *The Critique of Judgment*) establish the grounds for the autonomy of science, morality, and art. In attempting to win autonomy for the value spheres, Kant was also trying to win freedom for the individual as a thinking, acting, and feeling creature.

Kant was, of course, aware of a fourth value sphere which had laid claim to its autonomy with the emergence of the transcendent religions of Judaism and Christianity. Though Kant's Enlightenment sensibilities could not permit it full autonomy, religion was the subject of his *Religion Within The Limits of Reason Alone.* In Hegel's thought, which purports to carry through Kant's project, Kant's condemnation by faint praise is both doubled and undone through the sublation of religion into philosophy as the final avatar of the Hegelian system.

The consequence of the articulation of the value spheres in modern times is that five cultural interests have come to dominate the disciplinary activities of Western intellectual culture: science, morality, art, religion, and, finally, philosophy, which "takes survey of all the world." These are the interests with respect to which the modern

have been replaced by conceptual structures such as are expressed in theoretical traditions, and models of the human *psyche*, and so on, which serve to organize conceptions of self, society, and the formal interests of intellectual culture. With the emergence of cultural self-consciousness in the modern period, metatheoretical schemes have been devised to express the original cosmogonic motivation by seeking to organize the ways of organizing.

In the modern period, the complex relationships existing among the functions of the *psyche*, the persons of the trinity, the structures of society, and the interests of intellectual culture have formed a sensibility matrix which, when informed by the principal models of the organization of knowledge, and variously interpreted by recourse to the primary semantic contexts and their specialized permutations, have served as fundamental agencies of construal with which we, as the most recent representatives of second problematic thinking, have furthered the project of bringing order from out of chaos.

A culture such as ours, articulated in terms of second problematic thinking, is *theoretical* in a manner that a first problematic culture would not be. What this means, as we shall proceed to show in the following chapters, is that the meanings of ideas and doctrines are to be found by rendering them in semantic contexts which, as traditions and/or theories, serve as principal repositories of cultural significances. Further, in a theoretical culture, the accommodation of ideas and beliefs is achieved in large manner though the search for rational consensus which proceeds by appeal to dialectical interactions among proponents of alternative semantic contexts and their institutionalizations. As we shall soon see, the attempt to compare theoretical, second problematic thinking with that emergent from first problematic thought runs afoul of this serious problem: Both the means of envisioning the world and the manners of accommodating alternative visions are radically distinct among proponents of the two sorts of thinking.

In accordance with our general desire to remove the useless lumber that blocks the pathway to China, we shall be claiming that, in our interpretations of Chinese culture, attending to the semantic contexts dominating our culture will preclude the un-self-conscious employment of terms deriving both from the broad intellectual traditions represented by the four primary semantic contexts, and *a fortiori* from the specialized theories which specify these broad traditions.

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mary semantic contexts as frameworks within which to articulate and refine the crucial vocabularies that have shaped philosophic speculation, and of the dialectical interactions among these contexts and their institutional manifestations. Of equal importance has been the manner in which the five principal cultural interests of art, morality, science, religion, and philosophy developed as important cultural determinants. The rational ethos we have outlined, though defined in the modern period as a search for truth and objectivity, may equally be seen as a consequence of the need to handle the intransigent ethnic, linguistic, and sociopolitical diversity of the tradition. The results of dialectical disputations among the various theoretical visions, as well as among the claims of the various value interests, shaped the character of the culture at any given time.

What is achieved in the West by dialectical accommodations of distinctive viewpoints is realized in China by institutionalized "vagueness." By refusing to stress the univocality of concepts or the hypothetico-deductive or axiomatic systematization of theories, and in the absence of a strict delineation of a variety of cultural interests, the Chinese have not so persistently raised to the level of consciousness the presence of distinctive semantic contexts, nor have they foregrounded to nearly the extent this has taken place in the West, the sorts of dialectical conflicts among opposing theoretical contexts. The greater homogeneity realized by the Confucian synthesis in the classical period allows, nonetheless, for the efficacy of rich and nuanced, albeit tacit, significances. Thus, it is important when interpreting the character of Chinese culture to pay attention not only to the contrasting inventory of ideas and practices, but equally to the manner in which these ideas and practices are fixed and transmitted.

The strands which, loosely woven together, establish the rational ethos of the Western tradition must be recognized as contingent historical products. If we approach the task of interpreting the various elements of Chinese culture with the tacit belief in the existence of a single-ordered world

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to shift. Today, the project of modernity has fallen prey to late modern critics who, in almost as many ways as there are critics, challenge the hegemony of objectivity. Broadly, however, these critics follow the paths set out for them by Kierkegaard and Nietzsche. Some attempt to rehabilitate the intuition of process and becoming, through a direct appeal to experience; others set out to uncover the paradoxes of consciousness and language which force us back into "the flux of passing circumstance."

Kierkegaard, Bergson, James, Dewey, and Whitehead follow the direct route. Nietzsche, Heidegger, the later Wittgenstein, Foucault, Derrida, and Rorty take the winding path. The vast differences among the members of each of these motley assemblages does not undermine their common mission: All challenge the ultimacy of fact and return to the language of the first problematic.

Philosophers no longer maintain a critical distance from the mythic and poetic elements in culture. On the contrary, since most of the critiques of modernity are motivated by a desire to unmask the metaphorical character of our putatively rational discourse, we are as apt to look to novelists and poets, shepherds of our mythopoetic resources, as to the philosopher or scientist for insight and understanding. Thus we have grown to have less faith that our story is one of the steady growth of reason, or that the movement away from the mythopoetic to the scientific mode of thought and activity is either apt to or ought to continue.

Most contemporary challenges to the ultimacy of fact are Nietzschean rather than Kierkegaardian. That is to say, the majority of critics begin with the failure of the language of literal fact, rather than with the immediate experience of becoming. For Heidegger, the language of Being cannot be strictly propositional. Truth expressed by such language cannot be seen as the correspondence between reality and appearance or as the coherence of propositions within a logically consistent context. Truth is *aletheia* (ἀλήθεια), "uncovering," "unconcealment"—a notion difficult to apply within an ontology of fact, but most appropriate to the attempt to "think the difference of Being and beings."

The later Wittgenstein challenged the belief that the analysis of language could yield univocity. There are an indefinite number of ways of sorting the relations between language and reality, on the one hand, and language and its logics, on the other. Recognizing family

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problematic thinking could be salvaged by expunging unnecessary resorts to causal explanation and by rehabilitating the constitutive role of analogical and metaphorical language.

One of the central beliefs of the Enlightenment is giving way. Late modern challenges to the project of modernity have rendered problematic the orthodox account of the *logos/mythos* relationship. Judging from our present cultural ferment, the *mythos*-to-*logos* model of cultural development tells only half the tale. The second half of our story promises to be a reversal of the first. Therefore, the appropriate model for cultural activity must combine both the progress and regress of rationality.

Culture, by analogy to our most popular cosmogonic model, may express itself in the rhythmic pulsation from origin to end followed by a return to the beginnings. Our story may well turn out to be one of expansion from an indefinitely compact mythopoetic stuff, followed by "a return of the dispersed" to its source. A Big Bang model of cultural development suitably accounts for our time of reversal, our movement from *logos* back to *mythos*, which effects the unconcealment of our origins and elicits a celebration of the chaos of sensibility prior to sense.

Our narrative of the development of the Western cultural sensibility in terms of the first and second problematics has provided a context within which to approach the task of intercultural conversation. For we are now able at least to begin to set aside the more intrusive of the second problematic assumptions and consider how the world might appear to one whose sense of things is informed by first problematic thinking. What this means is that if, as we shall now argue, the Chinese sensibility resonates with first problematic intuitions, we are in a better position to understand Chinese culture than are those who remain enthralled by the "transcendental pretense."

By recourse to the distinction of the two cultural problematics, we have tried to argue that any culture is more complex than the dominant problematic that shapes it. We shall now attempt to demonstrate that complexity by articulating in greater detail the contrasting cultural problematics that characterize classical Western culture as a means of understanding the contingency of our dominant mode of cultural expression. For recognizing this contingency will prevent us from assuming that classical China must be evaluated by appeal to the idiosyncrasies of our own cultural paradigm.

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1. For an extensive analysis of the characteristics of "modernity," see Hall (1994), chapter 1, "Holding One's Time In Thought."

2. Robert Frost (1963:145), "In the Home Stretch."

3. Aetius 2.1.1 (DK 14, 21) in Robinson (1968:77). Note: We have taken most of the material from the Presocratics from two readily accessible English language sources: Kirk and Raven (1964) and Robinson (1968). The abbreviations of the original sources are consistent with those used in these two works. In most cases we have been able to include from these two sources (in parentheses after the original citation) the reference to the standard comprehensive source—H. Diels and W. Kranz, *Die Fragmente der Vorsokratiker*, Berlin (abbreviated as DK).

4. Simplicius *Phys.* 24.13 (DK 12 A 9) in Kirk and Raven (1964):106–107.

5. Many cosmological concepts were applied to the natural world by analogy from the social and political context. See Frankfort et al. (1967), Cornford (1957), and Lloyd (1966) for illustrations of this analogical process. There is nothing surprising about this fact. Abstract thinking of the sort associated with general philosophical or theoretical concepts more than likely involves the process of progressive generalization and refinement which leads from the specific and familiar to more general contexts.

6. Though we are by no means able to deal with issues beyond the formative period, we should note that the analogical "invention" of the cosmos is not itself an isolated instance of the employment of rhetoric and poetics in the understanding of the "universe." See, for example, Hallyn (1990:117–118), for a discussion of the tropic procedures of Copernicus and Kepler in their transitions away from the Ptolemaic models:

> Copernicus' enthusiasm for the sun's centrality reveals his desire to protect created space from the homogeneity of Euclidean space where all locations are like all others.... For Copernicus the sun's location is eminently *suitable*: It is not located at a random point in infinite space but at the predominant place within created space.

7. Diogenes Laertius 9.19 (DK 21 A 1) in Robinson (1968:54).

8. Augustine *Civitas Dei.* 8.2 (DK 12 A 17) in Robinson (1968:39).

9. Hippolytus *ref.* 1.13.2 (DK 68 A 40) in Kirk and Raven (1964:411).

10. This view is still present in the modern period. No less a figure than Isaac Newton, doubtless for reasons not unlike those of Democritus, accepted the possibility of a plurality of worlds, though he balked at the notion on theological grounds. See Newton (1952:543). Likewise, A. N. Whitehead's notion of "cosmic epochs"—world-orders which succeed one another over vast expanses of time—is a version of the many-worlds view. See Whitehead (1978:91–92, 96–98, 197–199).

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27. Alexander Pope (1965:181), *Dunciad* 1.653.

28. See Eliade (1961:95–104 and *passim*).

29. Snell (1960:205).

30. Sappho Poem (137). Quoted in Snell (1960:53).

31. According to Martha Nussbaum (1986:51), "The *Antigone* is a play about practical reason and the ways in which practical reason orders or sees the world."

32. Snell (1960:112).

33. The later division of labor which led to history having the "past" as its subject matter, while philosophy was to concern itself with eternal or rational-nontemporal factors, was a result of the Platonic and Aristotelian attempts to organize the dominant cultural interests.

34. See Nussbaum (1986:20).

35. *Ibid.*

36. Nussbaum's work, along with that of Bernard Williams' *Shame and Necessity* (1993), and more recently Lisa Raphals' *Knowing Words—Wisdom and Cunning in the Classical Traditions of China and Greece* (1992), continues a line of thought that begins, perhaps, with Nietzsche and Rohde in the nineteenth century and includes such works as Bruno Snell's *The Discovery of the Mind* (1960), E. R. Dodds' *The Greeks and the Irrational* (1951), and Adkins' *From the Many to the One* (1970), among others. These works, as various as they may be in their specific foci, constitute a significant counterdiscourse to the rationalistic interpretations of Greek culture exemplified by works such as John Burnet's *Greek Philosophy* (1964) and F. M. Cornford's *From Religion to Philosophy* (1957). (Cornford significantly modified his understanding of the origins of Greek intellectual culture in his posthumously published *Principium Sapientiae* (1952).) But it is doubtful whether any of these, with the possible exception of Nietzsche, and then only with respect to his more general philosophical writings, escapes the strictures of the second problematic. Indeed, it is equally doubtful that, again with the same exception noted, any of these individuals wishes to do anything more than to add significant depth and nuance to second problematic thinking.

37. Aristotle (1984): *Metaphysics* 985b23–34.

38. See Kirk and Raven (1964:269–273) for a detailed discussion of the Parmenidean fragments interpretable in terms of the identity of being and thinking.

39. Simplicius *Phys.* 145.27 (DK 28 8, lines 34–36) in Robinson (1968:115).

40. Simplicius *Phys.* 146.15 (DK 28 B 8, lines 42–49) in Robinson (1968:115).

41. See Brumbaugh (1985:59–67) for a discussion of Zeno's paradoxes employing this sort of analysis.

mental sense of paradox and the belief that philosophy, if it is to be true, must not be taught indirectly and abstractly; it must be expressed directly."

60. [Aristotle] frag. 10 *de mundo* 5.396b20 in Kirk and Raven (1964:191). The reference is to a pseudo-Aristotelian source.

61. Clement frag. 30 *Strom.* 5.104.1 in Kirk and Raven (1964:199).

62. See Vlastos (1975:3–6).

63. See Kirk (1954).

64. Aetius 1.3.4 (DK 13 B 2) in Kirk and Raven (1964:158).

65. Clement Frag. 15 *Strom.* 110 (DK 21 B 15) in Kirk and Raven (1964:169).

66. Clement Frag. 23 *Strom.* 5.109 (DK 21 B 23) in Kirk and Raven (1964:169).

67. "But without toil [this god] sets all things in motion by the thought of his mind." Simplicius *Phys.* 23.19 (DK 21 B 25) in Robinson (1968:53).

68. Sextus Frag. 24 *adv. math.* 9.144 in Kirk and Raven (1964:170).

69. *Iliad* 5.190.

70. *Iliad* 5.902.

71. Frag. 103/84 in Inwood (1992:249).

72. Frag. 27/23 in Inwood (1992:219).

73. Quine (1963:44).

74. See Hall (1987) for a discussion of the inveterate anthropocentrism of the most general and abstract speculation.

75. When we have occasion to discuss philosophical Daoism in chapter 3, we shall see resorts to notions of anthropocentrism and anthropomorphism seriously qualified. The Daoist enjoins taking up the perspective of the subject of one's interest. The important point, however, is that such an approach is diametrically opposed, as is anthropocentrism, to notions of rational objectivity.

76. See Kerferd (1981:59–60) for a discussion of Zeno's contribution to dialectical argumentation.

77. Sextus frag. 3.1.9 *adv. math.* 7.125 in Kirk and Raven (1964:325).

78. Simplicius frag. 17.1.6 *Phys.* 158.6 in Kirk and Raven (1964:324).

79. Aristotle (1984): *On the Heavens* 300b9–16.

80. Censorinus *De die natali* 4.9 (DK 68 A 139); Lactantius *Inst. div.* 7.7.9 (DK 68 A 139) in Robinson (1968:216).

81. Lucretius influenced Enlightenment thinkers though his long poem, *De Rerum Natura* (*The Nature of Things*). The poem was apparently a rather faithful expression of the atomism of the Greek, Epicurus (341–270), who had modified Democritean atomism in a manner which permitted an account of human freedom, thus allowing for a fuller exposition of the ethical implications of atomism. However, relatively little of Epicurus'

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96. Adkins (1970:17). See also Snell (1960) and Dodds (1951) for discussions of the "Homeric view of man" which characterize the "fragmentation" of personality in the early Greek world.

97. Adkins (1970:21).

98. Snell (1960:15).

99. Adkins (1970:26).

100. We are here using *nous* as a general category to name the element of reason in order to associate it with *noesis*—the activity defining "fourth level" thinking in the *Republic*. There are all sorts of complexities that need be addressed with regard to other terms Plato applied throughout his corpus (the use of *logistikon* as the faculty of reasoning in the discussion of *psyche*, for example). We would hold, however, that when the dust cleared, we finally would be left with *noesis*, *dianoia*, and *pistis* as the correlates of the reasonable, ambitious, and appetitive (ruler, soldier, and producer) classes in the *Republic*. See, for example, Brumbaugh (1985:165–171). The problem of the meaning of *psyche* in Plato is, indeed, a challenging one. For a summary of some of the complexities, see Adkins (1970).

In any case, in this present work, our concern to trace the development of dominant cultural sensibilities in terms of the subsequent use of taxonomic models such as the Divided Line and the tripartite structure of the *psyche* is a descriptive one. We are not endorsing the manner in which such uses have oversimplified the very real complexities internal to the Platonic corpus; we are merely reporting on their evolution and their influence in providing the vocabularies that shape our cultural self-consciousness. As philosophers of culture, we must be attentive to philosophical or cultural *importances* rather than interpretive veracity. We are concerned, therefore, with the manner in which "important" texts have been read rather than with the manner in which we believe they should have been read. The story of intellectual culture is, after all, largely a tale of the "strong misreadings" of texts.

101. John Dewey, of course, makes this point at the beginning of his *Quest for Certainty*. See Dewey (1960).

102. Aristotle (1984): *Metaphysics* 1025b25–26.

103. Aristotle (1984): *Metaphysics* 1025a20–21.

104. See the comparisons of Chinese and Western models of the organization of knowledge in chapter 3 for further elaboration on Plato's and Aristotle's classifications of the ways of knowing and of the body of the known.

105. The later step, taken in the first instance by Augustine, was to connect the sense of source, origin, and principle with Divine Agency. See Augustine's causal arguments in Augustine (1950): Book 9.

106. This judgment (which would be severely criticized by any who believe that the Milesians took seriously the senses of *physis* involving

124. Thus Paul Friedländer (1958:193), perhaps, provides a somewhat anachronistic interpretation when, discussing Plato's figure of the soul as chariot and charioteer, he claims:

> The two horses are of different kinds, the one being desire (*epithymia*), the other will, drive (*thymos*). Either the mind bridles the two in balance or they drag it with the charioteer into the abyss.

125. See Augustine (1950): Book 19 and *passim*.

126. See Cochrane (1957:480, 399–455). One should not undervalue the effects of Augustine's use of the Johanine notion of *Logos* as the Christ, which helped to provide sophistication and nuance to the original sense of *logos* as "causal account."

127. Calvin (1960): 1.13.18.

128. See Hegel (1961).

129. Feuerbach (1966:72).

130. An example of such usage drawn from the contemporary period is that of Paul Tillich's theological writing. Tillich (1954) makes the analogies explicit. Tillich (1951, 1957, 1963) elaborates the trinitarian analogies in every conceivable direction—from psychic to social relations—in the development of his systematic theology.

131. Whitehead (1968:65–66).

132. For a discussion of the complex issues involved in laying claim to a historicist method, see Hall (1994:53–64).

133. We shall be comparing Aristotle's organization of knowledge with Chinese "encyclopedic" models in chapter 3.

134. For a discussion of the metaphilosophical schools prominent in contemporary philosophy and a list of bibliographical references, see section 3 of the following chapter, entitled "Comparing Comparative Methods."

135. Some materialists attempt to account for freedom by recourse to a variety of ad hoc devices. But the fact that the materialist paradigm has been applied most often to the subjects of scientific inquiry has mitigated any concern to account for freedom from this perspective.

136. See Wittgenstein (1961:7).

137. For a discussion of the importance of the Kantian and Hegelian treatments of the value spheres to the development of our understanding of modernity, see Hall (1994:29–33).

138. For example, we have used the term *philosophy* in an advised manner to apply to certain modes of Chinese thinking. As we shall see in chapter 3, when applied to Chinese thinking, the term fails to overlap in significant ways its principal senses in the West.

139. See the early essay by Derrida (1982) entitled "White Mythology." One might also consult Rorty (1979). Rorty holds that metaphors such as