

## 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.

A.N. Whitehead

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.

John Dewey

**W**estern 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-

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.<sup>1</sup>

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.

## 1. FROM CHAOS TO COSMOS

In characterizing the shape of our intellectual culture we should like to begin at the beginning. But if our discussion must presuppose a world—that is, a cosmos as an ordered whole—we are hardly able to do so. As reasoning creatures, we seem forced to cut short any return to the origins and “begin” *in medias res*. Celebrating the truth of Virgil’s advice in the words of Robert Frost, we feel constrained to say:

Ends and beginnings—there are no such things.  
There are only middles.<sup>2</sup>

Reasonable words, certainly: the end hasn’t come, and the beginning is lost in the obscurity of chaos. Were we to stalk the time of beginnings before there was order or harmony, we could find only irrationality, since reason as the means by which we grasp first principles would take us only as far as that moment after the illumining of chaos. Reason and reasoning are tied to the notion of primordial beginnings. Cosmologies are the groundworks of rational order. Cosmogonies, by presupposing a “time” characterized by a basic irrationality, or nonrationality, remind us that beyond the conception of an ordered and harmonious universe lies emptiness, alienation, confusion. Pursued to their ground, therefore, all theories, principles, laws, and valuations characteristic of our Anglo-European culture dissolve into the yawning gap, the emptiness, the confusion, of our chaotic beginnings.

The *Oxford English Dictionary* tells us that “beginning” refers to “the action or process of entering upon existence,” “that out of which anything has its rise.” The source of this arising is chaos (χάος)—“the elemental,” “the first state of the universe,” “the great deep or abyss.” Further: “principle” (*arche* ἀρχή) is directly related to *archon* (ἄρχων), one authorized to *give orders*. Principles are beginning points of thought and action. But “beginning” itself is a richly poetic term carrying, through primary associations with the Old English *gínan*, the meaning of “the yawning gap,” or “gaping void” of chaos. Principles and beginnings dissolve, at their roots, into arbitrariness and confusion.

Thus, *arche*, *principium*, beginning, all refer to the *origin*, “the first state of the universe”—namely, chaos. We contrast chaos with

“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.<sup>3</sup>

Anaximander (?611–?547) believed that all things arose out of “the boundless (*τὸ ἄπειρον*).” 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.<sup>4</sup>

What is striking about this citation from Anaximander is that the world-order is analogized from the order of the law court.<sup>5</sup> 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.<sup>6</sup>

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.<sup>7</sup>

Indeed, it was commonly accepted by the early chroniclers of philosophy that Anaximander believed in an infinite number of worlds which succeeded one another in time. This is an implication of his vision of the harmony of opposites. All things that come into being from the boundless must return to it. This includes any given world-order:

These world-orders, Anaximander supposed, are dissolved and born again according to the age which each is capable of attaining.<sup>8</sup>

Democritus, too, believed in the existence of a plurality of worlds:

In some worlds there is no sun and moon, in others they are larger than in our world, and in others more numerous. The intervals between the worlds are unequal; in some parts there are more worlds, in others fewer; some are increasing, some at their height, some decreasing; in some parts they are arising, in others failing. They are destroyed by collision one with another. There are some worlds devoid of living creatures or plants or any moisture.<sup>9</sup>

Democritus' view that a plurality of world-orders coexist in space is a consequence of his assumption of an infinite number of eternally existing atoms randomly colliding in infinite space. The likely combinations of atoms into elements, compounds, planets, star systems, and so forth would be infinite, and over an infinite amount of time these combinations would be realized, but it is also true that in infinite space an indefinitely large number of world-orders would coexist.

One of the valuable lessons of returning to the origins of philosophic speculation is we thereby discover that many of our more obvious commonsense beliefs are the result of choices made at the beginning of reflective thought. Order is not presupposed, but constructed by analogy to the artificial order of human society. That there is a single world is not a given but is something that comes to be believed.<sup>10</sup>

One interesting bit of evidence about the early controversy concerning the question of one or many worlds comes from Plato's writings. In the *Philebus*, Plato has Socrates enjoin censure against the "blasphemy" that "the sum of things or what we call this universe is controlled by a power that is irrational and blind," and is "devoid of order."<sup>11</sup> And in the *Timaeus* there is the claim that "the creator made

not two worlds or an infinite number of them, but there is and ever will be one only-begotten and created heaven.”<sup>12</sup> 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.<sup>13</sup>

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.<sup>14</sup>

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.<sup>15</sup>

The description of the source or origin as a formless, dark, void is similar to the characterizations of chaos in terms of the “primordial waters” in Egyptian and Mesopotamian creation myths. Such a cosmogonic process tells of a victory over the forces of chaos. God’s command in *Genesis*, “Let there be light,” establishes order by a command.

Besides the vision of chaos as formless nonbeing,<sup>16</sup> there is the position of the Orphic cosmologies of the fifth- and sixth-century B.C.E. which interprets chaos as “separation,” reflecting one of the root meanings of chaos—namely, “yawning gap.” In these myths, chaos is often associated with the gap between heaven and earth. Eros, as specifically sexual or procreative love, serves as the means of unifying the two and overcoming chaos.

Hesiod’s *Theogony* tells of the coming into being of earth and sky and of the region in between. The union of earth and sky achieves unity at the cosmological level.<sup>17</sup> This myth may have been influenced by the Babylonian creation epic, *Enuma elish*, with its division of Tiamat into sky and earth, as well as by *Genesis*, which tells of God’s division of the waters below and above the firmament. Of course, the specific senses of chaos in the two myths are distinct.

The sexual imagery in Hesiod (Earth = Female, Heaven = Male) suggests that opposition is at the root of generation but that differentiation of this sort entails distance, a gap, chaos. Aristophanes’ myth of the round men in Plato’s *Symposium* rings a variation on this theme. Individuals, split in two by Zeus, seek through the agency of eros to reestablish their original wholeness. The separation, the chaos, that came into being with sexual differentiation is to be overcome by love.

A third type of cosmogonic myth is illustrated by Plato’s *Timaeus*. Here the imposition of order through persuasion leads to the creation of an ordered cosmos:

Desiring, then, that all things should be good and, so far as might be, nothing imperfect, the god took over all that is visible—*not at rest but in discordant and unordered motion*—and brought it from disorder into order. . . . Reason overruled Necessity by persuading her to guide *the greatest part of things that become* towards what is best; in that way and on that principle this universe was fashioned in the beginning by the victory of reasonable persuasion over Necessity.<sup>18</sup>

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.<sup>19</sup>

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.



As regards the question of origins, Gnostic myths share the same attitude toward chaos.

We do find interpretations of chaos which are not wholly negative. According to Werner Jaeger,

The common idea of chaos as something in which all things are wildly confused is quite mistaken; and the antithesis between Chaos and Cosmos, which rests on this incorrect view, is a purely modern invention. Possibly the idea of *tohu wa bohu* has inadvertently been read into the Greek conception from the biblical account of creation in *Genesis*.<sup>20</sup>

It is true that, for Aristotle, chaos meant merely "empty space."<sup>21</sup> But then Aristotle's use of the term was itself quite modern compared to that of the Orphics and Hesiod. Already Aristotle has demythologized the concept of beginnings by employing the notion of "principle" (*ἀρχή*) in a nontheological context. Aristotle is part of a tradition that has begun to forget the presence of the chaotic that lies directly beneath the surface of a no-longer-mythologized language.

The effect of the cosmogonic tradition, nonetheless, remains powerful. Jaeger is doubtless correct, as well, when he notes that the Semitic *tohu wa bohu* has been read into the Greek meanings of chaos. But it was not only the Semitic, but the Orphic and Platonic versions of chaos as well, that have reinforced the negative sense of the term.

As the etymology of "chaos" suggests, the construal of reason in terms of *arche* or *principium* is dependent upon mythical sources. Aristotle's avoidance of mythopoetic language and his rejection of the need to posit any initial creative act did not prevent him from serving as the primary source of our understanding of principles as determining sources of order.

According to Aristotle, a principle, is "that from which a thing can be known, that from which a thing first comes to be, or that at whose will that which is moved is moved and that which changes changes."<sup>22</sup> As such, principles of knowledge and of being are the origins of thought and sources of origination per se. In the political realm, an *archon* or *princeps* is one who gives orders.

Any who doubt the negative characteristic of chaos have only to reflect upon the traditional Western attitudes toward political anarchy. Anarchy is feared as much as it is because, at the most general

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."<sup>23</sup> Milton calls it a "wild Abyss, the Womb of nature and perhaps her Grave."<sup>24</sup> 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.<sup>25</sup>

We celebrate "the great morning of the world when first God dawned on Chaos,"<sup>26</sup> 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.<sup>27</sup>

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."<sup>28</sup>

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

tant in our tradition. Further, if stories of the origin are stories of the overcoming of chaos, one can immediately see how the sense of *agency* creeps into these early myths. It is from this sense of agency directed toward the construal of order that both the notions of rationality and causality emerge. To reason is to construe or uncover order; it is to think *causally*.

It is important to make this point now since the account of our cultural development found in the following pages will articulate the persistence of a tradition of thinking alternative to that of the rational and the causal. This tradition, associated with what we are calling “first problematic thinking,” seeks understanding through the employment of informal analogies based upon meanings associated with images and image clusters. What we shall call “second problematic thinking,” on the other hand, is privileged in our tradition in large measure because of the sense of chaos as the absence of order which must be somehow brought into an ordered state.

#### —— FIRST ANTICIPATION ——

Cosmogonic speculation of the kind described above was a fundamental element in the process of cultural self-articulation in the West. Notions of “Being” and “Not-Being,” of “Cosmos” as a single-ordered whole, of “principles” as the origins of order and, specifically, of “causal agency” as an important explanatory principle—in short the central components of the concept of “rationality”—are grounded in the myths of origins to which the founders of the Hellenic and Hebraic traditions appealed. The account of the development of the classical Chinese cultural sensibilities in chapter 3 will demonstrate that the sort of cosmogonic speculations central to the Western tradition were of no great importance to the Chinese. When accounts of the origins of things do appear with regularity in the Chinese tradition in the Han dynasty, they are genealogical narratives which tell, not of the creation of a “cosmos,” but of the emergence of the “ten thousand things.” The Chinese tradition, therefore, is “acosmotic” in the sense that it does not depend upon the belief that the totality of things constitutes

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.

In spite of the eventual privileging of *logos* as “rational account,” *mythos* was the source of all modes of accounting. Indeed, an implication of our argument that second problematic thinking is but an elaboration of the agencies of construal associated with cosmogonic myths is that rationality per se emerges from a mythical ground which it never succeeds in surmounting. Thus the presumed rationalization of mythical thought associated with the rise of philosophy and science, history, and secular literature, is nothing more or less than the perfecting of that *mythos* constituted by accounts which tell of the overcoming of chaos. Reason is the elaboration and ramification of the cosmogonic impulse.

This is but to say that *mythos* grounds *logos* and *historia*. But the earliest ramifications of *mythos* involved the emergence of the genres of epic, lyric, and tragic poetry. These developed as three principal media of mythical expression. In the Homeric epic, mythic themes are employed as a means of setting up structural analogies expressing similarities between the human and the mythic realms. These structural analogies help to meet “our need for establishing our place in the world order by means of comparisons, in order to arrive at a tolerable degree of certainty and stability.”<sup>29</sup> Likewise, the judgments of the gods, and their mutual conflicts and transactions, form the mythical matrix in terms of which events in the human world are played out. Direct interventions of the gods and goddesses account for significant actions and events in the human realm. *Ate* “strikes Agamemnon in the breast”; Zeus induces in him a false dream—in such manners are the events of the *Iliad* directed. Again, once the gods, after some debate, decide that Odysseus will be allowed to return home safely, a significant amount of divine intervention is required to bring this about.

With respect to the lyric, myth serves a more personal, self-creating, function. When Sappho sang

Once more Eros, looser of limbs, drives me about,  
a bitter-sweet creature which puts me at a loss<sup>30</sup>

she told, as did Homer, of divine intervention. But the effects of the two sorts of intervention are quite different. *Ate*'s intervention occasions the action that calls for the wrath of Achilles, thus serving as a primary motor of the events recounted in the *Iliad*. The intervention of Eros brings the mixed pain and joy of love to the individual, Sap-

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.<sup>31</sup> Though the deliberations taking place within Greek tragedies do indeed take place in a world largely determined by *Moirai* (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.<sup>32</sup>

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

tether, nor do they simply affix them as metaphorical accouterments meant to add depth to their speculations. Simply by appealing to principles as determining sources of order, by pressing for univocal definitions that bring order into thinking through the process of wringing clarity from vagueness, and by the ordering of concepts in a coherent theoretical frame, philosophical speculation—indeed, rational speculation of any kind—advertises its embodiment of the cosmogonic impulse from which reason was born. Even in its most immediate forms—as epic, lyric, and tragic poetry—*mythos* serves as a securing, stabilizing, *rationalizing*, medium, bringing order into the otherwise chaotic actions, emotions, and deliberations of human beings.

Turning to the development of *logos* and *historia* as modes of accounting, we should note that both the disciplines of history and of philosophy have their prominent origins among the Milesian Greeks. “Historians,” particularly the Milesian, Herodotus, were greatly influenced by the materialism of the *physiologoi* (*φυσιολόγοι*). The first philosophers wished to provide an account of the *physis* (*φύσις*) of things. The marriage of the terms *physis* and *logos* shaped the philosophical preference for permanence over process and change.

The term *physis* has come into our tradition through the Latin, *natura*, both terms being translated as “the nature of things.” But it is clear that both *physis* and *natura* have roots suggesting “birth” and “growth,” associations which were progressively lost with the increasing dominance of substantialist and causal interpretations in later Greek philosophy.

Philosophy provides an account of the *physis* of things—the way things are. But the search for this *physis* involves *logos*. It is a structured accounting that is sought. History, thus, has the sense of “enquiry,” but this enquiry was itself initially characterized as involving *logoi*, “accounts.” By offering an account of important public events, the historian provided for the world of human affairs what the *physiologoi* provided for the natural world.

Herodotus and Thucydides in their activity as historians provided accounts (*logoi*). It would be mistaken to think of history as something like a chronicle of the past.<sup>33</sup> The first historians were closer to ethnographers (Herodotus) and war correspondents (Thucydides). The first mythographers, the *philomythoi* (*φιλομῦθοι*), were those who sought to account for past and present time in terms of the time of beginnings.

*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.”<sup>34</sup> Tragedy includes both norms of rationality, “criticizing (the former) with reference to the specifically human value contained only in (the latter).”<sup>35</sup> 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



cultural self-consciousness. It is Aristotle as arch-patron of the second problematic who has owned the most powerful cultural import.

Moreover, as our brief discussion of the function of *mythos* in epic, lyric, and tragic poetry has suggested, the sort of understanding Nussbaum identifies is presented within the context of the “fragile” and “vulnerable” character of the good life. Fragility and vulnerability are shadows, echoes, of that sense of chaos which underlies second problematic thinking.

Our point is simply this: Second problematic thinking is deeply embedded in our culture, and there are real constraints placed upon the possibilities of historical reconstruction. In this present instance, accepting Nussbaum’s non-Platonic version of rationality—a vision which, as we shall discover in chapter 3, in many ways resonates well with Confucian or Daoist understandings—would urge us, as well, to import the tragic vision of the Greeks, shaped by responses to vulnerability and fragility. And to do this would mean that we had imported the cosmogonic mechanisms undergirding second problematic thinking into a context largely alien to them.

There is no question that reflections such as those Nussbaum and others<sup>36</sup> have provided can be valuable in suggesting interpretive strategies which will serve us better than those alternatives that have so clouded our understandings of classical Chinese culture. But we must be cautious in any attempt to employ theoretical constructs directly from one culture to another.

There is a larger point to be made: What we are calling second problematic thinking, at its maturity, will be forwarded by its advocates as a transcultural, universal sensibility. Proponents of rational, causal thinking will not be constrained by any presumed culture-specificity from applying rational methods in interpreting alternative cultures. On the other hand, first problematic thinking *is* culturally specific, and the shape of first problematic activities vary from one culture to the next. What this means is that even the purest examples of first problematic thinking in our culture may be used only suggestively, and by analogy, to interpret an alternative sensibility. It is for this reason that we are performing the negative task of indicating what amounts to “useless lumber,” rather than elaborating in any detail the specific content of our first problematic thinking as a means of attempting to identify transcultural constructs. While we wholeheartedly endorse the historical reconstructions of the sort repre-

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

“matter” (*hyle ὕλη*), a term perhaps first used stipulatively by Aristotle, into something inert and formless. This matter was, of course, something quite distinct from the *physis* of Thales, Anaximander, and Anaximenes, who, if we were to recall the connotations of “growth” and “originating power” carried by the term *physis*, could be more faithfully categorized than has traditionally been the case.

It is much better to bely any recourse to the term “materialist” to apply to the Milesian thinkers since we are tempted thereby to misconstrue them in two ways: (1) as thinkers believing in an inert world of matter, and (2) as thinkers reflecting upon cause and effect in the “efficient cause” sense entailed by later understandings of materialism. This latter misunderstanding is particularly damaging since it was Aristotle who, by organizing explanatory *logoi* into four “causes,” in effect, invented the concept of efficient cause as a separate agency.

However much one may stress the dynamic character of *physis* in the first *physiologoi*, it is clear that the dominance of substance over process and growth was guaranteed in the first centuries of philosophic speculation. *Physis* was to be accounted for by recourse to *logos*. In addition to the fact that the preferred means of “giving an account” privileged substantialist interpretations of *physis*, there are two other fundamental turnings which helped to guarantee the preference for permanence over the flux of human experience. The first is the dualism of soul and body, most prominently expressed by Pythagoras (and, later, Plato), and the second, of course, the ontological dualism introduced by Parmenides, which received its paradigmatic synthesis, again, in Platonic thinking.

The dualism of soul and body, familiar to us from Christian theology (which inherited it from Plato and Pythagoras), presents a new problem for philosophers. With the development among the Greeks of self-conscious concepts of “personality,” we begin to encounter a basic sort of ethical or religious problem focused upon the tensions between mind and materiality. Heretofore the assumption had been that the person was one with his body, but more and more as reason and thought came to be identified with the guiding and directing agency of the world, a distinction between “that which orders” and “that which requires ordering” was needed.

Pythagoras conceived the nature of things as number and the relations among things to be the sort of relations numbers have. And as

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.<sup>37</sup>

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

were concerned with the ordering of the relationships of soul and body are fair indications that this was the case.

One of the important themes of later intellectual culture, continuing into our contemporary technological age, will be the effects of an increasing separation of quantitative and qualitative considerations on the part of scientists, technicians, politicians, and educators. And one of the perennial questions asked by at least a significant minority of philosophers has always been: How, in the present social and cultural situation, may we insure the appropriate relationship between order and value?

Pythagoras' dualism of body and soul, interpreted in terms of his understanding of the numerical character of all things, places his thinking on the side of permanence over change. Parmenides' ontological dualism will lend added plausibility to that preference. Parmenides (b. 515 B.C.E.) lived in Elea in southern Italy. He wrote a treatise composed of two parts, "The Way of Truth" and "The Way of Opinion." While most of the "Way of Truth" has survived, we have only a small portion of the "Way of Opinion." The latter is concerned with a world of becoming, flux and change, the world admixed of Being and Not-Being. It is the world of sensible objects in which opposites are said to coexist and interdepend.

But it is "The Way of Truth" that has had by far the greater influence. Here Parmenides examines the implications of an intuition of the nature of things which is asserted in this form: "Only Being is; Not-being cannot be." This Being is one, eternal and indivisible. Parmenides' explicit claim that thought and being are the same<sup>38</sup> is the doctrine of strict rationalism against which most of subsequent Greek philosophy gauges itself:

But motionless in the limits of mighty bonds, it is without beginning or end, since coming into being and passing away have been driven far off, cast out by true belief. Remaining the same, and in the same place, it lies in itself, and so abides firmly where it is. For strong Necessity holds it in the bonds of the limit which shuts it in on every side, because it is not right for what is to be incomplete. For it is not in need of anything, but not-being would stand in need of everything.<sup>39</sup>

Being can have no beginning since that would require that it came into being. But it could not have come into being since only Being is,

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.<sup>40</sup>

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

it is or is not “in existence.” The predicative sense of “is” must be followed by a predicate—“red,” “round,” “silly,” or “sad.” To say “The ball is round” entails the claim that “The ball is not square.” But would Parmenides claim that a round ball cannot be not-square on the ground that Not-being cannot be?

Much has been made of this sort of critique of Parmenides, but it hardly touches the insight of Parmenides at all. Parmenides’ intuition is of the unity of Being. He employs logic to defend that intuition. Logically, there can be no distinction between existential and predicative senses of the verb, “to be,” if one affirms the unity of Being. For if we accept the unity of Being, there would be no beings about which we might predicate this or that. This does not, of course, logically justify Parmenides’ use of predicates such as “oneness,” “indivisibility,” “motionlessness,” and “eternality,” with respect to Being, and doubtless Parmenides was mildly uncomfortable, or could be made so, by virtue of this fact. But this does not seem to be a difficulty that could be overcome without ruling out altogether any discussion of the strong sense of the concept of unity—and that would be already to beg the question. The distinction between predicative and existential uses of “to be” is a mainstay of our World of Seeming or Opinion, but cannot be applied to discussions of the Way of Truth. We are forced to accept, as all mystical intuitions require, the limitations of ordinary language.

### ———— SECOND ANTICIPATION ————

The Western preference of rest and permanence over becoming and process is well-nigh reversed in Chinese culture. There are at least three important reasons for this. First, there was the separation of *mythos*, *logos*, and *historia* as modes of accounting, and the subsequent priority given to the notion of *logos* as “rational account” to provide the primary means of explaining things. This way of thinking then combined with the search for the *physis* or objective “nature” of things to privilege formal, static, structural understandings of the way things are. Second, the mind/body dualism associated with the Pythagorean/Platonic tradition offered additional support for the primacy of

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 Parmenides, 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.]



### 3. THE WATERSHED: ZENO AND THE POWER OF PARADOX

It is doubtful that the highly paradoxical doctrines of Parmenides would have had the influence they did in fact have upon subsequent Greek thinkers, and thereby upon the modern world as well, had it not been for Parmenides' famous disciple, Zeno (?490–?430). By appealing to a set of disarming logical conundrums, Zeno articulated the consequences of denying the truth of Parmenides' conviction that "Only Being is."

None of the Presocratics is more controversial than Zeno. The controversial character of his thinking is doubtless due to the fact that, in defense of Parmenidean rationalism, he forwarded a series of arguments that, perhaps against his own wishes, threatened to reduce second problematic thinking to absurdity. By employing the tools of logic and dialectic in the service of the Parmenidean doctrine, "Only Being is," Zeno managed to drive a wedge between the claims of reason and those of sense experience that even the most subtle of his opponents has not been able to remove. In general, the responses of later philosophers to Zeno's arguments effectively moved philosophy away from the immediacies of experience and toward abstract speculation.

Zeno used his arguments to demonstrate the absurd consequences attending a belief in the rationality of change and motion. Until one examines these puzzles rather carefully, it may be difficult to understand how they came to exert such influence on the theoretical development of philosophy, science, and mathematics.

Some introductory remarks are in order. First, in terms of the specific occasion of their construction, the arguments of Zeno, like the discussions of Parmenides, are best understood as a sustained effort to counter the influence of Pythagorean cosmology, which was the most influential doctrine of the times. Second, the power of the arguments as philosophic statements that transcend their historical locus may be understood only if the four principal paradoxes of motion are taken as a set.

The principal paradoxes deal with the concept of motion in terms of the relations of space and time. Since the seventeenth century, we have expressed these relations in the following way:  $v = s/t$ , which expresses the relationships of velocity, space (or distance), and time.