Anaximander and the Origins of Greek Philosophy

The Problem and the Three Tiers of Explanation

How shall we account for the origins of Greek philosophy? To answer the question requires, first of all, that we determine precisely what we are trying to explain. This, of course, proves to be a daunting task for it is in large measure a perennial problem for philosophers: What exactly is philosophy, and what did it mean to the ancient Greeks? We can profitably distinguish two kinds of questions in our inquiries:

(A) What are the defining characteristics of Greek philosophy in terms of which we can distinguish it from earlier pre-philosophical thought?

(B) What explains the rise of this particular type of thinking in Greece?

Naturally, the answer we give to (A) will affect the way we approach (B). Reflecting upon the diverse scholarly literature over the course of the last century, the disparate views and approaches suggest, not surprisingly, that there is considerable disagreement about precisely what "Greek philosophy" denotes and connotes. When the variety of opinions have been assembled, however, they may be roughly but usefully classified into two groups. On the one hand, we have what might be called first-tier accounts. These accounts answer (A) by identifying epistemological and ontological concerns in the systematic programs of Plato and Aristotle as characteristic of philosophical thought. First-tier approaches offer historical narratives that tend to look backward in time, before the classical period, to determine who should and who should not be included in the story that leads up to them. On the other hand, we have what might be called second-tier accounts that see the rationalizing activity of the Presocratics as characteristic of philosophical thought. Second-tier approaches offer historical narratives that focus upon the rejection of mythopoetical explanations and the adoption of *rational* explanations (*logon didonai)*, usually in prose, in attempting to explain the causes of this mentality. The use of this parlance, first tier and second tier, then, is a way of approaching the question about just what needs to be explained. First-tier proponents identify the epistemological and ontological concerns articulated by Plato and Aristotle, as central to "Greek philosophy," and the historical narratives include those earlier figures who supply and promote those characteristics. In first-tier accounts, the Milesian philosophers tend to become marginalized. Second-tier advocates identify the rationalizing mentality that dispenses with mythopoiesis as characteristic and central to identify the emergence of philosophical thought, and these historical narratives tend to focus upon the archaic thinkers of the sixth century BCE, Thales and Anaximander in particular.

Anaximander of Miletus, the *phusiologos*, has not always been judged to be a *philosophos*.[1] But, when doubts are raised about his place in the historical narrative, they almost always

come from proponents of first-tier approaches. In contrast, Anaximander is invariably included as a philosopher by those who adopt second-tier approaches. The general case to be made here is that Anaximander deserves to be included as a philosopher by either approach. This is because in order for us to understand what philosophy meant to the ancient Greeks we must come to grasp the newly emerging philosophical enterprise in terms of gradual transitions, rooted in archaic society, and yet distinguishable from those such as Homer and Hesiod. The ascension of reason, the promotion of rational over mythic discourse, is the cornerstone for making the case on behalf of Anaximander, even in terms of the promotion of epistemological and ontological concerns.

In order to grasp more clearly, however, about *what* and *how* yet needs to be explained about the origins of Greek philosophy, this study aims to open what we can call a third tier. What is this "third tier"? This third tier offers a new kind of explanatory hypothesis, and thus is suitably distinguished from the second tier. While second tier proponents tend to identify the incipience of philosophy with Milesian rationalizing activities, freed from their mythological moorings, they sought to illuminate the context in which these innovations transpired. What they did not supply was an explanation of precisely what fuelled the rationalizing. As we shall see, the architects, and their monumental projects that dazzled and transfixed archaic communities, powerfully supplied exemplars of a rationalizing mentality. When this new avenue of explanation is opened, the third tier is shown also to consist in the social and political context of the seventh and sixth centuries BCE, in terms of which, and against which, Anaximander's innovations represent a meaningful departure. The new and previously unexplored aspect of the third tier that we shall investigate, then, is the Ionian architects and their monumental building projects, and the social and political complex that brought them to center stage in archaic Greece. And if we see that philosophy emerged gradually, then, properly understood, the systematic programs of Plato and Aristotle depend upon an appreciation of a wide range of contributing factors

including those of Anaximander. This, however, requires, in turn, that we get clearer about the factors that promoted Anaximander's *rationalizing* mentality. Thus, while it seems certain that Anaximander made a variety of original contributions each of which exhibits a rational character including the writing of a book, arguably the first "philosophical" book in prose, his originality is best illuminated in terms of the transitions that he heralded within the fabric of archaic Greek society.

This approach of grasping philosophy in terms of gradual transitions had not always been favored. Indeed, in the early part of the twentieth century, estimable scholars with wide influence such as Burnet and Heath sought to account for the origins of philosophy by appeal to the "Greek Miracle." In 1914, Burnet offered to account for the Greek achievement by insisting that "they were born observers."[2] Heath, in his magisterial work of 1921, claimed that the success of the Greeks was due to their being "a natural race of thinkers."[3] Even as recently as 1962, a scholar such as Fränkel was still able to suggest that "pure philosophy . . . came into existence suddenly and without a cause . . . as if by a miracle. . . ."[4] The turn away from "miraculous" accounting and toward explanations that sought to preserve continuity and transition was led by the influential Cornford,[5] and was followed, by those such as Vernant,[6] Burkert,[7] West,[8] and Lloyd,[9] whose approaches have now become dominant. While these scholars share an interest in explaining the originality of Greek philosophy in the context of ancient culture, Cornford, Vernant, Burkert, and West belong to the second tier for they have focused on *how* Anaximander rationalizes mythic traditions, how he untethers himself from anthropomorphic moorings and instead gives a rational account *(logon didonai).*[10] Lloyd, in contradistinction as we shall see, is a first-tier proponent and seems ambivalent about the place of Anaximander. For, on the one hand, Anaximander falls short of fulfilling the conditions of promoting second-order questions and rigorous proof that ultimately, for Lloyd, characterize "Greek philosophy"; while, on the other hand, Lloyd, too, sees Anaximander as part of the background narrative that leads to Plato and Aristotle. But, whichever

tier we prescribe as our starting point, embracing a vision of the emergence and development of Greek philosophy as a *gradual* process still leaves unanswered the questions about just which factors plausibly contributed, and which individuals deserve to be included, in the historical narrative. Does Anaximander deserve to be included, and if so, why?

Cornford, Vernant, Burkert, and West all offer second-tier approaches, and each sought to explain aspects of archaic culture that plausibly informed Anaximander's mentality. In answer to (B), each scholar sought to explain the relevant factors that produced Anaximander's demythologizing mentality, and so contributed to the rise of Greek philosophy. Cornford traced the roots of Anaximander's cosmology to the Babylonian myth, the *Enuma Elish*, the creation of the world by Marduk, by way of Hesiod's *Theogony*.[11] He envisaged Anaximander's philosophical originality in the context of transitions within archaic society and in terms of narrative stories about origins. Anaximander, on Cornford's account, had not merely rationalized the cosmos but moreover had rationalized Hesiod's mythical account. Thus, an understanding of Hesiod, where Zeus replaced Marduk, became the essential context for an understanding of Anaximander's originality; Hesiod's originality, in turn, required a grasp of the Babylonian creation stories. Our grasp of originality, not *ex nihilo*, required that we see innovation in the context of transition.

Vernant took up Cornford's exegesis and carried it farther.[12] Against the background that Cornford had illuminated, Vernant invited us to see Anaximander's new geometry of the cosmos as a reflection of changing political ideas and the social reorganization that came with it. The tripartite division in the reformed Greek society was echoed, or adumbrated, by Anaximander's cosmos, divided also into three heavenly regions. Burkert sought to explain Anaximander's heavenly order, untypical of the Greek meteorological tradition, by appeal to the Avestan texts sacred to the Zoroastrians.[13] The placing of the stars closer to us than either the moon or sun seemed strange only if we did not know that this order was explicitly articulated in the

texts that outline the movements of the great divinity Ahura Mazdah, who travels to the sun, then the moon, and then the stars, before finally arriving at the hearth in the home. And West followed Burkert's lead in tracing Anaximander's originality to a new integration of Persian religion with the tradition of Greek meteorology. To think that the Zoroastrian ideology that pervades Anaximander's thought chanced to burgeon in his mind coincidentally at the very time when the *magoi* had been dispersed from Persepolis and Ninevah and wandered down the west coast of Asia Minor would be, West regarded, as preposterous as it was pointless.[14] Thus, unlike the appeal to the "Greek Miracle," the influential work by Cornford, Vernant, Burkert, and West offered a range of accounts that sought to explain Anaximander's originality—his emerging rationality—in the context of archaic Greek culture. And their important second-tier studies have inspired many others to follow their methodological lead. But, while each of these important scholars tried to reveal a context that illuminates Anaximander's projects, what they did not supply was an explanation of what motivated his *rationalizing* narrative. This explanation of Anaximander's rational techniques is the business of the new third tier.

We may regard the "conventional view" of the origins of Greek philosophy to consist in five hypotheses, each one of which has been claimed to offer a necessary and/or sufficient condition to account for its emergence: (1) leisure, (2) intermingling of beliefs, (3) literacy, (4) technology, and (5) the polis. Each hypothesis has been defended in some form or other, and an appeal to these hypotheses can be employed by proponents of either the first or second tier. G. E. R. Lloyd, whose work belongs broadly to what we are calling the first tier, discussed but rejected the first four hypotheses that comprise this so-called conventional view. His extensive work, visiting and revisiting the theme of the origins of ancient philosophy, shows how he sought to refine and modify what he seems to have regarded as the most promising of the hypotheses—the polis hypothesis—over the course of the last two decades. We now turn to this discussion to get clearer on the conventional view and its shortcomings.

The Conventional View and Its Discontents

The conventional view is a way of discussing the various explanatory hypotheses that have been proposed to account for the emergence of Greek philosophy. First-tier proponents, such as Lloyd, challenged the first four hypotheses in the process of trying to defend a first-tier approach. He did so by showing why the conventional view failed to provide a sufficient condition, and to that view he added a fifth hypothesis, broadly political in nature, to remedy the defect. Lloyd's work over the last two decades continued to struggle with and modify his sequence of deliberations. After examining Lloyd's case, exemplary of first-tier proponents, second-tier objections to the first-tier approach will be considered. Next, a review of the progress of Lloyd's case illustrates how first-tier approaches may be further defended. Finally, a response is in order to show why Anaximander deserves to be considered a philosopher from either approach.

Lloyd's insistence on a first-tier answer to (A), the question about what the defining characteristics of Greek philosophy are, leads him in (B), the explanations of the rise of this kind of thinking, to focus upon political causes, and ultimately political "correlations" to the detriment of other features of the conventional view—notably technology; his failure to take Anaximander seriously as part of the philosophical tradition, placing him instead in the background, leads him to overlook the significant fact of the interplay between politics and technology. To see how this first-tier defense can be orchestrated, we turn to his work as an exemplar of this approach.

Lloyd's work on the origins of Greek philosophy spans more than three decades. From 1979 through 1996, he has directly addressed the central problems under investigation here, and has also modified his positions over the years.[15] In Lloyd's more recent studies, where epistemology and ontology are called upon to identify "philosophy" proper, Anaximander's inclusion among the "philosophers" became difficult to defend,

since Lloyd became convinced that so little can be deduced from the secure evidence for him. Like the second-tier proponents, however, Lloyd also has attempted to account for the gradual emergence of Greek philosophy, and like some of them, he has emphasized political and legal factors. But, Lloyd's orientation is first tier; he focuses upon the kinds of epistemological and ontological inquiries that flourish in Plato and Aristotle, and then working backward, as it were, judges who does or does not address these explananda, or whether or not there is reliable evidence to decide the issue. Consequently, Anaximander retains at best an ambiguous status since he assumes a place in the background, not the foreground, of the discussion. Moreover, despite the extraordinary depth of Lloyd's learning, the early influence of the architects seems completely to have escaped his notice. To see this we would do well to retrace his arguments and their insightful modifications.

In *Magic, Reason, and Experience* (1979), Lloyd tried to account for the origins of Greek philosophy in the context of competing hypotheses already discussed in the scholarly literature. In order to appreciate what the hypotheses were attempting to illuminate, Lloyd, then, concluded that the essential explananda of "Greek philosophy" were: (1) *Rigorous Proof*, and thus rigorous demonstration;[16] and (2) *Self-Conscious Methodologies and Second-Order Questioning*. According to Lloyd, the development of self-conscious methodologies made prominent second-order questions about the nature of the inquiry itself. In contrast with Eastern predecessors, "the investigations only acquire self-conscious methodologies for the first time with the Greeks."[17] These conditions, as we shall see, Lloyd embraced more or less throughout the next two decades. And the readers can see immediately why, given these conditions, the inclusion of Anaximander as a philosopher is problematic. Lloyd explored four hypotheses—leisure, intermingling of beliefs, literacy, and technology—that sought to account for the gradual emergence of this new enterprise, each of which he regarded as at best necessary but in no way sufficient, before turning to focus upon the political hypothesis that he began to champion.

(1) *Leisure*: Aristotle supposed that the availability of leisure made possible by the wealth of economic surplus is a sufficient condition for the development of speculative thinking.[18]

(2) *Intermingling of Beliefs*: The sharing of different ideologies in the interactions with different peoples leads to a toleration for differing points of view and an openness in thought for one's own traditional beliefs.[19]

(3) *Literacy*: Written records provide a sufficient condition to account for this distinct kind of critical evaluation."[20]

(4) *Technology*: Technological mastery is a sufficient condition for the development of critical inquiry.[21]

Lloyd pointed out that these conditions were all present, even if in differing forms, in other Near Eastern civilizations. The Egyptians, Babylonians, and other Mesopotamian civilizations all possessed a leisured class, thrived in cosmopolitan cities where the interchange of differing beliefs must have been great, had literacy (in scribal-form connected not to public literacy but to the record keeping of the central palace), and far surpassed the achievement of Greek technologies, but on Lloyd's account not one of them apparently developed a tradition of the self-reflective and critical self-consciousness that characterizes the emergence of philosophy and science for the Greeks.

In Lloyd's 1979 estimation, the four hypotheses were suggested to have played some significant contributing roles but would not sufficiently account for these central characteristics in the development of rigorous proof and self-conscious methodologies. In addition to those hypotheses, Lloyd offered a fifth, broadly sociopolitical in nature, that he believed more adequately accounted for this unique transformation.[22] By doing so, he echoed the views already promulgated by Gernet,[23] Vernant,[24] Vidal-Naquet,[25] Detienne,[26] Vlastos,[27] and others that "Greek rationality is the product of the city-state." We shall regard these combined five hypotheses, together, as the *Conventional View*.

(5) *Polis*: The radical revision of the "framework of political relations" and of "beliefs about natural phenomena and the world" emerged co-relatively; developments in the legal and political domain provided images and analogies by which the spheres of law and justice could provide important models for thinking about cosmic order.[28]

Lloyd's view in the 1979 work, then, was that the growth of scientific inquiry and speculative thinking was a symptomatic expression of the dawning self-consciousness in other social and political domains. The development of the polis not only underlined the importance of freedom and free speech but also made possible "radical innovation," the "openness of access to the forum of debate," extolled the "habit of scrutiny," and fostered the "expectation of justification—of giving an account—and the premium set on rational methods for doing so."[29] According to Lloyd, the dawning of the philosophical and scientific spirit, expressed in these relevant factors, mirrored these sociopolitical developments. Consequently, the operations of the polis offered new models from the political and legal domains that suggested "the whole-world is a cosmos, that natural phenomena are regular and subject to orderly determinate sequences of causes and effects."[30] Those models provided a context against which one might investigate the broad range of natural phenomena.

But Lloyd's 1979 position was open to a variety of criticisms and the consequence was to urge him to modify his position. He never abandoned the centrality of the political hypothesis but the series of studies he produced testifies progressively to the acknowledgment that he could not provide the rigorous demonstration of political and legal causation that he himself initially suspected. Moreover, the overall balance of contributing factors also needed modification.

What was central to the conventional view, articulated by Lloyd in 1979, was the pivotal role that the polis played, especially in its promotion of democratic and egalitarian reforms, in stimulating and shaping philosophical activity. Hurwit and

Frischer, who represent second-tier approaches, both questioned the centrality of the these aspects of the polis in the earliest "philosophizing" of the Milesians. For whatever its plausibility may be for illuminating the nature of philosophical and scientific inquiry by the classical period, Lloyd's 1979 view, in their estimations, will not do for the opening activities of Thales and Anaximander in archaic Miletus.[31] Lloyd's argument, that participatory government promoted the origins of Greek philosophy, is hard to square with the political environment in archaic Miletus. Around 600 BCE and under the threat of Lydian aggression the tyrant Thrasyboulos ruled Miletus.[32] Whether he came to power as a result of the twelve-year siege of their city at the hands of the Lydian King Alyattes is hard to say. But that he was able to retain power in order to meet the emergency is less open to doubt.[33] Thrasyboulos is remembered by Herodotus as offering the wisdom to Periander, tyrant of Corinth, to kill the citizens who stood out from the rest as one might cut off the tallest ears of corn growing in a field.[34] So much for an openness to participatory government, disagreement, and dissent. However unclear the details of historical developments in the first half of the sixth century in Miletus, what is clear, according to Hurwit, is the general disorder, brutality, and instability of the social order. The pressures from both Lydia and Persia must have been great. As Herodotus informs us, Miletus was sacked again and again.[35] The picture painted by Athenaios is equally devastating; the poor trampled the children of the rich while the rich burned the children of the poor.[36] Few other cities were so ravaged, so unstable, and so apparently lacking in participatory government so central to Lloyd's defense of the conventional view.[37] And yet it is here in Miletus, following Hurwit's second-tier defense, that the origins are customarily traced. Moreover, the argument that participatory government was central to the initial stages of the innovations of Thales and Anaximander could not find much support from the political realities of archaic Miletus.

The likelihood, then, that the legal and political models of the democratizing polis directly stimulated Thales and Anaximander is

difficult to accept. The extensive travels alleged of Thales placing him in Egypt, Babylon, and elsewhere, were to localities where central palace civilization flourished, that is, systems that do not readily come to mind when one looks for exemplars of participatory government. This does not mean, however, that Thales and Anaximander were unaware of legal and political developments on the mainland and the islands, and certainly such developments could have informed a background against which, for example, Anaximander's assessment of justice in nature might have taken shape.[38] But the point that participatory government directly nurtured Milesian innovations is a difficult thesis to defend. It is clear, however, that the conditions, whatever precisely they were, that nurtured Thales and Anaximander did indeed make it possible for them to open a new horizon of inquiry, one that challenged and inspired others in their Ionic communities to respond and expand, indeed competitively.

Frischer also challenged Lloyd's thesis by a different argument. First, he objected to Lloyd's 1979 view that as he saw it maintained that "Philosophy . . . is purely parasitical on society; it has no function to perform within the social system generating it except for imitation and reflection."[39] In this way, he was reacting to Lloyd's position that philosophical and scientific inquiry is merely a symptom or mirror of sociopolitical transformation. Frischer's constructive response was to ask us to consider the political ramifications of a naturalistic explanation of the universe in which mythopoetic devices are not included. The efforts by Thales, in his estimation, might be plausibly supposed to legitimate the foundation for tyranny by undermining the gods, heroes, and values of the aristocracy. "Thales' social role," according to Frischer, "was to provide Thrasyboulos with the same kind of cultural legitimacy that the poets had given to the aristocrats."[40] Thus, Frischer challenged us to think again about the specific sociopolitical context from which the Milesian innovations emerge; Lloyd's polis thesis, taken as a first-tier approach, is insufficient to illuminate these earliest chapters.

Hurwit, sympathetic to Frischer, proposed a variation of his own, but again in criticism of Lloyd's thesis.[41] For him, the ori-

gins of philosophy are not so much the efforts to undermine traditional aristocracy, nor the establishment of an acceptable foundation for tyranny. Philosophy begins in Miletus, on Hurwit's account, as an escape from the ravages the Milesians were forced to endure. The picture of Miletus that he sees is one in which the ruthless tyrant Thrasyboulos is replaced by ruthless tyrants who briefly succeeded him. Those episodes at the beginning of sixth-century Miletus were followed by two generations of class war and massacres of innocents. So, Hurwit is taken by the paradox that philosophy and the scientific spirit emerge against a backdrop of extraordinary chaos and brutality. He came to the interesting conclusion that "[t]he decisive factor in the birth of philosophy was not the need to legitimize tyranny but the need to escape it and the bloody sacrifice left in its wake."[42] Thus, for Hurwit, the emergence of philosophy was a reaction to chaos, not participatory government; it consisted in an effort to find stability and meaning in a world that seems to be robbed of it.

Both Hurwit and Frischer raised important points that contributed positively to the discussion, but their arguments, too, have problems. Hurwit's critique rested on the premise that Miletus was a complete disaster area, incapable of providing stability and torn by violent excess. To Hurwit's criticisms it may be objected that in the time of Lydian Alyattes' long rule, roughly 610–560 BCE, the Milesians unlike the defeated Smyrnans succeeded in making a treaty.[43] Since the whole region was broadly under Lydian control until the incursion of King Kroisos *circa* 560, the arguments about radical instability seem to be overstated. Indeed, the most recent excavations of the temple to Apollo Didymaios has revealed that a limestone and poros construction began, on monumental scale, perhaps as early as the late seventh century BCE and continued throughout the sixth century;[44] this certainly suggests that Miletus could not have been in the persistent degree of turmoil Hurwit claims. Although Hurwit's assessment of the first half of sixth century Miletus seems too strong, it does seem likely, however, that the innovations of Thales and Anaximander deserve to be seen

against an unsettled background replete with injustice and in which participatory government was hardly the order of the day.

Frischer's critique reminded us that if we read the conventional view to maintain that philosophical and religious beliefs develop merely as imitation and reflection of some other aspect of society, however partly true it may be, then it is inadequate alone to account for the perplexities and the solutions that human meaning makers propose. The origins of Greek philosophy share with the prevailing archaic religion and its cult practices—with its prominent sacrifice and prayer—an attempt to understand the world and ourselves. To reduce philosophy, and religion, to a purely parasitical role on society is inadequate, and if the conventional view does so then it has left out an important ingredient of human soul searching and sources that provoked wonder about the mystery of our being and the world we encounter.

Lloyd reacted to criticisms such as those by Frischer and Hurwit,[45] and in a series of publications progressively modified his position. In *Revolutions in Wisdom* (1986), as he did in the 1979 work, he still regarded "rigorous proof," that is, demonstration by deductive argument from clearly identified premises, to be a fundamental characteristic of Greek philosophy.[46] While he was more cautious in his assertions of connection between the political and speculative domains, he still insisted that "the political dimension is crucial for our understanding of some of the distinctive characteristics of early Greek speculative thought."[47]

In the section on "The Argument from Politics," he modified his argument in a threefold manner, emphasizing the political dimension, parallel to the development of speculative thought, in terms of (1) innovation in framing and reforming constitutions, (2) the possibility of dissent from deep-seated traditional views that presupposes political freedom of speech, and (3) revisability in regard to political constitutions and laws. But, here, the argument still resounds in accord with the 1979 work where he emphasized the possibility of radical innovation, the openness of access to the forum of debate, extolled the habit of

scrutiny, and fostered the expectation of giving an account and the premium placed on rational methods for doing so.[48]

In *Demystifying Mentalities* (1990), Lloyd once again revisited the origins of philosophy/science. He asked "*How far* do political and social factors help to explain the rise of science in Greece . . . ?"[49] He immediately insisted that there is no simple answer, though he acknowledged some influence. He emphasized a parallelism between philosophical and scientific inquiries and activities in the political sphere. He noted that "evidence" in science and also in both the law courts and history are *marturia*. Some of the proofs, *tekmeria*, aim for what will persuade an audience, though this should be distinguished from Aristotle's *apodeixis*. He denumerated other such terms for testing and scrutiny, *elenchos*, *dokimazein*, *basanizein*. From these kinds of consideration he reached the tentative conclusion that "the style and sophistication of much early Greek philosophical and scientific debate presuppose an audience who were experienced judges of argument, and if we may ask where they gained that experience, the legal and political domain supplies a large part of the answer."[50]

After reassembling the context of his discussion, which he regarded as largely established ("the agonistic features of Greek culture, the extensive political experience of many Greek citizens, and the importance of legal institutions of the Greek city-state . . . and the way that political alternatives were presented or imagined in classical Greek debate . . ."), he asked *how far* can we connect the emergence of Greek scientific rationality with the ideology of democracy? He noted two immediate problems. First, the thesis might fail on the mere chronological grounds that Greek philosophy and science antedate the institutions of democracy, so the latter cannot be a factor contributing to the former. Or the thesis might prove too much since Greek philosophy and science were certainly not confined to the democracies.

He first explored the chronological objection, and this naturally required that he focus upon Anaximander. Lloyd accepted that Thales and Anaximander are roughly contemporaneous

with Solon and Pisistratus. If, as can be plausibly argued, the institution of the full democracy at Athens was the result of the reforms of Cleisthenes in 508 BCE, then there can be no question of saying that they could have influenced the first Ionian philosophers. But, for Lloyd, this was not the end of the matter. He repeated the thesis of the 1979 book that "so far as philosophy and science go, what I have taken to be chiefly constitutive of these are the *second-order questions*, and these only begin to be raised some time later than Thales, that is the epistemological debate that begins with Heraclitus (around 500 BC). . . ."[51] So, Lloyd's treatment of the Milesians showed, some eleven years after *Magic, Reason and Experience*, that his approach still belonged primarily to the first tier, that Thales, and presumably Anaximander, could not be accommodated within his criteria, and that if they are to be included it is because he recognized a kind of gradual transition in the development of both philosophical inquiry and democracy that required a grasp of the earlier stages that led up to these decisive changes.[52]

Thus, by 1990, the thrust of the argument was still quite similar but Lloyd was more cautious about the argument; political factors created an environment that fostered and echoed open investigations into matters philosophical, but the causal argument he regarded to be difficult (impossible?) to make with the clarity that would be required.[53] For example, on the one hand, he did not simply ask about the influence of the polis but rather asks specifically about *democratic* practices; on the other, he revisited earlier claims, and while ruling out the sweeping generalizations adopted earlier, he tended to modify them while not dismissing them. For example, "[I]t might be conjectured that the possibility of radical questioning in the political sphere may have released inhibitions about such questioning in other domains. . . . *That cannot be directly shown*."[54] But he immediately noted that there were many Greeks who believed that radical questioning of tradition in politics had particularly far-reaching repercussions on attitudes generally. And in defense he pointed to two passages in Thucydides (III.82, and II,37,40), and one in Aristotle (*Pol*. 1267ff) to support his claim.[55]

Lloyd then concluded chapter 3 by emphasizing the importance of the competitiveness in Greek intellectual life (as in the 1986 work) and the importance for it, as stated in the 1979 work, of "giving an account and the premium placed on rational methods for doing so": In this 1990 work he stated, "[T]hey [Plato and Aristotle] may be said to share . . . one recurrent preoccupation of much Greek political and legal debate, namely the demand for the *justification* of a point of view—except that now, in the highest style of philosophical inquiry, this was redefined as no mere matter of what was subjectively convincing, but on the contrary one of objective certainty, an incontrovertibility secured by rigorous demonstration."[56]

In 1992 Lloyd published a short essay, "Greek Democracy, Philosophy, and Science." It almost fully echoed the 1990 work. He took up again the question of determining the causes that gave Greek philosophy and science its particular characteristics. He balked at the possibility of providing "the" or even "among" the determining causes but explored how "some of the characteristics [in philosophy] appear . . . and reflect the social and political situation in which they worked, and it is these broader connections that we may try to identify as precisely as possible."[57]

In this 1992 essay Lloyd set out five lines of inquiry that he believed to be particularly promising:[58] "(1) the concept and use of evidence, (2) polemical or adversarial manner in which much intellectual discussion was cast, (3) the development of the theories of both rhetoric and demonstrative argument, (4) the privileging, in certain circumstances, of abstract analysis of concrete situations, and (5) the debt of the notion of radical revisability in philosophy or science to institutions of democracy." This list certainly echoed the 1990 work.

When he addressed his fourth point about abstractions, he mentioned Anaximander by name. There, Lloyd tried to make the point that abstraction inevitably involves a kind of idealization. "The constitutional reforms carried out by Cleisthenes at Athens beginning around 508 BC reorganized the entire tribal system on abstract principles. Attica was divided into three

regions (city, coast, and inland) and each of the ten new tribes had representative *demes* in each. Even though no direct influence may be involved—in either direction—the geometrization of the political system may be compared to the geometrization of the cosmos. The first attempts at a geometrical model for the heavenly bodies go back to Anaximander around the middle of the sixth century."[59] Once again, Anaximander assumes a place in Lloyd's narrative as part of the background, though the peculiar contribution that Anaximander made is hard for him to say precisely.

Then, Lloyd addresses his final theme of radical innovation. "One striking feature of much early Greek speculative thought is the impression given of the possibility of a radical new understanding of the world, not based on traditional beliefs nor on what was commonly assumed or generally acceptable, but on *reason* alone."[60] This possibility is to be accounted for in a twofold manner: on the one hand, the peculiarity of philosophers, doctors, and mathematicians, but also, on the other hand, in the general belief of the radical revisability of traditional ideas and assumptions. About the origins of this disposition no simple answer can be given, Lloyd again insists. But, "The traditional historiography of philosophy would place a primary emphasis on developments within epistemology itself. However, a further part of the answer may perhaps lie in the political field, since it provided particularly striking instances of the radical revisability of existing constitutional forms . . . especially in the democracies. . . . [T]he principle to which the democracies adhered was that anything could be discussed, that any argument would be given a hearing, that every issue would be decided by democratic vote in the sovereign assemblies."[61] Of course the democracies, in practice, were not always operated the way the ideal suggested, as Socrates found out, but this did not diminish their influence as an ideal. Then Lloyd adds that "even anti-democrats such as Plato and Aristotle hold to the principle of the very greatest freedom of discussion—at least of *philosophical* issues. As to the influence of political structure on other spheres of experience, Aristotle explicitly recognizes that,

if custom and tradition are open to radical challenge in the political domain, that has widespread repercussions elsewhere, indeed on *every* branch of knowledge."[62]

By the time we come to the 1996 work, *Adversaries and Authorities*, whereas *Magic, Reason and Experience* had explicitly discussed the parallelisms between the development of the notions of evidence and witnessing, testing, scrutiny, and accountability, in the contexts of law and politics and in speculative thought,[63] expressions such as "Greek rationality is the *product* of the polis" are now eschewed. Why? It seems that Lloyd probably considered that he could not prove the claim with the rigor that the tradition he was trying to illuminate would insist upon. He realized that asserting such a claim would constantly re-engender the objection of some critic who would pose a counterexample or demand what the evidence could never supply—a rigorous proof. So, he chose to excise "product"-talk (i.e., causal talk) from later discussions, and adopted a weaker but perhaps more compelling strategy by means of focusing upon "correlations." By taking this approach he avoids the pitfalls that await all who are prone to such broad generalization. About "philosophy" he says: "I would resist any sweeping generalization to the effect that there is just *one* notion of *what philosophy is* at work in *all* the individuals we lump together under that rubric."[64] Clearly, if Lloyd cannot specify a single notion of philosophy that appears in all the cases, the very idea of providing a causal explanation seems wrongheaded. If one looks back to the series of 1986, 1990, 1992 works, then, Lloyd's preferred strategy is to explore connections in terms of correlations. Thus, Lloyd cautiously and carefully draws our attention from one domain to another in displaying this approach: look here at these political matters, now look over there at these philosophical matters, now there at these mathematical or medical matters, now again over there at these legal matters. . . . Well, what shall we think? Too much coincidence and overlap to neglect. Can we assert causal connection? Too strong a demand, either way the evidence for it is not there. Rather, we must recognize "correlation" that "suggests" interrelation, "perhaps" influence, the "likelihood" of contribution, and so on.

But Lloyd's 1996 work also includes Anaximander in discussions about ancient philosophical issues such as the nature of opposites, the nature of infinity, and the desire for an ordered structure of the cosmos. In these discussions, Lloyd refers to Anaximander as a "Presocratic philosopher,"[65] and such descriptions suggest that Lloyd's positions continue to carry forward an ambivalence about him. Indeed, Anaximander's influence on the philosophical goal of finding an ordered structure of the cosmos is worth emphasizing. While it seems true, as Lloyd suggests, that Anaximander's motive for the systematic positioning of the sun, moon, and stars is merely symbolic, the very inclusion of him in such a discussion could arguably be interpreted as a primitive attempt toward the formulation of a rigorous proof. The fact that Anaximander's cosmic structure failed to be functional in the prediction of celestial events does not mean that such predictions were not goals Anaximander might plausibly have had in mind when searching for cosmic order. After all, the creation of a seasonal sundial, reasonably attributed to Anaximander, most certainly had among its goals accurate prediction of celestial events. To challenge Lloyd's various pronouncements is to urge further the inclusion of Anaximander as "philosopher," on the grounds that his contribution is significant to the gradual process of rejecting supernatural fancies, endorsing rational explanations, and moving forward a new kind of discourse to meet the increasing demands for rigorous proof and second-order questions about the nature of the inquiry itself.

So, to sum up, Lloyd's studies on the origins of Greek philosophy have followed a first-tier approach. Identifying rigorous proof and second-order questions about the nature of the inquiry as fundamental defining characteristics, he has investigated explanations of the rise of this mentality. In 1979, Lloyd examined four competing hypotheses all of which have had defenders and all of which he rejected as sufficient conditions. Even then, Lloyd advanced a fifth hypothesis, namely, political dimensions, to explain the innovations in Greece that apparently did not emerge elsewhere, and almost twenty years later