## Introduction

I wrote Archaeology and the Origins of Philosophy in light of my earlier books but with the intention of not requiring my readers to have familiarity with them. My ambition here is to explain the methodologies I have employed in two earlier works, Anaximander and the Architects (A&A, 2001) and (coauthored) Anaximander in Context (AiC, 2003), with the express purpose of offering as a paradigm a new model for future research in ancient philosophy. Part I of this book presents case studies drawn from, but also significantly extending, my earlier work. Part II of this book engages in an articulation of and reflection about the methodologies used in these case studies and the paradigm they offer to add to the study of ancient philosophy. I continue to embrace the thesis that Anaximander was present at the temple building sites and witnessed the technologies there that he applied imaginatively to his cosmic speculations. And thus to the readers already familiar with my earlier work who might start with Part I and think "Haven't I already read something like this?" I recommend that they read Part II first and only then turn to examine the details of the case studies presented in Part I. The general thesis about Anaximander and architectural technologies is again central to this study, but the case studies are new and attempt to provide exemplars organized in accordance with these new methodologies.

Let me also make clear that it is not my intention to diminish the long successful approaches in ancient philosophy but rather to offer alongside the familiar styles of scholarship this new research model. The extensive reflections on the metaphysical foundations of these historically and culturally embedded case studies (in Part II) seemed appropriate only in the light of these case studies (in Part I) showing that archaeological resources really are capable of illuminating the abstract and speculative thought that is central to the scholarship on ancient philosophy.

## PART II—ARCHAEOLOGY AND THE ORIGINS OF PHILOSOPHY: AN ARGUMENT FOR THE PHILOSOPHICAL IMPORTANCE OF HISTORICAL AND CULTURAL CONTEXT

Chapter seven sets out the problem and initially responds to the question: Why have studies of ancient Greek philosophy and its origins routinely neglected archaeological resources? The argument revolves around Jonathan Barnes, who despite all the marvelous studies he has produced, presents a myopic vision of what is philosophically appropriate. Barnes' two-volume work on the pre-Socratics is arguably the most influential work in the field for the last fifty years. By his vision of what counts as philosophy, it is no wonder why appeals to archaeological evidence are routinely neglected. In his first edition, Barnes insisted that "philosophy lives a supracelestial life beyond the confines of space and time," and when he was criticized for his historical insensitivities, he reinforced his earlier view, in his second edition, to rule out of court studies that urged consideration of historical and cultural context. Barnes' work has been so influential; his view is only the most extreme among so many studies that share his inclinations about what counts as "philosophical." But this point of view undermines the very appropriateness of research that appeals to archaeology, research that must take seriously historical and cultural contexts. As such, if the case studies I have presented here proved to be philosophically illuminating, it is fair to conclude that Barnes' approach is too extreme, and this means (what seems so obvious to me) that historical and culture context are also significant to research in our field.

Chapter eight traces out the development of archaeological approaches over the course of the last century. The underlying foci are to explore the theoretical frames in terms of which the archaeologists offer their narratives, and to try to understand *how* archaeologists have attempted to infer abstract thoughts from artifacts—how historical and cultural context assumes a place in understanding mentalities. In a curious way, as I see it, both Anaximander and I are standing in front of the same "architectural" evidence and reflecting upon matters that have now become the business of the archaeologist. So, what can we learn from the archaeologist? How does the archaeologist infer abstract ideas from the material culture? Accordingly, the survey of old archaeology, new archaeology, processual, postprocessual, and cognitive archaeology is designed to show to what extent abstract and speculative thoughts are implied by material artifacts, and how postprocessual archaeologists who champion "interpretative archaeology" undermine the meaningful distinction between "evidence" and "interpretation."

Chapter nine explores the "imaginative meaning of an artifact," and traces out the ideas of hermeneutic play and interpretation as applied to archaeology. I have been arguing that Anaximander came to imagine the cos-

mos by means of architectural techniques; what are the imaginative dimensions of determining the meaning of artifacts, indeed, objects in general? This discussion begins with Gadamer's work, and then turns to pragmatic interpretations of Dewey, James, and Peirce to explore a philosophical defense of how we infer from material context to abstract, imagined thought. All these positions, taken separately and together, stand in marked contrast to Barnes' positivism; they all insist that artifacts are never just artifacts, that the objects of the world cannot be understood by way of a single objective meaning but only through a process of imaginative interpretation. This theme is then connected to Quine, whose work on the indeterminacy of translation shares this commitment, and then to Davidson's radical interpretation that offers too extreme a position that can be countenanced no more than Barnes' positivism. Next, Putnam's internal or historical realism is considered because his position also offers a way to make sense of claims being true, and some opinions being "better" than others, without succumbing to either positivism on the one hand or contextual relativism on the other. Putnam's arguments offer a way to show how we can place constraints on a narrative without embracing the correspondence theory of truth; Putnam places truth claims within an historical context, but not a "trans-temporal context" as Barnes suggests. And finally, those positions are contrasted with Searle's arguments for the existence of brute facts, as opposed to institutional facts, as he argues for a version of metaphysical realism that he calls external realism. I argue against Searle and metaphysical realism in general.

Chapter ten begins by setting out an archaeological approach to ancient thought, discusses James and Dewey on the context of consciousness to set the platform for the natural and material basis of mental life, and then turns to a presentation of metaphor and bodily experience following the work of Mark Johnson and George Lakoff. To place Anaximander at the building site as a careful observer of temple architecture, who imaginatively projects the techniques he witnesses onto the cosmos because he envisions cosmic architecture, is to place bodily experience at the center of abstract and speculative knowledge. And to place bodily experience at the center is to argue for the importance of historical and cultural context for our understanding of (some aspects of) ancient philosophy and against Barnes' extreme view, the suprace-lestial vision of philosophy.

Chapter eleven explicitly sets out the new methods I have employed. My research has two parts: what I am calling a "Method of Discovery" by which we recreate in a meaningful way the historically and culturally embedded experience of Anaximander, or some other ancient thinker, and a "Method of Exposition" by which we promulgate the arguments that make our case.

The key to the Method of Discovery is to isolate in the doxographical reports the references to ancient technologies and techniques, then to appeal to archaeological reports and artifacts to recreate the ancient processes and

products delineated by archaeologists, and finally to connect the doxographies to these archaeological reports to illuminate a range of experience that Anaximander and other ancient thinkers would have plausibly experienced. What this method amounts to, in my estimation, is that (in Anaximander's case) when we recreate the archaeological reports on temple building, we are standing next to both the archaeologist and Anaximander (i.e., the Anaximander whose belief system we know through the doxographical reports) in the presence of the surviving archaic artifacts. It is only by recreating the activities going on at the building site that we can come to grasp the illuminating historical and cultural context of the doxographical reports. This approach is what I learned from Collingwood in his *The Idea of History*.

The key to the Method of Exposition is nothing other than clarity of presentation. This method has three parts. In the first part (A), I set out the relevant doxographical reports, the locus of the evidence, and then (B), I present the scholarly debate about this evidence. Finally, (C), I appeal to archaeological resources to clarify or resolve the old debates.

I believe these methods can be employed to facilitate new research in the field. I hope to follow this method in future studies on the pre-Socratics, Plato, and Aristotle. Consider the possibilities that every reference to an ancient technology or technique—throughout our ancient philosophical literature—might find a report showing evidence of the ancient artifacts with detailed explanation about the processes by which the artifacts were produced. We will find, I believe, that, in many cases, the appeals to this kind of historical and cultural context would be useful and revealing.

Chapter twelve weaves together archaeological developments and philosophical approaches. In summary form, I make clear that I am championing a realism that dismisses the distinction between "evidence" and "interpretation." A fact is a posit from which certain things follow or to which they are connected; they are not chiseled in stone, nor can they claim meaningfully to be "true" in a transhistorical or supracelestial sense. We must understand that an historical narrative requires the selection of a starting point and an ending point, and proposes a causal account that offers to connect the "facts." By the purposes and values that direct specific inquiries, our narratives are produced. Consequently, they are not copies or pictures of some antecedent reality. In just this sense, the age-old problems set by the program in metaphysical realism are rejected as hopeless and wrongheaded; an appeal is made to Kant's Critique of Pure Reason as an historical transition point in rejecting that program and the correspondence theory of truth that is its cornerstone. Finally, I offer a brief reflection on the reality of the past, contrasting it with Barnes' supracelestial thesis; the past has a meaning in the creative present. The project of reifying the past, and trying to make our narratives map onto that antecedent reality—the correspondence theory of truth—is, consequently, seen to be metaphysically mistaken.

## PART I—ANAXIMANDER'S COSMIC PICTURE: THE CASE STUDIES

Chapter one has three parts. The first part is an historical narrative that exhibits the results of what I am calling the new "Method of Discovery"; the narrative does not pretend to describe all of Anaximander's life, or cover all of his thoughts. The narrative is a glimmer, a slice of his life in eastern Greece that unearths some of his thoughts and the processes by which they burgeoned in his mind. It places Anaximander at the temple building sites, and situates those projects in the historical and cultural context of the sixth century BCE. The second part of chapter one contains five illustrations, each of which introduces the highlight of each of the following five chapters. The "picture" is the basis of the argument; each presents an archaeological resource as a clarifying answer to a traditional problem in Anaximander scholarship. The third part of chapter one invites the reader to take an imaginative journey to an ancient temple building site and, thanks to the fabulous illustrations made by Manolis Korres, who has graciously given me permission to reproduce some of them, our philosophers will be positively amazed by evidence that they have routinely overlooked. The ancient building sites and their related technologies provided the Greeks of the archaic and classical periods with a veritable experimental laboratory where principles of nature were displayed, explored, and tested, and where abstract, symbolic, and imaginative thought were realized in concrete forms.

Chapter two explores the size and shape of Anaximander's earth. In A&A, the investigation focused on column-drum preparation in the techniques of anathyrôsis and empolion. In AiC, the investigation concentrated on technical issues of where to measure "(lower) column diameter," that is, the architect's building module. In this new chapter, the art historical record of vase painting is explored (something I had never done before) to show the evidence that the column and column drum already had symbolic meaning in the archaic period. Then, the debate is extended, in light of the archaeological evidence, to determine where on the column was the  $3 \times 1$  drum that Anaximander imagined analogous with the shape and size of the earth. The module is usually identified with "lower column diameter," but there is no "metrological rule" for determining drum proportions. This means that drums could be of any proportions (i.e., 2:1, 3:1, 4:1, 5:1) so long as, when stacked together, they finally reached the same height for the installation of the capital. However, the archaeological evidence also shows that there were, in fact, column bases in the Ionic temples that were metrologically determined (i.e., they were all exactly the same proportions), and we have evidence for  $3 \times 1$  exemplars. Did Anaximander imagine the column-drum earth as a column base? After reviewing the fascinating archaeological evidence, I argue that it makes more sense to suppose that he did not, but that was because he imagined the earth

aloft, held up by nothing. The column base purposefully obfuscates this crucial point since it rested on the earth-foundation.

Chapter three explores two other features of Anaximander's cosmic picture: the earth in equilibrium and the cosmic numbers. In  $A\mathcal{C}A$ , the issue of the earth's equilibrium was clarified by appeal to the architect's techniques of plan and elevation views; in AiC, the cosmic distances to the stars, moon, and sun were clarified as increments of the archaic formula of 9 and 9 + 1 embraced by Homer, Hesiod, and others. In this new chapter, the distinctions between plan and elevation views are again emphasized, but this time the distinction between interaxial versus intercolumnar measurements plays the pivotal role. And the defense of the poetic formulas of 9 and 9 + 1 is now reinforced by a long discussion of how the archaeologist understands "Technological Style" and "Technological Choice," which are examples of historical and cultural context as important factors in the work of archaeologists.

Chapter four examines another aspect of Anaximander's cosmic picture and shows that *prêstêros aulos*, the nozzle of the bellows, is the correct reading of how the fire radiates from the cosmic wheels, because, in this hylozoistic universe, the cosmos is alive by breathing. Neither A&A nor AiC has any detailed discussion of this complex issue. In this new work, however, there is a long exploration of the archaeological evidence for the bellows. The central theme of the new illustrations includes Hephaistos carrying around his bellows, which is an animal skin—sometimes a double animal skin that suggests a pair of lungs—to be inflated and deflated like a breathing animal. The result of this study is to make the case that the bellows displayed a breathing mechanism; Anaximander projected imaginatively on to the living cosmos an instrument of breathing from the metal workshops at the building site. It turns out that the cosmos is alive as an everlasting fire-breather, a doctrine that is usually attributed to Heraclitus.

Chapter five investigates another aspect of Anaximander's cosmic picture, how the stars, moon, and sun are really heavenly wheels of fire encased in mist. Had Anaximander seen any vehicles of transport with hollow-rimmed wheels? In AiC, there is no discussion about wheels, neither cosmic nor land vehicles. In A&A, there is passing reference to the architect Metagenes' wheeled vehicle for transporting monolithic architraves from quarry to building site. What the new chapter argues at length (and not in passing) is the most likely candidate for Anaximander's cosmic imagination. In this new work, Metagenes' invention is reached finally at the end of a long discussion of the evidence for ancient wheeled vehicles. These techniques of making wheeled vehicles, curiously enough, have implications for both Anaximander's sundial and his map of the earth. And when this discussion of Anaximander's wheels is placed in the wheelwright's workshop, the wheel-and-axle construction suggests unmistakably a cosmic axle, an axis mundi. To unfold

this imagery, the discussion of Anaximander's cosmic wheels is placed in the context of Pherecydes' account of the cosmos as a great tree.

Chapter six attempts to reconstruct Anaximander's seasonal sundial. The sundial is not considered at all in AiC, and in A&A, while a reconstruction is proposed, the model is expressly rejected at the opening of this chapter. The new, proposed reconstruction of the sundial is shown to mediate between the cosmic picture (or cosmic map) and the map of the earth. The earliest surviving sundials in Greece date to Hellenistic times when conical and hemispherical sundials make sense, reflecting spherical conceptions of the earth's shape. But what did Anaximander's sundial look like, given his conception of a column-drum–shaped earth? In the new reconstruction, a column drum is proposed as the dial face with a gnomon placed vertically, and implications for his map are also considered in terms of the shadows cast. After the details have been considered, important objections are raised and answered. Contrary to the pronouncement of Cornford and others, there are good reasons to suppose that "observations" played a significant role in some (but not all) of Anaximander's cosmological speculations.

Thus, Archaeology and the Origins of Philosophy proposes a new additional methodology for research in ancient philosophy; as a volume intended to "stand alone" (and not presupposing familiarity with my earlier publications), Part II, the philosophical argument for the relevance of archaeology and the importance of historical and cultural context, needs Part I, the series of case studies in the newly articulated methodology. If the readers can see that we really do learn new things, and rich details, from archaeological resources that shed new light on Anaximander's abstract and speculative thoughts and his thought processes (and, in future projects, other pre-Socratics, Plato, and Aristotle), that is, Part I, then it is serious and worthwhile to explore how and why this is so, and why it should have been missed.

I had been trying for a long time to figure out why my interpretation had been so new, and why not just this theme but the whole approach of ancient philosophy routinely and systematically ruled out appeals to archaeology. In a curious way, I was lucky that so prominent and distinguished a scholar as Jonathan Barnes could help me get clear about what has gone wrong. My approach to Anaximander has been to place him in his cultural context; the kind of approach championed by Barnes and those who share his "trans-temporal" view undermines the appropriateness of this kind of study. If we can see, after reading this book, that we do gain insights into Anaximander's abstract and speculative thought, and, furthermore, that these insights are philosophically relevant, we should realize that traditional, and perhaps unspoken, guidelines limiting the scope of philosophical research need to be revised.