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# Creation Myths and Epistemic Boundaries\*

## Daryn Lehoux<sup>†</sup>

Scholars looking back to the earliest stirrings of the philosophical tradition in ancient Greece have often seen a rational approach to nature cleaving itself off from an older approach, that of the mythographer. If this account were right, we would have here a major (and perhaps the first major) drawing of an epistemic boundary. There are, however, mounting reasons to question this narrative that have been accumulating across several modern disciplines. This paper explores the most important challenges to the myth-to-science narrative and suggests that the different ways of framing the ancient debates have much to do with the boundaries between modern disciplines and/or academic cultures.

Once upon a time, people believed that the world was full of gods. Natural processes like thunder and lightning were explained by recourse to divine actions. They were seen as the ineffable will of unobservable beings. Earthquakes were caused by Poseidon, angry at some transgression. Epilepsy was possession, disease was punishment. The sky at night was painted full of heroes and monsters. Then one day, something changed: a small group of people at one time and in one place began to insist that the old explanations would no longer do. Instead they looked for a new kind of explanation, one that involved only natural entities and processes rather than supernatural ones. Epilepsy was now caused by a surplus of cerebral phleam overflowing into the veins that normally carry air up into the brain. Earthquakes were caused by subterranean winds, rumbling around in openings deep underground. No more gods acting out whims, just natural forces acting according to natural processes. Experience, tangible and testable, thus replaced speculation and superstition as ways of understanding-of knowing-the world. Science, in short, was born.

Maybe. But there are some hints that something has gone wrong in the telling. For one, the story finds itself standing fairly firmly on one side of one kind of boundary, that of modern academic disciplinarity: although something like this story is ubiquitous in the history of philosophy

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and in the history of the sciences, one would be hard pressed to find anthropologists, historians of religion, or historians of mythology in the last thirty years talking in anything like this way-who said the function of myth was explanation in anything like this sense<sup>1</sup> (Sedley 2007; Graham 2006; Algra 1999; French 1994; Lindberg 1992)? One might also worry about the categorical division between natural and supernatural, which are after all our categories not theirs. Surely Homer's gods are every bit as much a part of nature as his humans are, and they act in many of the same ways. And what about the new explanations, these phlegms and subterranean winds? How are one set of made-up nonexistent entities better than another set of made-up nonexistent entities? One might respond by saying that although phlegm is not really the cause of epilepsy, it at least has the virtue of being a real substance; Zeus is no such thing.<sup>2</sup> Then again, though, black bile seems also not to have been a real substance-its existence was instead very likely inferred based on certain disease patterns (Nutton 2004, 84). Likewise the great Hellenistic (physical) causal entity called *pneuma* was often imperceptible, usually because it was not (as we should say) actually there. One might also worry about what kind of reality the 'air veins' implicated in epilepsy are supposed to have.

We are further faced with the problem so forcefully pointed out by David Sedley, that the Presocratics and their successors (Plato, Aristotle, the Stoics) are, almost to a man, utterly saturated in theological teleology. To use Sedley's well-chosen word, the great majority of Greek philosophers are creationists (Sedley 2007). Sedley's point should further remind us that myth and religion, whatever they had been doing before the Presocratics, never went away after them. Myth and theology in fact continued to intertwine themselves with philosophy (including natural philosophy) for a very long time indeed (Buxton 1999; Morgan 2000; Taub 2008). One need only take the quickest of glances at Plato's Timaeus or the Derveni papyrus to see that mythos and logos were far from mutually exclusive, and indeed there was a longstanding ancient philosophical tradition that held that myths encoded important philosophical truths (indeed, did it ever go away?) (Brisson 1996; Boyes-Stones 2003; Ramelli and Lucchetta 2004; Struck 2004). It is also significant, to turn the point 180° around, that one of the most compelling recent accounts of Roman religion argues that at its heart was a dedicated and careful empiricism—which is explicitly taken to mean close observation of the natural world (Ando 2006).

Geoffrey Lloyd, who has written several books on the origins question, sees a larger issue hiding itself in the idea of different *mentalities* (Lloyd

<sup>&</sup>lt;sup>1</sup>A good survey is Csapo 2005. Perhaps the best criticism of the explanation model is Veyne 1983.

<sup>&</sup>lt;sup>2</sup>This tack is taken by, e.g., Longrigg 1993.

1990). Do we have a "mythopoeic" mentality being opposed or replaced by a "naturalistic" mentality, or do we have different contexts and different discourses coexisting and interacting-and doing so not just in the same culture, but in the same individual author? At the same time, though, Lloyd does not deny the claim that something new was happening in the early philosophers and physicians, even while he recognizes how very messy the question is—one Hippocratic author denouncing faith-healing quacks, another recommending prayer to the sick, for example. Likewise, as several scholars have pointed out, the chronology of the birth-of-naturalism account is all messed up: rather than being superseded by "rational medicine," the cult of Asclepius has its birth and expansion at exactly the same time and across exactly the same geographic regions as Hippocratic medicine does (Lloyd 2003; Jouanna 1992; Edelstein and Edelstein 1945). So also, Lloyd is quick to point out that both Hippocratics and religious healers used many of the same methods, and that the Hippocratic criticisms of faith-healers are hardly financially disinterested.

An important part of Lloyd's approach has been his use of research and methodology from outside of the history of philosophy proper. By crossing disciplinary boundaries and reading a lot of recent anthropology, Lloyd has been able to incorporate some important approaches to the essentially foreign ideas of the ancient Greeks that enabled him to shed light on how intertwined ancient Greek science and myth were, even among Greeks who explicitly professed otherwise (more on them in a moment). Indeed, we should expect a more nuanced approach to mythology among anthropologists, whose subjects of study are standing right there in front of the researchers, able to talk about, clarify, criticize, and respond to the various classifications and mentalities that might be ascribed to them. On hearing the claim that a jaguar is really a human spirit in cat's clothing,3 the anthropologist could, I suppose, run off and talk about the fundamentally nonscientific mentality of his host culture, but that would be very poor anthropology indeed. Instead, the task is to try and discern what that sentence might mean within the particular cultural and linguistic context in which it was uttered. Was it part of a ritual? An entertaining story? Was it an allegory with some moral point? What exactly do the terms mean? To directly compare it, contextless, to the kinds of things scientists say about jaguars is to blur every relevant category under which either set of statements gets its meaning.

Beyond the different interpretations of myth that we find across disciplinary boundaries, there are also linguistic boundaries across which the myth/science dichotomy does not travel easily. The standard interpretation of the birth of naturalism (or science, or philosophy...) as I put

<sup>&</sup>lt;sup>3</sup>I owe the example to Lloyd's reading of Viveiros de Castro 1998.

it forth above, is, it could be argued, a noticeably Anglo-American beast. French historians of philosophy in particular, see a significantly different picture. Just a list of book titles should suffice to show the trend: Paul Veyne's seminal *Did the Greeks Believe in their Myths?* (1983–answer to the title's question: not literally); Marcel Detienne's *The Creation of Mythology* (1981); Luc Brisson's *How Philosophers Saved Myths* (1996) and his earlier *Plato: Words and Myths* (1982).

To find philosophers in English asking hard questions about the myth-to-science narrative is more difficult, though thankfully not impossible (Lloyd 1979; 1987; 2003; Buxton 1999; Morgan 2000; Taub 2008). At the same time, though, those hard questions do not generally amount to an outright rejection of philosophy's creation myth as such. Even the critics seem to agree that there is some kernel of truth in the story. But we have to be careful. Suppose we make the claim that the Hippocratic innovation was to say that because all diseases have natural causes (to be treated with natural remedies), so the invocation of a second (divine) level of causation-even if it is truly there-is superfluous (Lloyd 2003). One danger is that this interpretation assumes the primacy of the physical, naturalistic starting point, which may in fact beg the guestion. After all, why should divinity be the second level rather than the first? We could imagine a faith-healer responding that since gods cause all things, gods must be appealed to in the first instance for healing; invoking a second (naturalistic) set of causes then becomes superfluous. Here the modern historian may be swayed one way rather than the other, perhaps, by the implicit supposition that faith-healing does (and did) not work and naturalistic medicine does (or did), so our Hippocratic would win this debate on empirical grounds-or would he? Given the ancient evidence, appeals to efficacy or inefficacy cut both ways at best (and in any case the question is unstudied and possibly un-study-able). But the efficacy angle does not just disappear for all that. For one thing, the emphasis on naturalistic causes in one group of ancient authors is widely seen as simultaneously enabling the empirical testing—and thus the improvement—of hypotheses. Knowledge becomes *cumulative* the instant it becomes testable. After all. to say that lightning is not caused by Zeus but is in fact caused by Thor is no real improvement in knowledge. By limiting relevant explanations of the natural world, we open up the possibility of making real progress as various hypotheses get put forward and tested. So also the tools of epistemology change: logic versus association, demonstration versus assertion.

We are back, in short, to our starting point (with all its attendant criticisms). Clearly, if we are to avoid this eternal recurrence of the same, naïve, myth/science distinction, then some careful fine-tuning is needed if we are to acknowledge that there is *something* different in the philosophers

and Hippocratics than in the mythogrophers and faith-healers. I want to suggest that the way out may lie in avoiding the temporal trap. Why do we need to see a birth of philosophy or of science as a way of thinking rather than as a genre of writing? After all, how safe is it really to assume that Hesiod or his forebears had no notion of naturalistic causation, no sense that experience improved knowledge, no understanding of how to be convinced by a rational argument? Surely the prospect is ridiculous. Hesiod may well tell a story in which the creation of the Cosmos is at the hands of the gods in one way or another, but why assume that he, his father, and his father's father credited all causation to gods? Before philosophy got written down, people had intervened in the world to produce all kinds of nonobvious (and often sophisticated) inventions, everything from agriculture, to bronze and iron, to oceangoing ships, to complex irrigation systems, and on, and on. How can one talk about, say, the domestication and selective breeding of horses, cattle, pigs, dogs, sheep, cats, and goats without assuming that the breeders had some-any-theory of inheritance, some naturalistic understanding of reproduction? One did not get puppies, let alone better puppies, by praying. One also did not improve the hulls or sails of vessels, navigation techniques, or weather prediction techniques by waiting for better ships to fall from the sky. To think that before Thales people had no naturalistic idea of causes is to put neolithic and bronze-age people in the position of the priest in the old joke, who prayed week after week to win the lottery so he could repair his crumbling church. After failing time and again, he finally curses God for not helping his people. God's response: "Meet me halfway: Buy a ticket!"

In the end, then, boundaries abound. But none of them, it seems, can be seen as epistemic. Disciplinary boundaries, temporal boundaries (real or assumed), linguistic boundaries, generic boundaries (poetry versus prose), media boundaries (oral versus written), all of these get a moment in the spotlight when we look closely at the creation myth of science or philosophy, but the epistemic moral should perhaps be held in that same suspension as the causes invoked by any other good fiction. Indeed, just so.

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