Book Review: Walsh, Lynda. *Scientists as Prophets: A Rhetorical Genealogy*. Oxford University Press, 2013.

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Science has traditionally viewed rhetoric with suspicion. Science, it was said, did not need techniques of persuasion because it had the scientific method, which offered results that were available for public inspection. The more knowledge one had, the less rhetoric was needed.

The problem with this view, as scholars of science have shown, is that it does not fit reality. When one looks at science as it is actually practiced, one sees rhetoric as an ineliminable aspect of scientific inquiry. Science, like any other form of human knowledge, requires that humans persuade each other, giving arguments that must take some rhetorical form.

It is in this context that Lynda Walsh has written her book "Scientists as Prophets: A Rhetorical Genealogy". A professor of English, she is interested not in scientific truths—the issue of truth is set aside for purposes of the study—looking instead at how scientists argue for the truth. Specifically, she argues that scientists in the early modern period employed what she calls the "prophetic ethos" as a way to persuade others. She claims that the legacy of the Western prophetic tradition provided scientists with the cultural resources to make convincing arguments.

Assuming that Walsh construes the term *prophetic* to have religious connotations, this thesis seems to me *prima facie* plausible, given the widespread connections that historians have established between religion and science (or, more accurately, natural philosophy). At least in the religion-saturated world of early modern Europe, it would be difficult to express beliefs about science without a religious gloss. The historian Andrew Cunningham has argued that one should distinguish between "natural philosophy" and the modern "science" that emerged in the nineteenth century because the former was often conceived in Christian devotional terms.

Unfortunately, I was less persuaded by the way Walsh argues for her thesis. She begins in chapter one by describing the Oracle of Delphi and then presents what she calls the five motivations of the ancient prophetic ethos.

1. Ascertainment- The move to consult a prophet in order to establish certainty in a crisis.
2. Authorization- The motive to see the prophet as speaking to the community as an outsider.
3. Confirmation- The motive to confirm the prophet's privileged access to knowledge.
4. Divination- The method for interpreting the prophetic messages that are received.
5. Prophecy- The move of the prophet to speak to the community in terms of the values that he or she holds.

With this prophetic ethos template, she will examine later figures in the history of science to show how they used the same motivations.

I will explain her approach using her chapter on Francis Bacon as an example. After briefly describing his career and his project of reforming natural philosophy, set in a tumultuous period after the English Reformation, she identifies the way the prophetic ethos manifests in his work.

1. Ascertainment- Bacon gives an experimental method that promises to establish progressive stages of certainty.
2. Authorization- He proposes the establishment of "Salomon's House", an ideal scientific society whose members will function as priests of nature parallel to the priests of the English church.
3. Confirmation- Bacon says the priest of nature will be able to use the method to create "tables of nature", a taxonomy of all knowledge.
4. Divination- Bacon's inductive method will "vex" nature so that it will reveal its secrets.
5. Prophecy- He recommends that natural philosophers report "natural knowledge" in a plain style in contrast to the scholastic philosophers of the medieval universities.

Walsh concludes that Bacon "adopted and adapted the political platform offered by the prophetic ethos", which was then taken up by the British Royal Society (which she analyzes in a separate chapter).

From my perspective, I am willing to grant Walsh that Bacon does set himself forward as a prophet in many cases; for someone who made no scientific discoveries, had an unworkable method, and was incorrect on many of the scientific disputes of his day, Bacon's rhetoric is immoderate and rife with religious connotations. However, it is not clear to me that Walsh's abstract theoretical apparatus succeeds in proving that this is the case. While she does establish some similarities between Bacon and the Greek prophetic tradition, that in itself is unconvincing because almost any situation can be compared in some respects. In other words, by rendering the Greek prophetic tradition in abstract terms, it becomes easy to discover the prophetic ethos everywhere. My visit to the doctor, for example, can easily be discussed in terms of her authorization, confirmation, and divinatory methods, even though it is not accurate to say she is employing the ethos of a prophetess. The book would have been far more convincing if Walsh could have presented better evidence of specific ways that Bacon picked up and promoted the Greek and Hebrew prophetic tradition.

I think Walsh implicitly acknowledges this criticism in the second half of the book, which analyzes the rhetoric of prominent figures in twentieth-century science, including J. Robert Oppenheimer, Rachel Carson, Stephen Gould, and Carl Sagan. In these chapters, Walsh makes little effort to fit these figures into the five motivations of Greek philosophy, instead choosing to place each figure in his or her own context and describing how each used rhetoric to accomplish intended goals. Freed from the artificial constraints of the five motivations, this part of the book was much more interesting, in particular the way scientists struggle with whether to confine themselves to only giving scientific data to the public or whether they should be policy advocates as well, thus overturning the is/ought distinction. In summary, this book has some interesting and well-researched chapters on the role of rhetoric of science, though the overall thesis fails to persuade.