

Finding Unity through Knowledge: Narrative and Identity-building in Greek Technical Prose

The notion that rhetorical qualities are by no means alien to Greek and Roman technical prose is well-established in scholarship on ancient knowledge traditions (e.g. Roby 2016; Berryman 2009; Schneider 1989). However, the question of how the rhetoric of identification is employed by technical authors still remains open. Through a comparative case-study, this paper addresses the use of cultural-historical narrative as a rhetorical means of identity-building in two Greek prose texts belonging to different technico-scientific domains: the Hippocratic treatise *On Ancient Medicine* (ed. Schiefsky 2005) and Philo Mechanicus' artillery manual (ed. Marsden 1971). I shall argue that, in constructing narratives concerning the origin of their craft or science, both authors emphasize the collective and collaborative dimension of their discipline's progress, in order to strengthen a sense of affiliation among practitioners.

While the Hippocratic writer opens his work with a subtle account of the invention of medicine (*De vet. med.* 1.2-5.5), Philo's handbook includes a detailed narrative reconstruction of the beginnings of artillery-science (*Belop.* 50.14-51.2). As I shall show, both authors attribute the discovery of their art to anonymous groups of researchers who, by trial and error (cf. Schiefsky 2015; Dunn 2005), developed the mental model (cf. Renn and Damerow 2007) on which any further innovation in the craft is ultimately based. By insisting on the plurality of the discoverers and highlighting the continuity of their discipline's methods and procedures across generations, these technical authors construe their craft's development as a cultural-historical narrative of unity and collaboration.

The language used by Philo closely recalls the cultural history of medicine outlined by the Hippocratic author: for both writers, the history of their respective disciplines starts with a discovery (*heúresis*); the object of this discovery is the first principle (*arché*) of the craft, and the

protagonists of the discovery narrative are nameless researchers of old. By discovering the basic method and principles of the discipline, the early inventors changed the technological world forever, and thereby made a major contribution to human civilization as a whole.

For both Philo and the Hippocratic author, method itself is the guarantor of the soundness of any innovation — even when the innovation itself departs from traditional practice — and the primary means by which a craft can be brought to perfection. Both authors' cultural-historical accounts are deliberately and explicitly connected with an effort to ground the scientific status, and thus the authority, of their respective art. Authority and authorship are, in other words, mutually interdependent within both writers' scientific communication.

In conclusion, both Philo's and [Hippocrates'] narratives adopt a rhetorical strategy of identity-building: both, in fact, aim at demonstrating that membership in the practitioners' community is contingent upon mastery of a systematic method of discovery. For both authors, as I shall argue, the role of cultural history in scientific communication is to persuade both the expert and the non-professional audience of the epistemic value of the methodological principles established through the practitioners' cooperation. While reinforcing the specialist's sense of belonging to a community of skilled technicians, this rhetorical strategy coopts the lay reader into the ongoing progress of the craft.

Bibliography

Berryman, S. 2009. *The Mechanical Hypothesis in Ancient Greek Natural Philosophy*.

Cambridge: Cambridge University Press.

Dunn, F. 2005. "On Ancient Medicine and its Intellectual Context." In Philip J. van der Eijk (ed.), *Hippocrates in Context*. Leiden: Brill. 49-67.

Marsden, E.W. (ed.) 1971. *Greek and Roman Artillery. Technical Treatises*. Oxford: OUP.

Renn, J. and P. Damerow. 2007. "Mentale Modelle als kognitive Instrumente der Transformation von technischem Wissen." In H. Böhme, C. Rapp, and W. Rösler (eds.), *Übersetzung und Transformation*. Berlin: De Gruyter. 311-331.

Roby, C.A. 2016. *Technical Ekphrasis in Greek and Roman Science and Literature*. Cambridge. Cambridge University Press.

Schiefsky, M.J. 2015. "Technē and Method in Ancient Artillery Construction: The *Belopoeica* of Philo of Byzantium." In B. Holmes and K.D. Fischer (eds.), *The Frontiers of Ancient Science. Essays in Honor of Heinrich von Staden*. Berlin: De Gruyter. 615-653.

_____ 2005. *Hippocrates. On Ancient Medicine*. Leiden: Brill.

Schneider, H. 1989. *Das griechische Technikverständnis. Von den Epen Homers bis zu den Anfängen der technologischen Fachliteratur*, Darmstadt: Wissenschaftliche Buchgesellschaft.