Valuing Knowledge: Technical Manuals on Stones as Cultural Artefacts

Prior to the fourth century BCE, detailed textual references to precious stones are rare. In the late fourth century BCE., however, a handful of technical writers began to take an interest in gemstones and minerals. The *Lithika* (*de Lapidibus*) of Theophrastus, the earliest extant example of this type of inquiry, dated to circa 315 BCE, examined the properties of both precious and semi-precious stones (Eicholz 1965, Keyser 1997). In his work, Theophrastus outlines a rudimentary system of mineralogical classification and presents his observations and experimentations with stones that border on alchemical in nature. His work not only provides an early glimpse into the world of the natural sciences, but would also profoundly influenced later writers.

Several centuries later, Pliny the Elder, as part of his encyclopedic project known as the *Natural History* (1st cent. CE), devoted several books to the description of minerals and precious stones. Although he cites Theophrastus along with the lost texts of Sotacus as sources for his books on stones contained within the *Natural History*, Pliny's treatment of stones differs substantially from that of Theophrastus. Pliny, who appears to have been less concerned with the scientific uses of stones, provides more of a narrative of the use of stones in the Roman world, a sort of history of stones. Like Theophrastus, he categories stones according to color rather than by crystalline structure, but he does far more than this, frequently including anecdotes about the popularity of certain colors of stones at different times, as well as the perceived benefits and powers of particular gems.

Both works have been, at best, neglected, and at worst often characterized by scholarship as unoriginal, subliterary, and devoid of empirical experience, especially that of Pliny. This paper argues that such a view neglects to fully consider the social and cultural importance of

these mineralogical treaties. Even in their own time, these mineralogical treatises may have influenced writers well beyond the genre of technical treatises; Smith, for example, has proposed, that Theophrastus may have influenced Posidippus' ekphrastic poems on stones (Smith 2003). While such literary influence is significant, I argue that the mineralogical treatises are significant in their own right as well. The texts, by means of the treatment of the stones, engage with important discourses of the time. Their descriptions of stones, ranging from the common to those gleaned from the boundaries of the known world, reveal beliefs about empire and identity. Likewise, the fact that some stones were allegedly gathered at great expense, whether with a bow and arrow or by someone hanging from a rope over the Alps, provides information about cultural tastes and values.

This paper will explore the *de Lapidibus* and portions of the *Natural History* as two works that serve as distinct yet parallel examples of early mineralogical texts embodying different approaches to one topic. Despite varying methodologies, both works served to test and demarcate the boundaries of lithic knowledge. Theophrastus' experiments and Pliny's exhaustive treatment of the subject each reflect the desire for mastery over a body of material and power that such knowledge brought. Whether knowledge and command of the material was gained by trial and experimentation or by reading others' works, this paper concludes that the texts must be read as artifacts whose value and prestige rivaled that of the very objects described therein.

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