## Back to Basics: Ancient Technologies and Invisible Histories

As archaeologists, the social life of objects is central to the way we understand the people and societies that we study; however, this aspect of material culture is often difficult to convey in a classroom setting. For many students, ancient objects are confined to the pages of a textbook or are static artifacts in a museum display. To address this disconnect between the reality and the reproduction of objects, many classes incorporate museum quality replicas in an effort to engage students' tactile senses, and to encourage a familiarity with the three-dimensional object in order to approximate its reception by ancient Greeks or Romans. But this approach only captures half of an object's life—the final portion of an object's biography in which it was used and (perhaps) broken and discarded. Little is learned about the object's creation, and no light is shed on the insights that can be gained from a focus on the practical design of common household items, not as objects d'art in a museum, but as the utilitarian tools that people in antiquity understood them to be. To address this lacuna, I propose a class that focusses on material culture in a decidedly low-tech manner: a class in which students learn about ancient materials and technologies by creating replicas with authentic materials and techniques.

In this class, groups of students learn about the applications and the limitations of different materials by researching and crafting everyday objects. In the process, they also gain an appreciation of the temporal and social complexities that underpin the construction of even simple objects in an age before power tools and industrial materials were accessible. For example, while learning about technologies of communication and record keeping, students can opt to build a wax tablet and experiment with ancient note-taking. Through this process, they learn that a wax tablet is not the direct equivalent of a modern notebook. Because tablets contain a finite amount of space, the scribe must make a series of decisions about what information to

record and what to omit. Clay tablets, on the other hand, are more easily scalable for large jobs, but they require preparation and must be used within a limited amount of time in a warm, dry climate like the Mediterranean and the Middle East. In a similar vein, stone seals reveal much about trade networks and literacy. Steatite (soapstone) was commonly used to create sealstones and signets, and the medium is easy for students to carve, but that facility of construction also made it less valuable. By presenting students with a hard stone, like jasper, the course teaches that the value of semi-precious sealstones is derived not only from the intrinsic value of the medium but also from the time it takes to work them. Such lessons are easy enough to tell students, but they are also easily forgotten. By contrast, the presentation of experiential opportunities allows students to engage directly with the ancient world in a way that better relates to their own lived experiences.

The value in this approach lies in the fact that these creations are not final projects or one-off extra credit assignments, but instead form the core of the class. Students craft their replicas in response to scholarly questions about different materials and ancient technologies repeatedly throughout the semester, and this repetition encourages experiential exploration of ancient social contexts. The dynamic life of common objects in antiquity is easy to miss and overlook, but by engaging students in the creative aspects of ancient technologies, the course brings into focus those social histories that are otherwise invisible to the modern eye.