

# CESTA research anthology 2022

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# Foundations for the Alpheios Research Lab

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Working with The Alpheios Project, Ltd., a non-profit organization that develops digital tools for reading ancient languages, I am researching how undergraduates use technology in their first-year ancient language courses. Developed by the Alpheios project, the Alpheios reading tool (from here on, "Alpheios") is a Chrome extension that allows students to double-click on any word in ancient Greek, classical Latin, or ancient Persian on any web page and receive a full analysis and definition, alongside other information. The tool also keeps track of the words a user clicks on and allows this list to be exported, along with definitions, directly to flashcards.

The goal of this research project is to determine to what extent Alpheios is an effective tool for undergraduate learners in first-year ancient language classrooms. A tool like Alpheios, which provides immediate information about the salient features of a word, can be an invaluable resource for students. This ease-of-access may also, however, enable a student to rely on the tool as a crutch rather than a scaffold. I ask students to complete a reading task in ancient Greek or Latin using a traditional paper dictionary, and one week later to complete a similar task using Alpheios. Students then take a short quiz that measures their reading comprehension and vocabulary retention. This experiment is scheduled to begin this fall after a rigorous year of background research and experiment approval.

**A** The text on the left from Homer's *Iliad* is on a web page available through the Loeb Classical Library (Murray, trans., 1924).

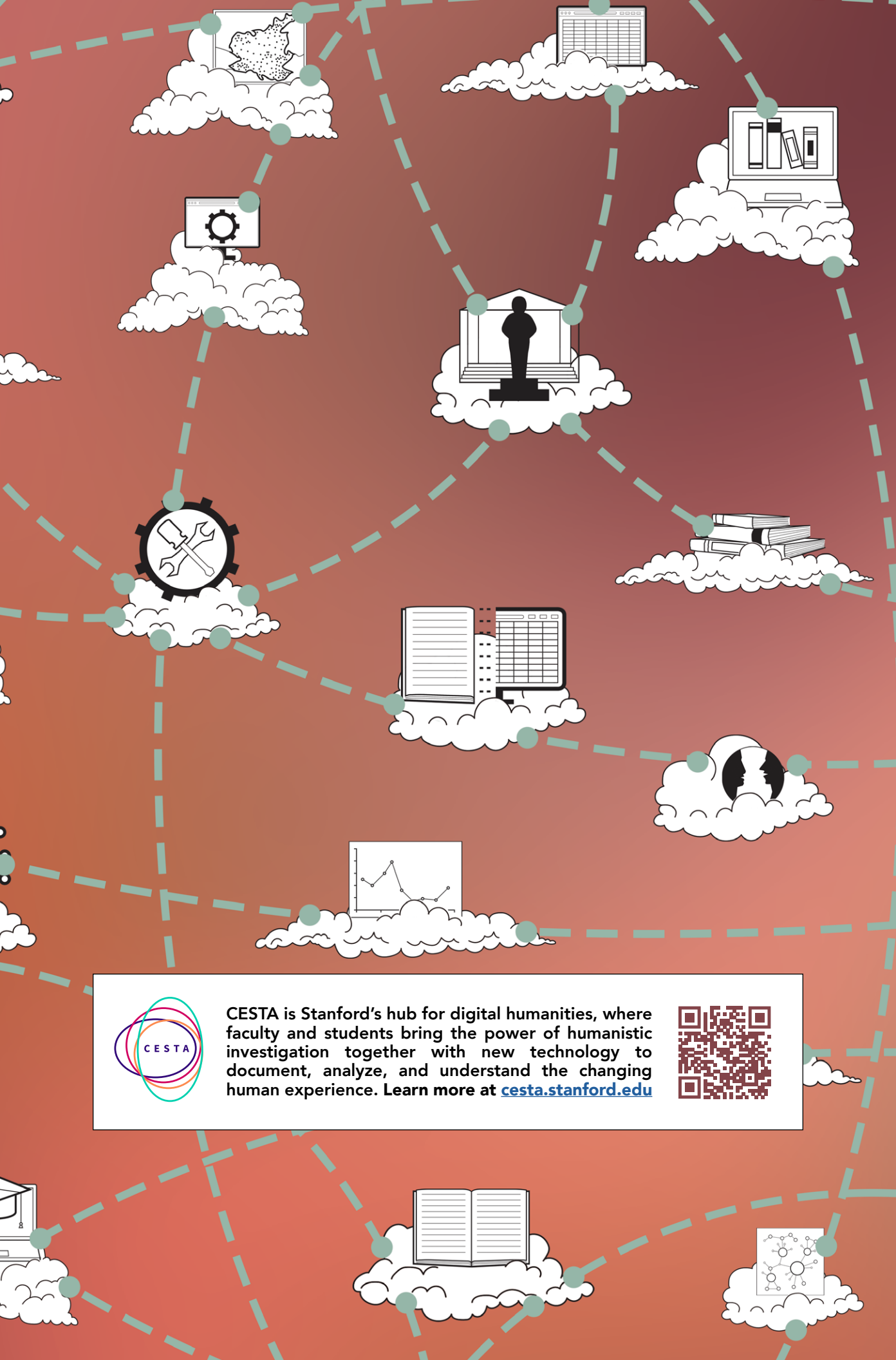
**B** Alpheios displays the root form of the word; this is the form a learner would need to know to find this word in a dictionary.

**C** Alpheios provides basic information about the word; since μήνιν is an ancient Greek noun, the information displayed is the word's gender, verbal type, and declension.

**D** Alpheios provides the first dictionary definition of the target word followed by the syllabic deconstruction.

**E** Alpheios parses the specific morphological form that the user clicked on; in this case, μήνιν is a singular accusative form.

A labeled screenshot showing the core functionality of the Alpheios tool.



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