Although virtual reality (VR) is a relatively new tool in language learning, a recent systematic review of scholarship on the topic underscores the various ways VR can augment the language learning experience. Immersing students in interactive, computer-generated virtual worlds can boost students' learning outcomes and enhance students' motivation to learn the target language (e.g., Huang 2021). Despite the clear pedagogical potential of transporting Latin and ancient Greek students into the past to engage with their target languages in meaningful cultural contexts, reviews indicate that VR is primarily being utilized for modern language teaching in higher education (e.g., Qui 2019; Beams and Crofton-Sleigh's *Lingua Vitae* (2024) is an exception but still developed for a college-level Latin curriculum). To address these biases, this paper outlines the development of a VR Latin language learning application and its integration into a junior high school classroom in the USA. The application functions as an ancillary tool for the *Lingua Latina per se Illustrata* series and a complement to the instructor's Active Latin methodology, which encourages students to read, write, listen, and speak in Latin (e.g. Stringer 2019).

An interactive 3D model of an ancient Roman shop, designed in the Unity 3D game engine by the Virtual Roman Retail Project (VRR) for use on a Meta Quest VR headset, forms the basic building block for the language learning application (see Fredrick et al 2023). When students put on the Quest headset, they are transported back in time to a textile shop on the *via dell'Abbondanza* in Pompeii. Inside the virtual world, students can use their hybrid physical-digital bodies to explore the shop, browse the goods displayed on the shop counter with their hand-held controllers, and engage the NPC shopkeeper in a commercial exchange to purchase a

pair of *socci* (slippers). The authors' script for the commercial exchange, inspired by Latin student composition projects keyed to *Lingua Latina*'s Chapter 8: *Taberna Romana*, was designed in Yarn Spinner, an open-source dialogue system that facilitates the creation of branching narratives. With Yarn Spinner, students have the power to make choices in their conversation with the shopkeeper that leads to different paths and outcomes: for instance, they might successfully haggle for and purchase a pair of *socci* (slippers) or they might try to steal them! Consequently, the VR application is designed to offer students an engaging and meaningful cultural context in which they can practice and learn grammar and vocabulary intuitively.

The authors investigate the efficacy of VR in improving the students' Latin language skills by testing the application with junior high school students in their second year of a two-year elementary Latin course. At the time of testing in January 2025, the class will have already worked its way through Chapter 8: *Taberna Romana*. The students who elect to participate in the study will complete a pre-VR survey and assessment that asks them questions about their previous VR experience and that establishes a baseline for their understanding of targeted vocabulary (e.g., *socci* = slippers, *emptor* = buyer) and grammar (e.g., correlatives *tam...quam* and *tantus...quantus* introduced in Chapters 6-8 and demonstrative pronouns *hic* and *ille* introduced in Chapter 8). After playing through the application in the Quest VR headset, the students will take a post-VR survey and assessment to record their reactions to the experience and test their vocabulary retention and general comprehension of the Latin dialogue. Although the value of the use of VR in Latin language learning in a secondary school context has not yet been fully explored, the authors hypothesize that the VR application will improve the students' vocabulary retention and Latin comprehension. The paper will end with a reflection on the

benefits and challenges of integrating VR into an ancient language classroom as a learning tool that promotes "Living Latin."

Works Cited

- Beams, B., & Crofton-Sleigh, L. (2024). "Lingua Vitae: Teaching the Latin Language in Virtual Reality." In B. Beams and L. Crofton-Sleigh (eds.), Past and Future Presence:

 Approaches for Implementing XR Technology in Humanities and Art Education. Amherst College Press.
- Fredrick, D., Vennarucci, R.G., Loder, W. (2023). "What Remains of Paquius Proculus? Video Game Bodies in Virtual Pompeii." In H. Barnard (ed.), *Archaeology Out-of-The-Box* (pp. 237-224). Cotsen Institute of Archaeology Press (UCLA).
- Huang, X.; Zou, D.; Cheng, G.; Xie, H. (2021) "A Systematic Review of AR and VR Enhanced Language Learning." *Sustainability* 13, 4639.
- Stinger, G. 2019. (2019). "What Can Active Latin Accomplish? Well Let Me Just Show You." The Classical Outlook 94, 81-93.
- Qiu, X.Y.; Chiu, C.K.; Zhao, L.L.; Sun, C.F.; Chen, S.J. (2021). "Trends in VR/AR technology-supporting language learning from 2008 to 2019: A research perspective." *Interactive Learning Environments* 31, 1–24.