

# Classical heritage and text-based second language learning in three-dimensional virtual library environment

István Károly Boda<sup>a</sup>, Erzsébet Tóth<sup>b</sup>

<sup>a</sup>Debrecen Reformed Theological University, Department of Mathematics and Informatics

boda.istvan@drhe.hu

<sup>b</sup>University of Debrecen, Faculty of Informatics

erzsebet.toth@inf.unideb.hu

## Abstract

In our paper we would like to discuss in detail the current status of our three-dimensional virtual library model (3DVLM) built on the hierarchical scheme of the ancient Library of Alexandria worked out in the so-called Pinakes by Callimachus in the 3rd century BC. The full content of the model, once completed, would provide a comprehensive overview of the classical heritage our culture is originated from. In this tradition Callimachus is considered to be one of the most talented Hellenistic scholar-poets. His brief epigrams were outstanding which reflected his allusive mind and erudition. In general, it is a great challenge for us to deliver the message of ancient times to the present-day culture, but it seems to be very difficult to convey this highly sophisticated content to the members of the young (and especially the y and z) generations of our times who have been brought up and educated in a completely different social and cultural environment. Our basic idea is that language learning can serve as a common basis to transform and offer the ancient knowledge for the young generations of the internet era. Moreover, we are aware that nowadays one of the preferred sources of information is Wikipedia. So we chose and carefully preprocessed some Wikipedia texts (in English) about Callimachus' life and works for the 3DVLM to assist our users in language learning and, at the same time, provide them short but valuable texts which are worth learning and memorizing.

In order that the selected texts could be easily understood and memorized we provided additional items which are necessary for language learners (e.g. vocabulary and thesaurus of rare or special words, expressions and idioms, images and illustrations, selected concordances and quotations, encyclopedia entries, referred texts etc.). Because the organization of the primary texts and their relationships with the associated items are of great significance in the

learning process, we tried to fully exploit the advantages and special features of the 3D environment of the MaxWhere Seminar System, visualizing and mapping the compiled material using various colors and typography, block elements, images, lists etc. on the one hand, and exploring the co-reference and intertextual relationships by maps and the spatial arrangement of the material, tables, hypertext links between the primary texts and the additional items etc. on the other hand. Since self-check and practice is inevitable in the learning process, we elaborated exercise materials related to the preprocessed library content by providing various exercises, questions, drills, tests, quizzes, puzzles etc. for our users.

We intend to achieve two main objectives using the 3DVLM. First, we would like to support and motivate our users to acquire in-depth knowledge of the ancient Alexandrian times. The learning philosophy of the model is to help its users understand and interpret the compiled material ‘at once’, supplying them with the necessary background and linguistic knowledge. Second, we firmly hope that our users will gradually improve their English linguistic competence in the course of reading, understanding and memorizing the preprocessed material provided by our virtual library.

*Keywords:* Callimachus, Library of Alexandria, three-dimensional virtual library model, MaxWhere Seminar System, text-based language learning

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