



SunoikisisDC

An International Consortium of Digital Classics Programs

BEYOND CLASSICS: THE BOOK OF THE DEAD IN 3D

SUNOIKISISDC SUMMER 2021 SESSION 14, JULY 15, 2021

CONVENORS: RITA LUCARELLI (UNIVERSITY OF CALIFORNIA, BERKELEY) AND
FRANZISKA NAETHER (UNIVERSITY OF LEIPZIG)

YOUTUBE LINK: [HTTPS://YOUTU.BE/W8TD3UJDGMA](https://youtu.be/w8td3UJDGMA)

GITHUB LINK: [HTTPS://GITHUB.COM/SUNOIKISISDC/SUNOIKISISDC-2020-
2021/WIKI/SUNOIKISISDC-SUMMER-2021-SESSION-14](https://github.com/sunoikisisdc/sunoikisisdc-2020-2021/wiki/sunoikisisdc-summer-2021-session-14)

SESSION OUTLINE

- The material and written culture of ancient Egypt constitutes one of the best preserved and most robust archaeological corpora to survive from antiquity, as well as one of the most popular avenues for public engagement with the Humanities. Digital initiatives and techniques, especially 3D visualizations, have become crucial for the conservation, documentation, and dissemination of ancient Egyptian material and texts to the broadest possible audience. This class will introduce the students to the Book of the Dead in 3D project, aiming at building a database of annotated 3D models of ancient Egyptian coffins. In the first part of the class, we will explore the technological and intellectual challenges of combining multiple types of data in the realization of the models and their annotations.

CASE STUDY

- In the second part of the class, we will focus on a case-study: the Late Period inner sarcophagus of the “chief physician” and “overseer of the Temehu (Libyan mercenaries)” Psamtek, found in 1900 in Psamtek’s tomb south of the Unas pyramid at Saqqara, which is now on public display in the Phoebe A. Hearst Museum of Anthropology in Berkeley, California (PAHMA 5-522). Like many museum objects, its modern display cannot adequately replicate aspects of its original archaeological context — in a deep rock-cut shaft, nestled among hundreds of impressive elite tombs at the necropolis. We will look in detail to the 3D annotated model of this coffin and, in order to virtually re-place the sarcophagus in its original context, how a joint team from the University of California, Berkeley and Santa Cruz, is developing a dynamic VR-headset experience that combines a 3D reconstruction model of Saqqara with a photogrammetric model of the sarcophagus. Finally, we will look at a demo of the VR headset application (under development) that we are developing to “experience” the coffin in its original burial setting.

SEMINAR READINGS

- 2016 “Images of Eternity in 3D. The Visualization of Ancient Egyptian Coffins through Photogrammetry.” In Monica Berti and Franziska Naether (eds.), *Altertumswissenschaften in a Digital Age: Egyptology, Papyrology and Beyond; Proceedings of a Conference and Workshop in Leipzig, November 4-6. Leipzig, Beitrag 24*, open access available here (QUCOSA): <https://nbn-resolving.org/urn:nbn:de:bsz:15-qucosa-201685>

DIGITAL EGYPTOLOGY: MATERIAL CULTURE

- Primary sources: still a way to go!
- Initiatives (open/closed access; open source/proprietary databases)
- On the road to standardization (ontologies/thesauri/vocabulary)
- APIs for exchanging data and to integrate material in larger frameworks (Wikibase, Wikidata, national infrastructures, Trismegistos, Pleiades etc.) or create new databases (Semantic MediaWiki etc.)
- AI for recognition of elements/similar artifacts in images
(<https://cleo.ainciant.org/pages/en/>)

EXAMPLES/SOFTWARE

- Example closed access: Filemaker + Website; Egyptian Museum Leipzig: <https://www2.gko.uni-leipzig.de/aegyptisches-museum/ueber-das-museum/objekte-erklaeren.html>
- Example open access (art history): Getty Vocabulary: <https://www.getty.edu/research/tools/vocabularies/> - used e. g. in „South Africa, Greece, Rome: a digital museum“ <https://exhibits.stanford.edu/SAGR> (Spotlight)
- Example open access (national endeavor): Arachne - <https://arachne.dainst.org/>; <https://www.idai.world/>
- Example open access: Research Space; British Museum: <https://www.britishmuseum.org/collection>
- Example open access: <https://collections.louvre.fr/en/ark:/53355/cl010000125>
- Example interaction: Website; Metropolitan Museum of Art, New York: <https://www.metmuseum.org/art/collection>
- Example 3: Omeka S: <https://omeka.org/>; <https://classicizingphiladelphia.omeka.net/>

EMBEDDING FURTHER MEDIA

- Impact of covid: opportunity to digitize vs. no access to collections/research data (people working from home)
- Text corpora; blogs
- Maps
- Audio guides, curator's videos
- Educational tools (games, sketch book handouts etc.)
- RTI viewer/3D images etc. (SketchFab)
- Digital exhibitions

The background is a dark blue gradient. In the corners, there are white, stylized circuit-like lines. These lines consist of straight segments connected by small circles, resembling a network or a map. The lines are more dense in the bottom-left and top-left corners, and more sparse in the top-right and bottom-right corners.

THE BOOK OF THE DEAD IN 3D

RITA LUCARELLI

FURTHER READINGS – PLEASE ASK US FOR PDFS

- Lucarelli, Rita. “Ancient Egyptian Magical Spells in 3D and the Materiality of the Book of the Dead.” In Emily Cole and Alice Mandell (eds.) *Materiality of Communication [Special Issue]*, MAARAV, A Journal for the Study of the Northwest Semitic Languages and Literatures, vol. 23, no. 1, 2019, pp. 137-150
- Sullivan, Elaine, Angel D. Nieves, and Lisa M. Snyder. “Making the Model: Scholarship and Rhetoric in 3D Historical Reconstructions.” In *Making Things and Drawing Boundaries: Experiments in the Digital Humanities*, edited by Sayers, Jentry. University of Minnesota Press, 2017.

OTHER RESOURCES

- The Book of the Dead in 3D: <https://3dcoffins.berkeley.edu>

EXERCISE

- Look at the annotated 3D model of the sarcophagus of Psamtek (<https://3dcoffins.berkeley.edu/coffins/pahma-5-522>) and write down in one paragraph what you think it is the most important information that the annotations on the model provide.



SEE YOU NEXT WEEK!

- **Session 15. Beyond Classics: The Turin Papyrus Online Platform (TPOP)**
 - Thursday July 22, 17:15-18:45 CEST
 - Convenors: Susanne Töpfer (Fondazione Museo delle Antichità Egizie di Torino) and Franziska Naether (University of Leipzig)
 - YouTube link: <https://youtu.be/tkom5WSs6PA>
 - <https://github.com/SunoikisisDC/SunoikisisDC-2020-2021/wiki/SunoikisisDC-Summer-2021-Session-15>
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