

CONgolese heritage objects examined and contextualized through X-ray Tomography

Contract - B2/233/p2/CONteXT

SUMMARY

Context

The 2-year CONteXT project (CONgolese heritage objects examined and contextualized through X-ray Tomography) was launched in March 2023 as a continuation of the TOCOWO project (Tomography of Congolese Wooden Objects). During TOCOWO, 129 wooden cultural artifacts from the Royal Museum for Central Africa's (RMCA) collection were transported to UGent, where they were scanned using X-ray microtomography. The primary aim of this initial research was to assess the viability of this non-invasive imaging technique for identifying wood species. By the project's conclusion in February 2023, the high-resolution 3D scans had not only provided insights into the anatomical structure of the wood but had also revealed a wealth of additional information that remained to be explored. The CONteXT project was established to further investigate these data, delving deeper into the objects' material composition, craftsmanship, signs of degradation, and past conservation treatments.

Objectives

The primary goal of the CONteXT project is to enhance the understanding of Congolese heritage objects through advanced imaging and analysis. By delving into the scans and systematically examining the information this unprecedented dataset holds, the project wants to explore the possibilities to visualize and document any construction details, traces of use, deterioration processes and old restoration treatments. The insights provided by these hundred collection objects about their creation and use, as well as about the interaction of their materials with past and present environments. Beyond material studies, the project aims to address ethical considerations surrounding the scanning of sacred and religious artifacts, particularly those containing concealed spiritual elements. By actively engaging with knowledge-holders from both Belgium and the Democratic Republic of Congo (DRC), the project seeks to incorporate source community perspectives in determining how the scans and results of this project should be disclosed and valorised. Additionally, CONteXT foresees knowledge dissemination through public and academic outreach, including exhibitions, an open-access online database, and scholarly publications.

Conclusions

Over the course of the project, we have made significant progress in deepening the contextual understanding of Congolese heritage objects. The integration of scientific analysis with ethical discourse has facilitated a more nuanced approach to cultural heritage preservation. Challenges such as time constraints and evolving ethical considerations required adaptations to the original research plan. Despite these, the project has successfully contributed to the knowledge of the cultural objects, advanced material heritage research, and fostered dialogue with source communities.

Keywords

Cultural heritage, Sub-Saharan African heritage, tropical wood species, X-ray μ CT, wood identification, wood selection