

DOI <https://doi.org/10.30525/978-9934-26-525-9-5>

**EVALUATING INFORMATION POTENTIAL  
AND CATALOGING OF VOTIVES  
WITH ENGRAVED HUMAN IMAGES  
(NATIONAL PRESERVE «KYIV-PECHERSK LAVRA»)**

**Antonina Kizlova**

*National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»; National Preserve «Kyiv-Pechersk Lavra»,  
ant\_kiz@ukr.net*

**Introduction.** The veneration of Christian sacred objects, spanning Catholic, Orthodox, Greek-Catholic, and Armenian traditions, frequently manifests through the offering of small votive gifts. These offerings, ranging from metal or wax figurines to exquisite pieces of jewellery, are placed by devotees from diverse social backgrounds alongside. This practice, widespread on the territory of Ukraine, especially spanning the 18<sup>th</sup> to the early 20<sup>th</sup> centuries, illustrates the varied material expressions of spiritual devotion, uniting believers across social strata in their reverence for holy artifacts. Thus, as multimodal artifacts of spiritual history and decorative applied arts, and as complex historical sources, they require in-depth study. The National Preserve «Kyiv-Pechersk Lavra» houses an extensive collection of more than 600 metal votive offerings, spanning from the 18<sup>th</sup> to the early 20<sup>th</sup> centuries. In cases where the origin of a museum artifact is uncertain, ascertaining its cultural and religious background can pose significant challenges [1]. Therefore, it is crucial to comprehensively study every detail, every component of these multimodal artifacts.

This paper *aims* to evaluate the possibilities of applying artificial intelligence for the classification and interpretation of the votives with engraved human images (National Preserve «Kyiv-Pechersk Lavra»).

**Materials and methods.** 49 silver votives (plates of geometric shapes or in the form of a heart or a specific body part) and one silver-gilt votive from the mentioned collection contain engraved images of people in various contexts. Unlike stamped or embossed items, these images are significantly more individualized and dependent on the personality of both the craftsperson and the donor. Sometimes these items contain inscriptions. This study is conducted with strict adherence to fundamental principles of academic integrity and research ethics, particularly crucial when dealing with religious artifacts of significant cultural value. The research framework ensures comprehensive documentation and ethical handling of all materials while maintaining rigorous academic standards. Our methodology emphasizes transparent documentation of all examined artifacts, including their inventory numbers, provenance, physical characteristics, and detailed recording of inscriptions and engravings. This systematic approach ensures the preservation of these valuable cultural heritage items while facilitating thorough academic investigation.

**Results.** Based on the results of examining the mentioned pendants, the main criteria for classification were determined. It was found that the informational potential of an engraved image increases in the presence of an inscription or when a complex scene is depicted (for example, the offering of gifts to an icon). Even initial classification based on criteria deeper than the pendant's shape or the pose of the depicted person, requires profound knowledge of religious, church, and art history, symbolism, paleography, costume studies, and historical research methodologies.

**Conclusion.** It's possible to argue that the varied shapes, engravings, and inscriptions on these items provide only a limited opportunity for applying state-of-the-art computer vision techniques for semantic segmentation, classification, and image understanding. However, the study of the ex-votos with the engraved human images can benefit from and contribute to the development of AI-powered methods for automated indexing and cataloguing of visual sources in the collections, provided that researchers correctly document the

identified characteristics of each individual pendant according to a specific scheme.

### References

1. Кізлова, А., & Крайня, О. Повсякдення та емоційний світ вірян у символах і образах вотивів з колекції Національного заповідника «Києво-Печерська лавра». *Forum Wschodnie. Rocznik interdyscyplinary*, 2022, 10, 25–40.

**Key words:** votive, sacred artifact, engraved image, artificial intelligence, religious heritage, Christianity, material culture.

DOI <https://doi.org/10.30525/978-9934-26-525-9-6>

## CORRELATION BETWEEN ACADEMIC INTEGRITY AND CONSCIOUS CITIZENSHIP

**Victoria Kolisnyk**

*Bohdan Khmelnytsky Cherkasy National University,  
victoriayu@ukr.net*

**Introduction.** Academic integrity is not only the matter of educational establishments. It is closely connected with the society in the form of attitude to work and personal life. Thus paying considerable attention to that concept is a proper way to create a healthy society with conscious citizens of high moral principles.

Academic integrity is a comprehensive issue. In general, it concerns writing individual works, tests, reference works, course papers, diploma papers, projects (in the students' area) as well as writing scientific articles, creation of teaching material, textbooks, courses, theses, providing research (in the area of lecturers, scientific workers and researchers).