Runes in Venice.
Ontological description of the runic inscriptions on the Piraeus Lion (Venetian Arsenal)

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The poster aims at showing an ontological description of three fragmentary runic inscriptions in Venice. This research work is part of the project "Il Leone del Pireo presso l'Arsenale di Venezia: un progetto digitale partecipativo" (P.I.: Prof. Marina Buzzoni, Ca' Foscari University of Venice), which is in turn part of the CHANGES (Cultural Heritage Active Innovation for Sustainable Society)-Crest (Cultural Resources for Sustainable Tourism) project, funded by PNRR (Piano Nazionale di Resistenza e Resilienza (PNRR 2021–2026), and led by Ca' Foscari University of Venice.

The project is based on an interdisciplinary approach, and focuses on the study, analysis, and valorization of the three runic inscriptions (ca. 11th cent. AC): two of a considerable length engraved on the right and left flanks (respectively of 3 and 4 lines), and a shorter one on the left hind leg. They are engraved on the Greek zoomorphic statue (ca. 4th cent. BC) of the Piraeus Lion at the Venetian Arsenal and their readability is increasingly deteriorating. The statue has been standing outside the entrance of the Arsenal since its arrival from Athens in 1687 and it is delimited only by a fence. This impacts on the condition of conservation of the statue, as well as of the inscriptions. For this reason, the first step of the project was to create a 3D digitization of the statue with a focus on the inscriptions in compliance with the AGID (*Agenzia per l'Italia Digitale*) guidelines. The goal is to make the consultation of the inscriptions and its readings, along with the transcriptions and the translations provided by the scholars during the centuries, including our own, available and easily accessible. Hence, the texts of the inscriptions have been encoded according to TEI-EpiDoc XML encoding standard (Guidelines v. 9.5), to eventually produce a scholarly digital edition of the corpus. The edition is also to be compliant with the FAIR principles.

As a further step, in accordance with AGID guidelines for the digitization of cultural heritage, it is fundamental to encode metadata, and this is as important as the encoding epigraphic texts. Given the peculiarity of this project, an ontological approach and description will be helpful in overcoming the differences in likely-customized TEI schema (Murano *et al.* 2023) and at the same time, being detailed and rich in its semantics; this approach seems to be the most suitable solution. As regards epigraphic texts, CRMtex 2.0 model, an extension of the CIDOC CRM family, is a reference ontology for describing ancient texts, specifically inscriptions, and their metadata, such as the state of conservation, the interpretation of textual entities (e.g. glyphs), and its production (cf. Felicetti and Murano 2021). The aim is to emphasize the uniqueness of the presence of runic inscriptions in Venice and the on-site scholarly investigations up to the present day: among the many, the ontological classes *TX9 Glyph* for the description of the graphic features of the runic characters, *TX5 Text Recognition* for the text recognition activity and *TX14 Reading* are fundamental to the present study. In the poster, the ontological description of one of the runic inscriptions will be illustrated, in compliance with CRMtex classes and properties. More specifically, CRMtex allows to analytically describe the text in relation to the context (history, writing support, author(s), and so on).

Linking this annotation to the visualization of the 3D mapping of the statue and its texts would indeed strengthen the valorization and enable the conservation of such delicate texts, which are gradually disappearing. The encoding, as well as the ontological description of the model will be downloadable and available for consultation in open access infrastructures, preferably CLARIN-IT.

References

AGID–Linee guida per la digitalizzazione del patrimonio culturale https://docs.italia.it/italia/icdp/icdp-pnd-digitalizzazione-docs/it/consultazione/index.html

Buzzoni, Marina; Peratello, Paola. 'Il Leone del Pireo Arsenale di Venezia: metodi e strumenti digitali per una fruizione partecipativa di testi e immagini', *Convegno DTC Lazio - CHANGES* "Tecnologie e Patrimonio Culturale. Nuove Competenze e Professioni", Sapienza Università di Roma, November 30, 2023 (Rome).

CHANGES–Crest, https://pric.unive.it/progetti/spoke-9-changes/changes

CRMtex, http://www.cidoc-crm.org/crmtex/

EpiDoc, https://epidoc.stoa.org/

Felicetti, Achille and Murano, Francesca. (2021) '*Ce qui est écrit et ce qui est parlé*. CRMtex for modelling textual entities on the Semantic Web', Semantic Web 12, 2, 2021: 169–180 https://www.semantic-web-journal.net/system/files/swj2374.pdf

Italia Domani, il Piano Nazionale di Ripresa e Resilienza (2021–2026), https://www.italiadomani.gov.it/content/sogei-ng/it/it/home.html

Murano, Francesca / Quochi, Valeria / Del Grosso, Angelo Mario / Rigobianco, Luca / and Zinzi, Mariarosaria. 'Describing Inscriptions of Ancient Italy. The ItAnt Project and Its Information Encoding Process.', *Journal of Computing and Cultural Heritage* 16, 3, 2023: 1–14. https://doi.org/10.1145/3606703