1. Introducing Byzantine seals and SigiDoc

Byzantine seals are small discs, mostly made of lead, commonly bearing an iconographic representation on one side (a saint, the Virgin, etc.) and a legend — with name, at times surname, dignities, functions, places — on the other. The Byzantine Empire (former Eastern Roman Empire, 4th to 15th C) left an impressive amount of them (estimation: 80/100,000 specimens), thanks to which the Byzantine administrative, political, and social history is gradually rewritten.

SigiDoc is an effort providing XML-based and TEI-compliant encoding standards for Byzantine seals: SigiDoc is in an advanced development phase (beta version) and currently allows the display of a complete critical edition of the seals as well as all the main features needed to build a sigillographic corpus.

2. Why SigiDoc?

SigiDoc is intended to solve some of the major problems in the current research in Byzantine sigillography, which greatly limit its impact on Byzantine studies, such as: restricted access to collections, scattering of unpublished material, fragmentation of published material, often bad quality of the images, troubles in connecting the data, limited use of seals by scholars, lack of consistency of the publication criteria, as well as lack of training.

SigiDoc is supposed to become a common and customisable standard for the edition of Byzantine seals. The use of this common standard will enhance the interoperability of the data. In addition, SigiDoc could also be a pattern for numismatists and sigillographers working on material coming from other times and cultures (e.g. the Western Middle Ages or the Hellenistic period etc.).

3. How has SigiDoc been developed?

SigiDoc was designed for users with no prior computer skills but with a background in Byzantine sigillography or Byzantine history. For this reason, SigiDoc is as (reasonably) easy and ready-to-use tool, but a more advanced user will be able to go further and customise it to a larger extent.

SigiDoc strives to combine traditional research methods and scholarship in the field of Byzantine sigillography with the technologies offered by the Digital Humanities.

In fact, standards for scientific publications within Byzantine sigillography have been established during the 20th century; hence, one of the main tasks of SigiDoc has been to convert these standards publications into a digital and TEI-compliant form. In order to do that, SigiDoc is largely based (after adjustment) on the ongoing experience of TEI XML-EpiDoc.

Once the critical editions of a corpus are ready, all the TEI XML-SigiDoc files are transferred into a SigiDoc-customised version of EFES (EpiDoc Front-End Services). EFES is a highly customisable platform ensuring four main critical features for a TEI-XML based corpus: multiple indices, multilingual options, facedet search interface, and a (raw) web page. In 2018 SigiDoc became one of the pilot projects using and testing EFES and, in this way, actively contributing to its development, being also the only non-strictly epigraphical project.

4. SigiDoc’s achievements

- Standards for the critical edition of the Byzantine seals
- A highly customised (but still in progress) version of EFES for web visualisation and data valorisation
- A set of files intended to be shared among all the future SigiDoc projects
  - IDs’ lists
  - controlled vocabularies
  - authority lists
  - ontologies

5. Agenda and Future Work

Short/Medium Term
- Finalisation of SigiDoc 1.0
- Dissemination and cooperation: a dedicated website (http://sigidoc.huma-num.fr/), a blog, and a GitHub repository are under construction
- Training: SigiDoc training weeks, inspired by those of EpiDoc
- Data feeding: Sigillographic corpora in SigiDoc and cooperation with museums, public institutions as well as private collectors

Medium/Long Term
- Common search interface: the SigiDoc corpora will be virtually unified in a higher-order catalogue
- Iconography: being iconography a key element to Byzantine sigillography, standards for the description of the numerous and specific iconography typologies on Byzantine seals are now under development

6. Conclusion

Digital Byzantine sigillography is an entirely new discipline. The visibility and availability of data coming from an always increasing number of seals, jointly with the possibility of establishing relations among them, will push further our knowledge of several aspects of Byzantine history: although most of them already existed before SigiDoc, thanks to its analysis will be greatly enhanced, in a way and to an extent extremely difficult to reach without this tool.