

Three Is the Charm: A New Architecture, New Features and New Projects in EVT 3

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Introduction

Edition Visualization Technology (EVT) is an open source tool to produce Digital Scholarly Editions on the basis of TEI XML-encoded documents. It was created as the browsing component of a specific project, the Digital Vercelli Book (Rosselli Del Turco 2017), but it has been developed in such a way as to become a general purpose tool. Several projects are using it to publish digital editions (Salvatori 2014, Delle Donne 2020), in fact many researchers have found in EVT the perfect tool for their needs: it is easy to configure and deploy, it is fully customizable, it includes several useful research tools out of the box.

Versions

Three EVT versions are available (Rosselli Del Turco 2019):

- EVT 1: diplomatic or single-witness editions support, based on XSLT 2 and Web technologies [2013 → December 2019 EVT 1.3 version published]
- EVT 2: a complete “reboot” of the source code based on the MVC design pattern and on the AngularJS framework [beta 2 published in June 2020]
- EVT 3: new version based on the Angular framework [first alpha published November 2022]

The current development version is EVT 3. The first code rewrite was caused by the need for a more robust and flexible

framework, i.e. AngularJS, dropping the building phase. After the deprecation of AngularJS we chose to move to its successor, Angular, so as to further refine the development workflow and increase the flexibility of the overall architecture.

The basic philosophy has not changed, though: we aim at producing an easy-to-use tool, empowering the lone scholar / young researcher, highly customizable, rich in functionality. Since EVT is based on the client-only architecture, it falls within the minimal computing approach: it requires no server-side software to work, and little to no maintenance after an edition has been published on the Web.

Finally, besides recovering feature parity compared to the previous versions, there are several new features that will be introduced in EVT 3.

Synoptic edition

Synoptic editions present two or more versions of the same text from a comprehensive point of view, generally by laying them out side by side. The constraints of the printed page limit and skew the way in which complex networks of information can be represented. Medieval German handwritten traditions, such as the *Alexanderlied* with its three significantly diverging recensions (Cipolla 2018), are a challenging case study for the visualization of digital synoptic editions. Using the *Alexanderlied* as a test bed and starting from encoding criteria for establishing connections among the recensions and aligning the three texts, the fruitful collaboration between the fields of textual criticism and interface design will lead to synoptic editions support in EVT 3. Through the EVT interface, users will be able to extract and dynamically handle textual segments corresponding to episodes in the three recensions: these narrative units will be visually highlighted at the same time and enriched with philological comments.

TEI data processing

EVT's capabilities have further been enhanced by the implementation of new functionalities to retrieve data and perform complex queries on encoded texts. The application of such a method could prove essential to assist the retrieval of information otherwise difficult to extract from source material that survives in multiple versions (Rosselli Del Turco et al. 2021). This is the case, for instance, of the *Anglo-Saxon Chronicle* (Keynes 2011): transposing it into a digital format is beneficial not only for textual criticism but, most importantly, for historical analysis. Bridging together information dispersed in a plurality of manuscripts—through the encoding of historical events, named entities and realia—would make it possible to shed new light on primary sources and gain fresh knowledge about the past.

User annotations

One of the key features developed in EVT 3 is the creation of an annotation system for text and images. Its main focus is to recreate the same actions performed by a reader when writing personal notes related to the displayed text, thus adding an additional layer of information to the edition itself. User annotations will be based on the W3C standard (the Web Annotation Data Model) and will employ a data structure based on the JSON-LD format. This allows the serialization of data in a traditional JSON model, using

a structure common to other EVT 3 functionalities, so that it will be possible to manage a wide spectrum of different typologies of resources.

Conclusion

In this poster we will present the new framework used to develop EVT and the new features that are already implemented in the current development version. A live demo of the tool will be performed to show how the software works and what its capabilities are.

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