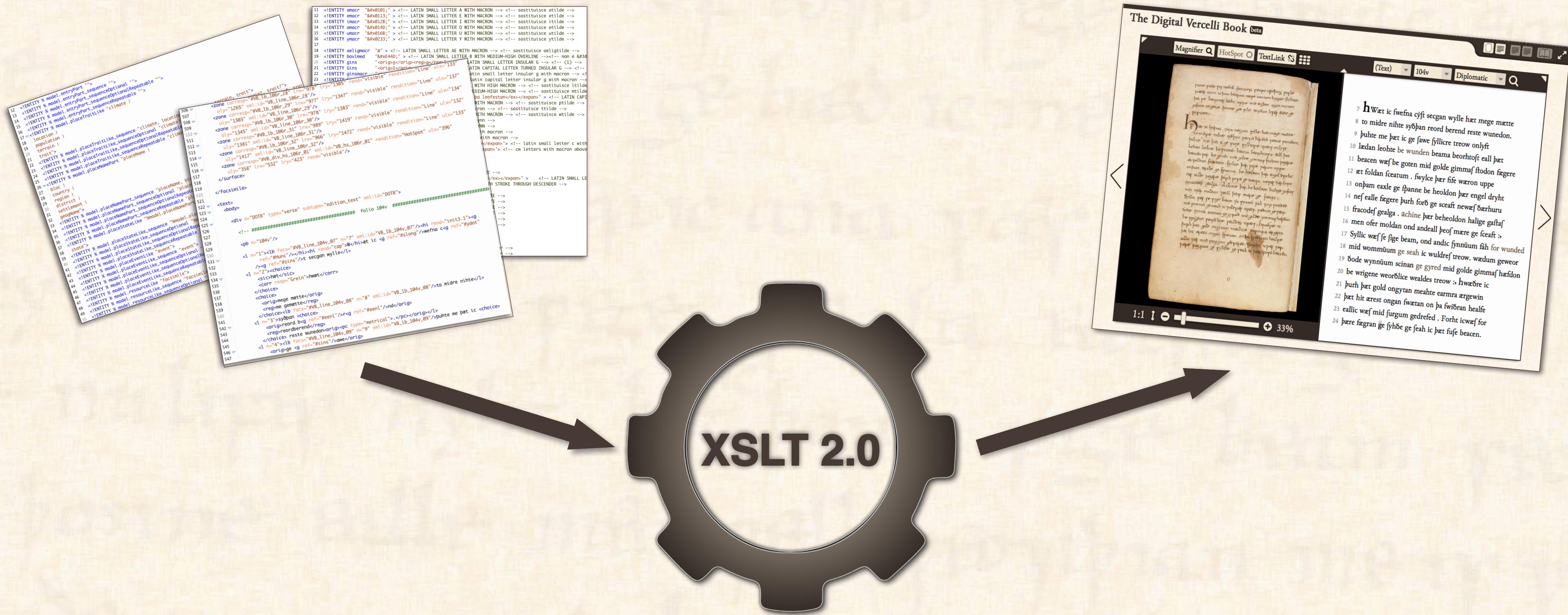


# EDITION VISUALIZATION TECHNOLOGY

## A simple tool to visualize TEI-based digital editions

Born as part of the Digital Vercelli Book project, EVT is a software aimed at the creation of image-based web editions of TEI P5 encoded texts. It is an open source tool specifically thought to simplify the production of digital editions, freeing the scholar from the burden of web programming. It is a lightweight general purpose software that enables the user to browse, explore and study digital editions, in respect of the universal browser requisites and the usability principles and guidelines. It has a user-friendly interface, providing a set of tools for a more accurate investigation of the digitized manuscript, and currently supports two levels of edition (diplomatic and diplomatic-interpretative).



### Transformation

Everything is created around the data and the encoded text itself. It just needs to be properly encoded according to the standard TEI P5 schemas. It supports both parallel and embedded transcription. The transformation system is composed of a collection of XSLT 2.0 stylesheets, arranged in a modular structure, properly designed to permit the scholar to freely add his own style sheets and transformations without interfering with the other parts of the system. The chain of XSLT modules have two main purposes: generating the HTML files containing the edition and creating the home page which will dynamically recall the other files. By applying the main stylesheet to the TEI XML file that contains the whole transcription of the document, the system automatically generates the HTML home page and a set of HTML files, each one corresponding to an individual folio of the manuscript identified from the XML encoding. The system has been developed to allow the generation of an arbitrary number of edition levels: for each text fragment identified as a page it creates as many output files as many edition levels requested. The final result is a web based application (a mix of HTML 5, CSS3 and JavaScript), that can be easily shared even on the Cloud (e.g. Dropbox).

### Main Features

The application allows the comparison between the digital scans of the original manuscript (if available) and the corresponding text of the edition, or between different edition levels of the text. Moreover, it provides a bookreader visualization mode if double side images are supplied. Both the scans and the text can be browsed thanks to an hyper-textual navigation. Among its specific features it offers some image tools (zoom, magnifier and hot-spots), the image-text link and an internal search engine.

### Image-Text Linking

One of the most important features is the image-text link that allows to browse the content of an edition line by line, highlighting in parallel its original form on the scan, and vice versa.

This tool is available only if the XML file contains the elements that are necessary to identify each single area and the text in it. This feature is particularly useful for teaching purposes.

### Search Engine

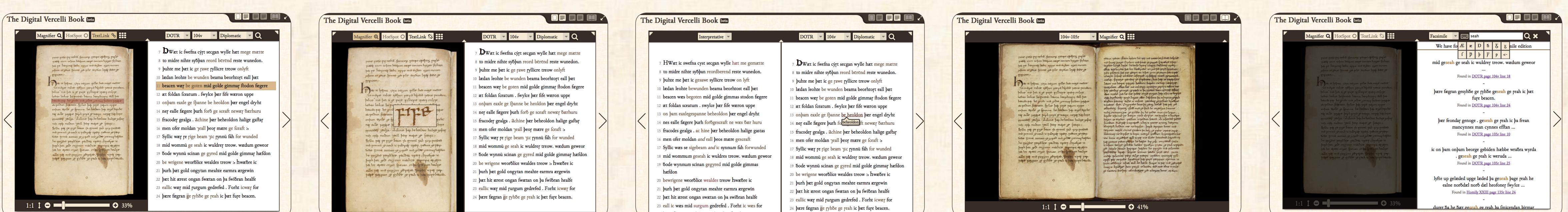
An internal search engine has been developed based on Tipue Search, a jQuery plugin made for indexing and searching large collections of web pages. The plugin operates on JSON data structures that are generated from the original TEI XML files via XSLT transformations. The engine is very easy to understand and use: the user can make simple queries and see the matches highlighted in their specific context; a virtual keyboard manages the insertion of special characters.

### Support for Embedded Transcription

Originally the software was developed to deal with XML text encoded in parallel transcription, where informations about the scans and the eventual coordinates of sensible areas are separated from the transcription and aligned with it thanks to linking attributes. But after several requests and thanks to the support of EADH, the compatibility with the embedded transcription was added in the first half of 2014. The main changes when compared to the previous version were in the way the system identifies and separates the text of different folios and creates the structure for the image-text linking.

### Work in progress

The EVT team in Pisa never stops: many new useful features are continuously developed for the software. In particular, we are working on the support for the critical edition and the corresponding apparatus, and to implement a digital lightbox, i.e. a tool that allows an advanced image manipulation and analysis (crops and annotations of selected image areas, graphic filters, etc). Don't forget that this is a free software available on SourceForge: you can download the whole code base and experiment with it. If you are interested in using it and/or helping with its development just let us know!



### EVT development team

Project lead: Roberto Rosselli Del Turco (Università di Torino)  
XSLT framework, graphic plugins: Julia Kenny and Raffaele Masotti (Università di Pisa)  
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