

Through the Reading Glass: Generating an Editorial Microcosm Through Experimental Modelling

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Introduction

The Centre for Scholarly Editing and Document Studies (CTB) is preparing a digital edition of *De Trein der Traagheid*, a novella by the 20th century Flemish author Johan Daisne. The project initially aimed at a print reading edition, involving the constitution of a reading text based on a text-critical analysis of 19 witnesses of the novella's print history. However absent from the original project proposal, the TEI markup scheme was adopted early in the project as the means for digitally representing the edition. Its provisions for marking up textual variation with the so-called parallel-segmentation method informed the construction of a single XML source text containing the transcriptions of all 19 text witnesses under consideration as well as the constituted reading text, records of their mutual textual variation, and editorial annotations. The subsequent development of the electronic edition proved this unitary source text's potential for modelling a microcosm of user-generated editions. This paper will focus on characteristics, difficulties, and theoretical challenges of this particular editorial constellation, as well as the tools developed for probing into it.

Modelling

Refocusing the goal towards an electronic edition added an experimental dimension to the project. The lack of well-established models for (creating) electronic scholarly editions forced us to conceptualise the boundaries of this particular electronic edition in the course of its development.

Initially, traditional notions of scholarly editing (explicitly formalised as 'a print reading edition' in the initial project proposal) provided a good starting point for the development process. At first, development was guided by mimicking the familiar print edition model, aimed at generating a reading text with apparatus variorum from the XML source text. However, this denotative model of the print edition (McCarty, 2004) soon evolved to a guiding principle itself for conceptualising new ideas, an exemplary model for electronic editions. The added potential of an interactive edition framework allowing for user-driven input opened up new ways of exploring possible engagements of the user with the textual tradition. On a theoretical level, this exemplary model for electronic scholarly editions informed some challenging insights and rethinking of the nature of this model's object (the edition).

Technology and tools

On the most basic level, the seminal potential of the XML source text for our edition could be realised through the use of several open source XML-related technologies and tools that are currently being adopted as a standard amalgam for accessing XML resources. Key technologies for deploying XML texts like the Extensible Stylesheet Transformation Language (XSLT) and XML Query language (XQuery) allow for flexible manipulation and retrieval of XML encoded information, commonly achieved through dedicated XSLT and XQuery processors, and native XML databases. The advent of XML publishing environments like the Cocoon web development framework has made it possible to integrate these functionalities in dynamic user interfaces for presenting and querying XML content via easily accessible delivery technologies such as a web browser. This integrative potential stimulated the development of our XML text processing scripts initially developed as a tentative instrument for a specific task, to what we named the 'Morkel system', a generalisable suite of XSLT and XQuery scripts for driving electronic scholarly editions in an open source software environment.

Views on textual tradition

In the course of its experimental development the Morkel system became a tool facilitating a multi-faceted user-driven view on the textual tradition captured in the unitary XML source text. The scope of this view can be adjusted from micro- to macro-level. Users can have access to singular texts in the tradition, by requesting specific versions of the text as orientation version which presents itself as a faithful reconstruction of this text version. A broader view on the tradition can be accomplished by selecting a parallel edition, in which different episodes in the textual tradition can be viewed

and contrasted, literally next to each other. This parallel presentation mode of different text versions for visual comparison resembles that of the *Versioning Machine*, developed by the Maryland Institute for Technology in the Humanities. Finally, the entire textual tradition can be taken into account when a variorum edition is selected. In its ability to compare any number of text versions with an orientation version, this variorum edition is similar to the *Juxta* tool, developed by the Applied Research in Patacriticism group at the University of Virginia. The focal point of this text comparison in the Morkel system is the contextual external apparatus variorum containing only the relevant variants for the selected comparison set and providing a locus for reorienting the edition. This scope on the textual tradition can be further refined on an intra-textual level. Complete text versions can be compared, as well as separate text divisions (one of the 33 chapters or the dedication). Where applicable when comparing different text versions, an entry to a generated apparatus is provided both at chapter level and at paragraph level.

Edition formats

One end of the delivery spectrum features the dynamic XHTML visualisation discussed so far. The versatility of XML equally allows for the generation of a PDF visualisation of the (different) edition(s), closely resembling a traditional print view of the textual tradition. A PDF rendering consists of an orientation version, either as an integral text or as a chapter sample, possibly compared to any number of comparison versions, as reflected in an inline contextualised apparatus variorum. However dynamic this generative edition frame is (Vanhoutte & Van den Branden, forthcoming), its boundaries are still present. To cater for this limitation and to enhance scientific independence, the other extreme of the delivery range is offered as well: the Morkel system equally allows users to generate pure XML renderings of the selected comparison version texts or chapters, containing their parallel-segmented inline record of the textual variation. These source texts can then be used in completely different usage scenarios, perhaps featuring completely different software environments.

Challenges

In short, the Morkel system enables users to generate their own edition(s) along 3 axes (comparison set (19 text witnesses and 1 reading text), textual scope (all or 1 of the 34 text divisions), delivery format (3 possible formats)), combining to 58 different visualisation parameters. This generates the potential for 53.477.376 different views on the text, and problematises some traditional text theoretical concepts, as well as the defining role of tools for the electronic editions they

facilitate or constitute. An obvious consequence of this generative edition paradigm (Vanhoutte & Van den Branden, forthcoming) is the promotion of each text witness to a candidate orientation version, instead of the adoption of one text version as a base text for the edition against which all other versions are calibrated. Instead, this calibration itself is made relative by the possibility of restoring each different textual witness as an autonomous landmark in the textual tradition, thence allowing a forward or backward look into the tradition. As a matter of fact, the constituted reading text itself has become integrated as 'just' a (commented) view on the textual tradition, against which all variant versions of the text can be plotted. A dynamic selection of a comparison set not only transforms the apparatus variorum to a dynamic, contextualised rendering of the relevant textual variation, but equally promotes it to a performative instrument for reorienting the edition to another point in the textual history. Due to the dynamic selection of comparison sets, the notion of variable classification becomes relativised. Discerning different types of textual variants becomes irrelevant: a variant can hold as a spelling variant in one comparison set but can change classes and become a semantic variant when compared to another version in the textual tradition. The search capabilities of the Morkel system even extend the view on the textual tradition from text level, by allowing simple search operations inside one text version (intra-textual), to collection level, by allowing complex search operations over different text versions (extra-textual). To conclude, this generative paradigm for electronic scholarly editions seems to articulate the defining role of the specific tools for accessing electronic texts more sharply. On its own, the XML representation of text-critical research is a valuable record of scientific labour, but it is the specific (generative) interface which instantiates it as an editorial microcosm by providing a range of user-driven access methods that enable dynamic exploration of a textual tradition. The characteristics and exact nature of this user-driven scholarly edition or constellation of editions is strongly determined by the boundaries this generative interface provides, allowing for a microscopic, telescopic, stereoscopic, or kaleidoscopic view on the textual tradition.

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