

Tidskrift för studier av IT ur ett humanvetenskapligt perspektiv

A Linkemic Approach to Textual Variation

Theory and Practice of the Electronic-Critical Edition of Stijn Streuvels' *De teleurgang van den Waterhoek*

by Edward Vanhoutte

In creating the electronic-critical edition of Stijn Streuvels' De teleurgang van den Waterhoek, the Electronic Streuvels Project (ESP) wants to explore new ways of scholarly editing. Apart from having published a text-critical reading edition in bookform and an electronic-critical edition on CD-Rom, the ESP has entered the international debate on text encoding, electronic scholarly editing, and the changing role of the editor. In the electronic-critical edition of de Teleurgang, textual qualities such as instability and textual variation are approached through the introduction and realization of two new concepts: orientation text and linkeme. *Together with the hybrid character of our edition - the edition includes elements* of documentary, historical-critical, diplomatic, study and reading editions, but is neither of them exclusively - the linkemic approach to textual variation serves a wide array of possible orientations of study. The true hypertextual features of the edition enables the user to add annotations and to create hyperlinks and bookmarks. The electronic-critical edition of De teleurgang van den Waterhoek fulfils what I believe to be the threefold purpose of an electronic edition: 1. to articulate what the editors think; 2. to invoke the literary debate by providing tools and material to explore new ways of understanding and studying the text; and 3. to preserve our cultural heritage.

Contents

- 1. Theory
- 2. Practice (and a bit of theory too)
- 3. Concluding notes

1. Theory

In *The Literary Web*, Johan Svedjedal crisply describes the aim of a critical edition as:

to produce a reliable, definitive text, to provide it with critical apparatus, introductions and commentary and to see that it reaches as many readers as possible, either directly (through reading) or indirectly (as printer's copy for later editions). $\frac{1}{2}$

By including in his description both the production side of a critical edition - the scholarly research involved - and what I would call the *communicative* side ("see that it reaches as many readers as possible" etc.), he utters an astute critique of the current editorial theory and practice. Since McKerrow - amongst others - opened the debate by stating that the aim of a critical edition is "to reconstruct as nearly as is possible from the preserved documents what would have been an author's careful fair copy of his work" the different attempts at defining "the theory of a critical edition" have mainly focused on 1. the choice of the *copy text* and the constitution of a *base text* or *best text*; 2. the function, organisation and necessity of the apparatus criticus or variorum; and 3. the level of specialization the editor should apply to the commentary sections of a critical edition.

In this article I will concentrate on the former two, and I will argue that concepts such as multiplicity, bibliographical evidence and hypertextual linking, which are at the core of the young theory of electronic editing, corroborate the case for textual qualifications such as variation, instability and genetic (ontological/teleological) dynamism. I will illustrate my position in this debate by the demonstration of the electronic-critical edition of Stijn Streuvels' *De teleurgang van den Waterhoek*.

One of the oldest debates amongst theorists of critical editing is probably the one about what Bowers defined to be the primal point of attention of the critical editor: the choice of *copy text*. The copy text is in a critical editorial enterprise subject to emendation in order to produce an *ideal text* or *base text*. This discussion can - in my understanding of the history of editorial theory and in a simplified and generalized observation - be reduced to four main attitudes towards the choice of copy text, all of which are being determined by the specific intended purpose of the edition and the orientation of the critical editor. A first group of editors is concerned with establishing a single *ideal text* representing the final authorial intention. A second group is concerned with establishing a single *ideal text* representing a best text in contrast to a corrupt or incomplete or damaged text. A third group consists of editors who need a single *best text* for some other purpose than the ones already mentioned. This purpose can be of a didactic nature or correspond with a certain editorial orientation. A fourth group does not want to establish one single text, but believes that the meaning of a text lies in the multiplicity which is to be found in the history of the text (both documentary and

transmission history).

The theory and practice of the three most important schools of textual criticism do not completely parallel these four positions but the main tendencies are the following. The German and French schools of genetic criticism believed in putting the emphasis on textual development and genesis and opted to study the versions of a work (including drafts and so called *paralipomena*) rather than concentrating on establishing a single text for every work, which the Anglo-American school did. The German school of Editionswissenschaft with its historical-critical editions, traditionally focuses on presenting a constituted (critical) base text against which textual variation is documented for text-historical reasons, whereas the French school of critique génétique traditionally concentrates on the genetic study of the text in relation to the avant texte which can be found in notebooks, cahiers, etc. An 'extreme' group in the latter school is sometimes not even interested in the printed versions of a work, nor in establishing a clear text. Reality proves that the German and the French schools become more and more recognized by the Anglo-American school through growing international contacts in journals and on conferences. 8 Consequently, the great diversity of approaches to editorial theory mirrored in the productions of different types of editions shows that these clear lines I have drawn are ideal lines, contrasting with the real vapours of editorial ideas and practice that do exist. 9 But let's not romanticize this reality too much. It is a fact, though, that these three schools are institutionalised and that their approach to textual and genetic criticism inevitably floats on a theoretical tradition, be it an evolving one. Therefore I believe that the real bridging role can only be played by schools or groups of scholars with a young tradition of textual criticism who can carefully decide on which ingredients they take from the existing traditions and compose their own theory, just as a top chef in a fusion kitchen does.

If the concept of an *ideal text* is a theoretical one, then the concept of the *definitive* text is definitively a historical one which can no longer claim any legitimacy, for critical editions are always based on subjective critical judgements and can therefore never be (called) definitive. 10 Apart from this outdated and utopic requirement of a definitive text, the first half of Svedjedal's definition is unambiguous and fits seamlessly in the tradition of editorial theory. The second half - what I have called the *communicative* part - however, can have a double meaning. The context in which this definition functions in *The Literary Web* is a report on the production and publication process of C. J. L. Almqvist's "Samlade Verk". Svedjedal defends the editorial decision not to publish the digital Collected Works on CD-Rom, but on the Internet, 11 since no medium can claim to have a larger potential audience. In doing so, he considers it the editor's job to create a situation in which a maximal consumption - to use marketing terminology - can be expected. But the marketability of a critical edition can also be furthered by investing in the usability of the form of the publication. Recently, textual scholars as De Tienne, Lavagnino and McGann, 12 have voiced their dissatisfaction with the efficiency of the formal appearances of the apparatus variorum and the commentary sections, 13 but because "no single book or manageable set of books can incorporate for analysis all of the relevant documents", 14 the apparatus could not do anything else but come before the reader as a technical and coded construct: an economic and compact model in which textual variety is stored, often through a combination of variants. Traditionally, an apparatus can be used in two ways. Whereas a selective apparatus is mainly used in scholarly reading editions as a means of justification of the editor's emending of corrupt passages, a complete apparatus - as found in historical-critical editions - serves a different goal: it should be organized in such a way that it enables the interested scholar to reconstruct the genetic history of the text, and allows him to cite from the different documentary sources. The inclusive edition which presents textual variation identified with various diacritics and symbols within the text does not seem to prove any alternative on the level of usability. In the *New York Review of Books* of 18 January 1968, Lewis Mumford in his famous review of the edition of the Emerson Journals referred to the symbols in the text as "barbed wire". 16

The problems of efficiency and usability, which no doubt render critical editions into an elitist product, are inherent to the linearity of the printed form, or as Marilyn Deegan observes in her introduction to the *Guide to Digital Resources*:

Over the centuries the critical edition has reached a high level of sophistication in the organizational principles that allow a flat, linear, printed book to present information which is not linear. 17

The advent of the electronic paradigm to the field of scholarly editing and textual criticism opens up new possibilities for both the production process and the delivery of products which may herald a new era in scholarly editing. A new practice including text encoding, automated tagging, automatic collation, the use of scripting languages, etc. creates new kinds of editions in which the record or visualization of textual variation becomes a central point of attention, both on the markup- and on the delivery-side. 18 The application of new technologies to an established scholarly discipline such as textual criticism urges editorial theory to reconsider and widen the role and function of the editor. The role of the editor must be upgraded to a key role including skills such as design, programming, and technical writing. In the new reality of electronic scholarly editing, research, design and development become the three most salient occupations of the e-editor, and problems of both DTD and interface design, implementation of standards in text-encoding, the organisation of electronic databases, etc. arise. 19 In being responsible for content and programming as well as (interface) design, the new editor becomes directly responsible for the *communicative* effects of the product he is working on. It becomes part of the task of the editor to conceive and organize his editorial project as well as his edition so "that it reaches as many readers as possible, either directly (through reading) or indirectly (as printer's copy for later editions)." By making use of the Internet and the World Wide Web for the dissemination of electronic-critical editions, the editor becomes his own typesetter, designer, systemmanager and distributor/publisher, and even a publication on CD-Rom assumes the same qualifications. 20

But not only does the role of the editor change, the nature of the possible editions changes as well, as does "the theory of a critical edition". The exponential increase of storage capacity, both of computers and of storage media, and the evolution in hypertext technology are the most influential factors in the debate on a new rationale. Parallel with these two constantly evolving tendencies, Peter Shillingsburg observes two visions on electronic editions: 1. Electronic scholarly editions become electronic

archives which may store all documentary sources both in searchable text and digital images, but they may suffer from the pitfall of becoming chaotic collections of material. 2. By contextualizing the electronic archive through the application of hypertextual structures on the material, the archive "can provide more than access to source material" and the electronic archive/edition becomes a tool for study and research and the place par excellence for tracing genetic history and textual variation. The minimum requirements for a scholarly electronic edition that Shillingsburg develops in another essay, follow directly from this dual vision.²³ First, Shillingsburg, as does Tanselle in his Textual Instability and Editorial Idealism, requires the electronic edition to provide both "a full accurate transcription" ("a newly keyboarded rendition" Tanselle) and a "full digital image of each source edition" ("a facsimile that shows the original typography or handwriting, lineation, and layout." Tanselle).²⁴ As a second requirement, an electronic edition must have "a webbing or networking of crossreferences connecting variant texts, explanatory notes, contextual materials, and parallel texts". He adds to this a third requirement for a "navigational system" which functions for the user as an omnipresent horizon and a clear map. By trying to develop a rationale for electronic editing through the definition of a set of requirements, the theorists pilot the academic debate to a discussion of practical considerations. This is not a critique from my part but an observation which has to be read together with the urge for a new profile of the editor, as outlined in the previous paragraph. This "practical" direction in the debate on theory and practice of electronic editions consequently blurs "the boundaries between scholarly editing, archiving, and pedagogy". 25

Hypertext is a powerful technology and can, if applied sensibly, be useful and instrumental for the case of textual and genetic criticism. In the early nineties, a new wave of writings from hypertext-theorists such as Bolter, Landow, Lanham and Tuman²⁶ appeared. But hypertext is a much older technology. Writings by a group around Carmody, Gross, Nelson, Rice, and van Dam prove that working hypertext systems were being built in the 1960s.²⁷ The first such system to run on commercial hardware and OS was Brown University's FRESS (File Retrieval and Editing System). Before that two earlier computer assisted hypertext-systems had been developed: Doug Engelbart's NLS (oNLine System) which he developed at Stanford Research Institute in the mid 1960s, and Ted Nelson and Andries van Dam's HES (Hypertext Editing System) which they started developing at Brown in 1967. The early hypertext structures used sophisticated document structure models and addressed four issues which are crucial to the design and development of hypertext systems more satisfactorily than most current systems do. 28 First there is the issue of the internal structure of *nodes* or *documents*. In order to facilitate exact linking, structural markup is needed as can be found in the TEI Xpointer syntax on which the XML Xpointer specification is based. HTML cannot provide such exact linking except when each anchor has been specified explicitly. A second issue deals with the availability of alternate views of information, for which again sophisticated structural markup is needed. Stylesheet languages and dynamically generated views of a document (e.g. the expandable table of contents of an SGML instance displayed by Panorama, Dynatext or MultiDoc) can provide such alternate views. Bidirectional linking is the third crucial issue under discussion. Most widely spread hypertext systems are unidirectional

(e.g. HTML) whereas some paper-based canonical reference schemes provide bidirectional linking. In an electronic environment, the back-button or the possibility to undo an action can by no means be considered a realization of bidirectional linking. HyTime (ISO 10744), TEI Xpointer syntax, and Xlink do provide this bidirectionality. A fourth issue is one addressing usability, namely *link classification*. By having technology which shows a rhetoric labelling of links, the user can discern amongst relevant and non-relevant links.

The approach of the 1960s and 1970s discussion of hypertext was a realistic and a highly technical one. The new wave of interest of the 1990s floated on a mainly poststructuralist approach by academic humanists "who see in the development of electronic writing the realization and popularization of phenomena described in literary theory." Their hypertext theory advocates a maximal participation of the hypertext reader who uses this liberating and democratizing technology. In a review of Landow's Hypertext 2.0,30 Joseph DiNunzio summarizes Landow's hypertext as an "openended' (Edward Said), 'perpetually unfinished' (Jacques Derrida), 'non-linear' (Roland Barthes), 'multivocal' (Mikhail Bakhtin), and of course, 'decentered' (Michel Foucault)" system. At the end of the review he attacks Landow's incapacity to bring his theory into practice: "Professor Landow's World Wide Web site is one particularly illustrative example of a closed, hierarchical hypertext." Alex Soojung-Kim Pang goes one step further in contending that - after having researched the strengths and flaws of hypertext - hypertext "while a breathtakingly radical and even noble technology, doesn't actually exist, though hypertext theory is based on the assumption that it does" and

The fact that hypertext theory is writing about a revolutionary impact of a nonexistent technology wouldn't matter if its proponents recognized that fact. But they don't. [...] Technological determinism is bad enough, but determinism caused by nonexistent technology is worse still.³²

For the case of textual and genetic criticism and the discussion of electronic editing, the poststructuralist approach to hypertext is not appropriate, because no single existing hypertext-system corresponds with the descriptions in the literature. Taking the structured approach of the FRESS system as a guide to explore possible use and applications of hypertext in electronic editions may take us further along the road, as long as we put hypertextual promises in perspective. At the core of the young theory of electronic editing, concepts such as multiplicity, bibliographical evidence and hypertextual linking corroborate the case for textual qualifications such as variation, instability and genetic (ontological/teleological) dynamism. Hypertext is not the sole answer to the insufficiency of paper editions to please every reader, and it does not solve the physical and financial constraints of the printed book. 33 As I described above, the editor of an electronic edition is confronted with more problems of a practical kind, and with new questions. With Jerome McGann and Peter Robinson, I can say from experience with the Electronic Streuvels Project, that as an electronic editor, one is forced "to think about texts in new ways, to ask new questions about textuality, and perhaps most interestingly, to ask new questions about what the archive

was [is] to do."34 And more questions do arise when thinking of textual variation and genetic editing. In this context, Dirk Van Hulle asks such pertinent questions as

whether new media can create more continuity between the different versions by means of hyperlinks; whether it is at all possible to capture, let alone edit, the dynamics of a work's progress, since one can only render a succession of manuscripts. 35

(To the top)

2. Practice (and a bit of theory too)

In 1996, Marcel De Smedt published a genetic article³⁶ on Stijn Streuvels' (1871-1969) novel *De teleurgang van den Waterhoek* (The decline of the Waterhoek) from 1927, on the basis of a close-reading of the author's correspondence with friends and publishers and of thorough research of the extant primary sources, which can all be found in the Archive and Museum for Flemish Cultural Life in Antwerp (AMVC, Archief en Museum voor het Vlaamse Cultuurleven). The archive comprises:

- a defective draft manuscript from 1926 (S935/H15),
- a complete neat manuscript from 1927 (S935/H18),
- a corrected typescript (1927) (S935/H16),
- a corrected and annotated copy of the prepublication of the novel in the literary journal *De Gids* which functioned as manuscript for the first print edition of 1927 (S935/H17),
- a defective corrected proof (\$935/H17),
- an elaborately edited version of the first print which functioned as manuscript for the second revised edition of 1939 (S935/H24), and
- a small set of paralipomena. 37

The drastically revised edition of 1939 only retained 73.4% of the original text of the first print edition and was probably the author's response to both the publisher's request to produce a shorter and hence a more marketable book and the catholic critique which had fulminated against the elaborate depiction of the erotic relationship between two of the main characters: the headstrong and voluptuous village girl Mira and Maurice, the reserved but promising engineer from the city. Mainly for commercial reasons, Streuvels made his novel less offensive for catholic Flanders and literally crossed out the denounced passages on his copy of the first print edition which then served as a printer's manuscript for the second print edition. This 'filtered' version of the text especially lacks the essential psychological descriptions which give depth to the main characters. Up to 1987, this revised text had been the basis for 13 reprints of the book, and for most of literary criticism.

De Smedt's conclusion of his genetic study was a plea for a new scholarly edition of the novel based on the restored text of the first print edition:

We believe that in this case, the first print edition prevails over the journal publication. It wasn't till the redaction of this first edition that Streuvels had the complete text of his work at hand, and that he

could overlook and edit his book as a whole. (326)

and further on

It is obvious that manifest mistakes in this first edition have to be corrected with the use of the proofs and the manuscript. $(326)^{39}$

In 1998, the Royal Academy of Dutch Language and Literature (Koninklijke Academie voor Nederlandse Taal- en Letterkunde, Gent) created the Electronic Streuvels Project (ESP) which had as its main goal the electronic-critical edition of Stijn Streuvels' *De teleurgang van den Waterhoek*. So far, both a text-critical reading edition in bookform, and an electronic-critical edition on CD-Rom have been published as spin-off products from the ESP. By opting for both kinds of editions at the same time, I believe we took care of the communicative side of the project.

The reading edition (published in 1999 by Manteau) is by all means a scholarly edition, in that it answers the central criterion as defined by Bowers in his essay *Notes on theory and practice in editing texts*: $\frac{40}{100}$

Perhaps the central criterion for such a reading edition is that its text is intended to serve two audiences - the scholarly and the generally informed non-professional public, in each case without essential compromise. (245)

It provides the reader with a constituted reading text based on the text of the first print edition, together with a glossary, an introductory article on the genesis of the novel, a description of the transmission history of the text including all of the documentary sources and existing editions, an account of the principles underlying the constitution of the reading text (spelling, punctuation, corrections) with a list of corrections and end-of line hyphenations, an account of the principles underling the creation of the glossary, and a couple of facsimiles from the several documentary sources involved in the research.

In the rest of this essay, I will leave out any discussion of the text-critical reading edition and will concentrate on the electronic-critical edition which contains all this and more. 41

From the beginning of the project, the ESP opted for the SGML (ISO 8879) 42 approach to text encoding and markup. For the markup of six documentary sources included in the electronic edition, the ESP made use of the TEI Lite DTD, 43 a fully compatible subset of the complete TEI scheme. 44 They are, with their corresponding sigla:

- MS: complete neat manuscript (1927).
- DG: prepublication in the literary journal *De Gids* (1927).
- DGcor: version of *De Gids* corrected by Streuvels (1927).
- D1: first print edition (1927).
- D1cor: version of the first print edition corrected by Streuvels [1939].

- D2: second revised print edition (1939).

Unfortunately, SGML/TEI is not the sole solution to all markup problems in the humanities. In trying to apply the TEI encoding scheme to the diplomatic edition of 71 letters from Streuvels' correspondence which are included in the electronic-critical edition, I had to find ways to encode features which are both letter-specific and common practice in diplomatic letter editing. In letter editing the following typographical conventions rule:

- what's underlined in the letter, is rendered *in italics* in the edition,
- what's double underlined in the letter, is rendered *in italics and underlined*,
- additions in the letter are put /between slashes/ in the edition,
- deletions in the letter are <-preceded by a minus-sign and put between angled brackets> in the edition,
- substituted text in the letter is put <between a lower-than and a double greater-than sign>> in the edition.

Except for the last feature, which would probably have needed a <SUB> element as an extension of the TEI guidelines, TEI could well have been used for both the encoding and rendering of typographical information. A combination of the use of existing elements with appropriate attributes and dedicated stylesheet instructions should have done the job. But there were also some letter-specific elements to encode and for which no TEI equivalents exist. The encoding in TEI of the existence of the envelope and envelope information such as postmark, place of posting, sender, sender's address, recipient, recipient's address, etc. would mean extending the DTD. Because the overall project uses the TEILite subset, and upgrading to the full DTD was at that time for practical reasons not debatable, I heavily relied on the TEI guidelines to develop a project-specific DTD which allows for both descriptive and procedural markup and which includes a set of letter-specific elements, rather than doing the theoretically unwise thing of modifying the TEILite DTD. I named this DTD the StreuLet DTD, and it's being used for the first time in this edition.

On launching the electronic edition from the CD-Rom, $\frac{46}{}$ the user gets the opening screen (figure 1). We are using he programme $MultiDoc\ Pro\ CD\ Browser$, an on-the-fly SGML browser from Citec, to present our work. To the left you can see the dynamic-interactive table of contents, and the text is displayed in the document window to the right. As one can see from the table of contents, the edition consists of four major parts, preceded by a Vooraf (Preface). The parts are:

- 1. *Verantwoording* (Account of underlying principles): consisting of the chapters "Ontstaansgeschiedenis" (genetic history), "Basistekst en tekstconstitutie" (base text and text constitution) and "Overlevering" (transmission history).
- 2. *Teksteditie* (hypertext edition): presents all the paragraph variants from the 6 documentary sources included in the edition against the orientation text by making use of hypertextual features.
- 3. *Bronnen* (Documentary source): includes the full-text versions of DG, D1 and D2, and the facsimile-editions of MS, DGcor, and D1cor.
- 4. Brieven: presents the diplomatic edition of the correspondence Geerardijn-

Streuvels, Veen-Streuvels, Colenbrander-Streuvels, Streuvels-Eeckhout and Eeckhout-Streuvels.

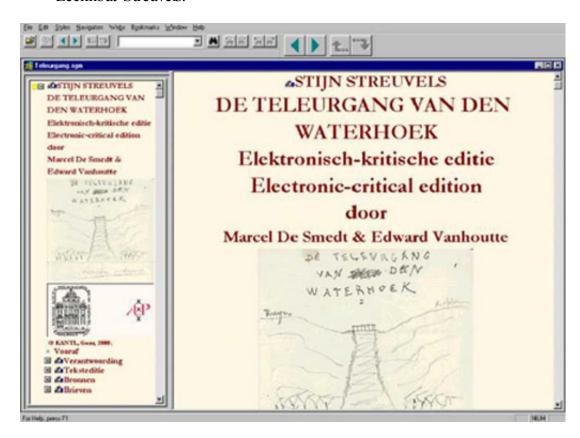


Figure 1. The opening screen of the electronic-critical edition.

Clicking on an item in this table of contents displays the corresponding section in the document window, clicking on a plus-sign reveals underlying sections, a yellow square keeps track of where the user is in the edition and prevents him from getting lost, and a small hand-icon marks the places where handy snippets of users' instructions can be found. Apart from the table of contents, there are four more tools to navigate one's way through the edition: the scrollbar to the right-hand side of a window, the "Previous page" and "Next page" buttons in the taskbar at the top, user defined Web-files, and command-line arguments and DDE commands. ⁴⁷ By providing the user with this array of tools, we created a "navigational system" in true fulfilment of Shillingsburg's third requirement for scholarly electronic editions. ⁴⁸

The section *Verantwoording* consists of three subsections, the first of which ('Ontstaansgeschiedenis van *De teleurgang van den Waterhoek'*) is a scholarly article on the genesis of the novel. This article cites from and refers extensively to the correspondence between Stijn Streuvels and his publishers and friends. By providing hyperlinks to the diplomatic edition of the corresponding letters, the reader of the article can immediately check and read the relevant passages (figure 2) which launch in separate windows. Conventional notes are provided with the article as well as links to digital facsimiles of relevant material from the Streuvels archive.

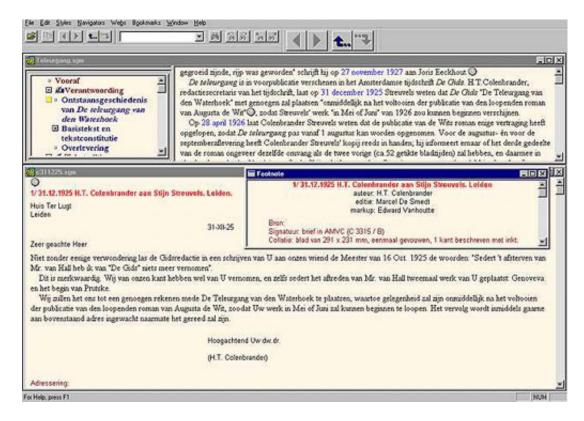


Figure 2. Diplomatic edition of a letter and its hypertextual reference in the article on the genesis of the novel.

In a second subsection ('Basistekst en tekstconstitutie') the editorial principles for the constitution of the full text versions are articulated. The treatment of spelling punctuation, and emendations are clarified for each of the full text sources, and a list of corrections is provided for the critical texts. The edition presents two critical texts (D1) & D2), one of which (D1) is used as the orientation text in the hypertext edition. The text of the prepublication (DG) has not been emended, though corruptions are encoded using the <SIC> element (76 in total) and corrections are suggested in a CORR attribute. A different approach was chosen for the critical texts, where emendations are encoded using the <CORR> element and the original reading is put inside a <SIC> attribute. Whereas D2 only retains 73.4% of the text of D1, more emendations had to be made (93 and 73 respectively). Further, the editor responsible for each of the corrections is documented inside a RESP attribute to the <CORR> tag, allowing the user a maximum control over the editorial work. The choice for two critical texts is a sociological one. Since both the first print edition and the second print edition have been received by the audience and literary criticism, it would be unwise to neglect the cultural validation and the position of both these texts in the history of Flemish literature. The first print edition does present e.g. a more complete psychological depiction of the main characters and has therefore been contested, but the revised version of the second print edition is the text that generations of readers have read and studied.

The third subsection ('Overlevering') lists the transmission history of the text and provides a description of all extant complex and linear documentary sources (manuscripts, typescripts, corrected proofs and prints, and subsequent print editions). This section also provides an entry to the third major part of the CD-Rom ('Bronnen') by linking the description of a documentary source included in the edition to the location where that source can be consulted.

Indeed, not only full text versions of DG, D1, and D2 are included in the edition, the user can also consult the facsimile editions of MS, DGcor, and D1cor. The third part of the edition presents the six versions of the text chronologically, which allows the user to consult each of them separately. It is of course true that "every form of reproduction can lie, by providing a range of possibilities for interpretation that is different from the one offered by the original" and the process of imaging is a process of interpretation. In order for the user of the edition to be able to evaluate what he sees, the facsimile editions are accompanied by a full account of the imaging procedure including the documentation on the soft- and hardware (and settings) used in the project, which I believe is an essential requirement. No facsimile can of course substitute the original, but it is the best approximation we can offer the interested user.

By including either a full text version or a digital facsimile version of a documentary source, the electronic edition shows a mixed approach towards Shillingsburg's and Tanselle's first requirement to provide both a "a full accurate transcription" and a "full digital image of each source edition". This mixed approach, however, is partly overcome by the possibility to deduce the physical form of DG from the facsimiles of DGcor, and D1 from D1cor. Only MS and D2 do not have a full text and a facsimile counterpart respectively.

But the essential part of the edition is to be found in the section 'Teksteditie'. This part of the electronic-critical edition presents the constituted text of D1 as the *orientation* text around which the hypertext presentation of textual variation is organized. Instead of linking the orientation text to an apparatus variorum, the ESP opted for what I want to call a linkemic approach to textual variation. I define a linkeme as the smallest unit of linking in a given paradigm. This unit can be structural (word, verse, sentence, stanza, etc.) or semantic. In the case of the glossary provided with the orientation text, the *linkeme* is of a semantic class which can be defined as "the unit of language that needs explanation". In the case of the presentation of textual variation, the *linkeme* is a structural unit, namely the paragraph. In the actual hypertext edition it is possible to display all the variants of each paragraph in all six of the versions on the screen. 52 This is made possible by a complicated architecture on the code side which allows for hypertext visualisation on the browser side. The linkemic approach to textual variation is realized as follows in the edition. Each paragraph of the orientation text is preceded by a grey round button. On clicking that button, a pop-up window containing five sigla is launched (figure 3). In this pop-up window, a grey round button behind a sigle points to a corresponding variant paragraph in full text, and a document icon points to a corresponding digital facsimile on which the variant paragraph of that version can be found. Because of the extension of the variant it is sometimes possible to find several links per sigle. Each variant full text paragraph is displayed in a pop-up window, which marks the sigle of the document source in red at the top of the window. Clicking a document icon behind a sigle launches a Zoom Window containing a digital facsimile of the page on which the corresponding paragraph in the respective complex documentary source is located. A project specific hierarchic naming scheme allows the user to know exactly which facsimile is being displayed. This is explained and illustrated in the Manual provided on the CD-Rom. This linkemic approach provides the user with enough contextual information to study the genetic history of the text, and

introduces new ways of reading the edition. Because of the fact that a new document window, displaying a version of the user's choice, can be opened alongside the hypertext edition, every user can decide on which text to read as his own base text. The hypertext edition can then be used as a sort of apparatus with any of the versions included in the edition. This way, hypertext and the linkemic approach enable the reading and study of multiple texts and corroborate the case for textual qualifications such as variation, instability and genetic (ontologic/teleologic) dynamism. 53



Figure 3. Pop-up box with 5 sigla.

The fourth and last major part of the edition presents the diplomatic edition of 71 letters from the correspondence between Stijn Streuvels and his publishers and friends. The letters all deal with the genesis of the novel, and are ordered chronologically per correspondent in a hypertextual list. The letters are encoded in confirmation with the StreuLet DTD and can be displayed on the screen by clicking on the hyperlink. The editorial principles of this diplomatic edition are outlined in the subsection 'Verantwoording' to this part. For each letter the following information is documented:

- the catalogue number in the diplomatic edition, the uniform date notation, the sender's and recipient's name, the mailing location,
- the name of the author of the letter,
- the name of the editor of the letter,
- the name of the researcher responsible for the markup,
- the document description, i.e. archive signature and collation (description of writing material, format in mm, paper colour, number of written pages, note on whether the letter is typewritten or written by hand).

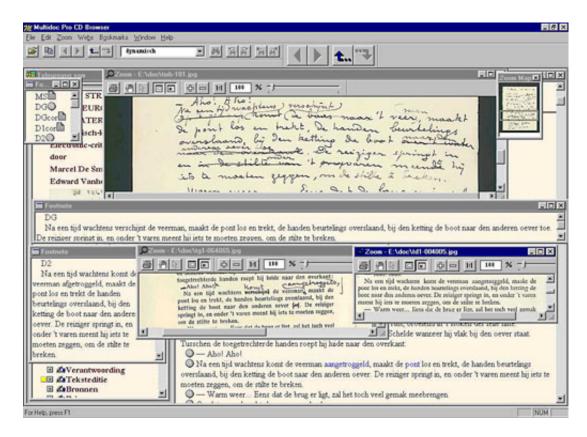


Figure 4. The simultaneous presentation of variant paragraphs from 6 documentary sources on the screen.

So far, the electronic-critical edition has been presented as a stable, closed, and "fixed" package which demonstrates textual instability and multiplicity through a webbing of cross-references which the user is free to discover at his own pace and according to his own goals. But true hypertext is inherently unstable. True hypertext should not only invite readers to maximally participate in the process of establishing the edition through the possibility to create their own reading paths. True hypertext should also enable users to add to it:

Annotation tools (again, possibly the same tools used by authors) allow readers to create and publish responses to published writings, adding their own insights and perspectives to the range of possible texts other readers may encounter. Readers can also add their own links between extant works, making connections that the original authors did not, or creating entirely new links based on completely different principles. (They cannot modify already-published writing, however.) This ability for new readers to contribute to hypertexts, combined the ability of authors to modify originals, makes it impossible to speak of hypertexts as "finished:" rather, they are inherently unstable. 54

In the electronic-critical edition, every user can enrich the edition with his own annotations, bookmarks and hyperlinks by making use of the *Personal Webs* feature. User defined links for retrieval of locations in a document (Bookmarks) can be inserted anywhere in the edition. The user can annotate each string of text (figure 5) or spot on a digital facsimile, and create user defined bidirectional hyperlinks between text and/or facsimiles. It is of course true that the user cannot alter the editor's constructions and text, but this facility breaks the edition open and enables the establishment of critical

thinking and the application of personal insights on the edition. Personal Web files are SGML files that use the HyTime addressing concepts (ISO 10744:1992) and they are stored on the user's hard drive. The concept of storing annotations, bookmarks, and hyperlinks in a separate web file instead of encoding them in the main document, opens a number of interesting possibilities for new kinds of research and teaching. It allows the user to:

- Superimpose alternative hypertext structures onto a single document.
- Attach all sorts of information to a document without changing the document itself.
- Distribute only a set of personal comments to the edition to fellow users, given they own a personal copy of the edition.
- Receive comments of several users of the edition and display them on the screen simultaneously (with each user using a personal set of icons for their comments).

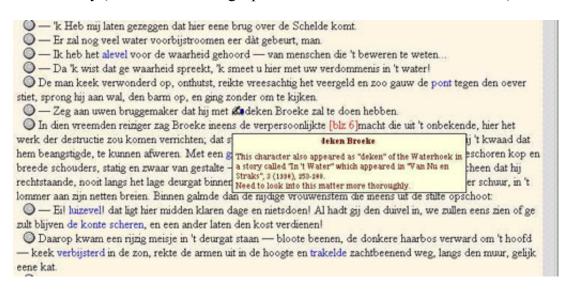


Figure 5. A user defined annotation to the string "deken Broeke".

(To the top)

3. Concluding notes

From the very start of the project it was clear that the ESP had to include an electronic component which would make the exclusive choice for a specific well defined form or for one kind of edition (e.g. a documentary, historical-critical, diplomatic, study or reading edition) obsolete. The project would have to include elements of all of these, but be neither of them. At the start of the project, its main aim was to produce an electronic edition of Stijn Streuvels' *De teleurgang van den Waterhoek*. Soon it became clear that one could not embark on such an enterprise without exploring, questioning and criticizing existing textual and electronic theory. The questions of textual variation, textual instability and multiplicity, the definition of hypertext, the markup and display of electronic texts, and the rationale of electronic editing - to name just these few - became central points of attention, and forced the ESP to enter the international debate on electronic scholarly editing (including the discussion on the role of the editor) and issues of text encoding.

Through my work at the Electronic Streuvels Project and through the creation of the

electronic-critical edition of *De teleurgang van den Waterhoek*, I believe the purpose of an electronic edition is threefold: to articulate what the editors think, to invoke the literary debate by providing tools and material to explore new ways of understanding and studying the text, and to preserve our cultural past.

If our cultural and literary heritage is to meet its future, it's the electronic editor's responsibility to make it happen.

(To the top)

About the Author

Edward Vanhoutte is an SGML/XML consultant in different academic projects in Belgium and The Netherlands. He publishes widely on textual and genetic criticism and electronic scholarly editing, and runs graduate courses on textual criticism and electronic publishing at the University of Antwerp (UIA). Amongst his most recent publications are the text-critical reading edition in bookform (Manteau, 1999) and the electronic-critical edition on CD-Rom of Stijn Streuvels' *De teleurgang van den Waterhoek* (Amsterdam University Press/KANTL, 2000) which he prepared together with Marcel De Smedt.

(To the top)

Notes

(All URL's checked on May 28th 2000)

- 1. Svedjedal (2000, 185). (Back to the text)
- 2. Quoted from [Van Vliet] (1992, 14). (Back to the text)
- 3. Bowers (1964, 226). (Back to the text)
- 4. McGann (1992) counters Bowers' vision by contending that "The first consideration which the critical editor must face is to distinguish textual versions" (114). See, for a discussion of the early debate on copy-text, Bowers (1966). (Back to the text)
- 5. Shillingsburg (1996a, 15-27). (Back to the text)
- 6. This position has been defended in the essays of Bowers, Greg and Tanselle. Cp. Thorpe (1972, 50): "The ideal of textual criticism is to present the text which the author intended." (Back to the text)
- 7. DuRietz (1996) uses the term *realtexter* for real physical documents such as manuscripts and print editions, and *idealtexter* for constituted constructs based on them. Cp. Svedjedal (1999, 22): "Realtexterna är de texter vi faktiskt ser omkring oss, exempelvis manuskript och tryckta böcker, med alla deras eventuella skriv- och tryckfel. Utifrån dessa dokument [...] försöker utgivaren i regel åstadkomma en idealtext, en text rensad från de felaktigheter som har uppkommit när realtexterna skapades." DuRietz (1999) however abolished the term *realtext* in favour of the term *naturaltext* with exactly the same meaning (thanks to Mats Dahlström for pointing this out to me). See in this context also the first meaning of *ideal text* in Shillingsburg (1996a, 75): "*Ideal*, contrasted to *real* or *actual*, is a term applicable to the notion that documents can misrepresent works. Thus, the work is "ideal," while documents are "real" (i.e. physical)." Tanselle (1996, 53) and Shillingsburg (1996a, 17) also mention this meaning of "ideal" in contrast with "physical". (Back to the text)

- 8. I do not seem to escape from touching once again on the stereotype Tanselle (1995) opens his essay with. What I present here is of course an oversimplified scheme which only shows the general tendencies in the three traditions. For an excellent and more nuanced account of the three traditions of textual criticism, see Van Hulle (1999). (Back to the text)
- 9. Whereas *lines* delimit two units of identity and can only be crossed or moved, *vapours* can dissolve, cover or be covered, mingle, or change of composition and substance. (Back to the text)
- 10. On Bowers' frequent use of the word "definitive" in connection with critical editing, G. Thomas Tanselle explains that "Those who already understood the nature of critical editing recognized that he was employing "definitive" in a special sense and that the word was rhetorically effective in helping him emphasize the rigor, discipline, and thoroughness of the bibliographical way. They knew, and realized he knew, that no product of critical judgement can ever be definitive." (Tanselle 1993, 129). In his essay "Critical Editions, Hypertexts, genetic Criticism" Tanselle proves his case by bringing to mind that even the supporters of the CEAA's guidelines recognized that "it was not the only responsible way to produce a scholarly text." (Tanselle 1996, 582.). Cp "One indication of this recognition was the decision to use the phrase 'An approved edition,' not 'The Approved edition,' on the CAA emblem; the scholars responsible for this wording wished to make the point that the editions formally approved by the CAA were not the only responsible editions of those works that could be produced." (Tanselle 1995, 582 note 3.) See also Shillingsburg (1996a, 95): "No one seriously claims that editing can be done definitively." It is interesting, however, to observe that the term "definitive" appears again in Peter Robinson's negative attitude towards too much editorial interference in an electronic archive/edition "This does not mean that we will eventually impose our own text on the Tales and call it definitive." (Robinson 1996a, 111) (Back to the text)
- 11. See Svedjedal (1998, 176) for a terse discussion of the term *digital* as opposed to *electronic*. (Back to the text)
- 12. De Tienne (1996), Lavagnino (1995), McGann (1996). (Back to the text)
- 13. In Vanhoutte (1999), I argued that, in respect to the organisation of the apparatus variorum in hard-copy critical editions "the code used to establish the fixed form does not enhance the readability and consequently impedes the usability of the edition." (202) (Back to the text)
- 14. McGann (1996, 13). (Back to the text)
- 15. "If one imagines the textual history in the shape of a 3-dimensional cylinder standing upright, then the different versions are horizontal planes perpendicular to the axis of the cylinder. The purpose of the historical-critical edition (apart from the necessary correction of mutilated text) is to create an appropriate reproduction of this cylinder, that is to say, of the complete textual history; while the purpose of a critical edition is to reproduce a particular plane, that is to say, an individual version. Contamination would mean the projection of one plane onto another. In the historical-critical edition the editor selects one version (or, when there are substantial differences between the versions, more than one) for reproductions as the text in his edition, and he presents the remaining textual history (or possibly all of it) in the apparatus." (Zeller 1975, 245) (Back to the text)
- 16. Mumford (1968). Cp. Tanselle (1995, 585): "One could argue [...] that the status of a reading is not automatically elevated by bringing it into the main text and marking it with a symbol, for the act of reconstructing and experiencing divergent texts is not necessarily made easier by this arrangement." (Back to the text)
- 17. Deegan (2000). (Back to the text)
- 18. The early evaluations of the possibilities and practice of electronic critical editing have divided scholarly editors and textual theorists in two groups. On the one hand, scholars such as McGann, Mcgillevray, Hunt, Higdon and Harper proclaim the redundancy of critical constructions in digital archives, and reject intentionalist editing. On the other hand, Shillingsburg and Tanselle both want to combine a historical-documentary approach with an intentionalist approach. "[...] one can argue that the potential of the electronic form is not being very fully exploited unless editors' critical reconstructions are included along with documentary texts." (Tanselle 1996, 54) and

- "Properly understood, there is no reason not to have both types of editing." (Shillingsburg 1996a, 95). Hence the distinction I make in the encoding (record) of textual variation for the constitution of a critical text, and the visualisation of textual variation by imposing a hypertextual web on the documentary texts. (Back to the text)
- 19. Cp. "The development process reveals that content, design, and programming are even more intimitely connected in electronic media than in print." (Pang 1999, 95) (Back to the text)
- 20. When making an electronic edition of any kind available through co-operation with a commercial or academic publisher, the distribution and marketing will normally be taken care of. Research, design and development, however, will always remain presupposed activities of the supplier/creator of the edition. (Back to the text)
- 21. Shillingsburg (1996a, 161-171). (Back to the text)
- 22. *Idem*, (165). (Back to the text)
- 23. Shillingsburg (1996b, 28). (Back to the text)
- 24. Tanselle (1996, 54). Cp. Tanselle (1995, 591): "Digitized images of the original manuscripts and printed pages should always be provided, along with the more manipulable electronic texts (that is, keyboarded transcriptions of manuscripts and rekeyboarded or optically converted texts of printed pages). (Back to the text)
- 25. Shillingsburg (1997). The new reality of scholarly editing in which archives become editions and editions include archives (McGann 1996 and Robinson 1996b), and hybrid editions come into being as a combination of critical, diplomatic, facsimile and reading editions (De Smedt & Vanhoutte 2000), calls for a new theoretical framework and a thorough critique of the theory and practice of paper-based critical philology. (Back to the text)
- 26. Bolter (1992), Landow (1992), Lanham (1993) and Tuman (1992 & 1993) are amongst the early studies of a new wave on (aspects) of electronic publishing and hypertext. (Back to the text)
- 27. Carmody et al. (1969), van Dam & Rice (1971). (Back to the text)
- 28. Four issues taken from DeRose & van Dam (1999). (Back to the text)
- 29. Pang (1999). (Back to the text)
- 30. Landow (1997). (Back to the text)
- 31. DiNunzio (1998). (Back to the text)
- 32. Pang (1999). (Back to the text)
- 33. "But some decisions about apparatus in the past that is, before computers were determined by the constraints of the printed book, both physical and financial." (Tanselle 1995, 585). (<u>Back to the text</u>)
- 34. Quoted from Shillingsburg (1997). (Back to the text)
- 35. Van Hulle (1999, 452). (Back to the text)
- 36. De Smedt (1996). (Back to the text)
- 37. As *paralipomena* I consider all kinds of authorial material (both created and collected by the author) that do not belong to a version of the work for instance: lists of characters, time tables, drawings, notes, scribblings, doodles, etc. The discussion whether or not to include them in a critical edition, proves to be a problematic one, and standpoints in this debate rely heavily on the level of geneticism one approves of. (Back to the text)

- 38. Cf. Letter of R. Van der Velde to Stijn Streuvels of 02/06/1938. AMVC (S 935 / B) and included in De Smedt & Vanhoutte (2000). (Back to the text)
- 39. My translations. (Back to the text)
- 40. Bowers (1992). (Back to the text)
- 41. Since the text-critical edition in bookform (Streuvels 1999) is completely derived from the electronic project, the discussion of the electronic-critical edition (De Smedt & Vanhoutte 2000) is also relevant for understanding the rationale behind the critical edition in print. (Back to the text)
- 42. Goldfarb (1995). (Back to the text)
- 43. Sperberg-McQueen & Burnard (1995). (Back to the text)
- 44. Sperberg-McQueen & Burnard (1994). Revised reprint 1999 available from: http://www.tei-c.org/uic/ftp/P4beta/index.htm & http://www.hcu.ox.ac.uk/TEI/Guidelines/ (Back to the text)
- 45. I hope to be able to develop the StreuLet DTD further as a set of extensions to the TEI Guidelines in the next project on the edition and encoding of the complete correspondence of Streuvels', which comprises a couple of thousand letters. A complete (technical) documentation of the encoding strategies and the use of both the TEI Lite DTD and the StreuLet DTD is provided in Dutch and English in the Handleiding/Manual of the electronic-critical edition of de Teleurgang, and can at all times be consulted by pressing F1. (Back to the text)
- 46. The electronic-critical edition of *De teleurgang van den Waterhoek* is an auto-executable application which launches itself on inserting the CD-Rom in the CD-drive, and comes with the MultiDoc Pro CD Browser software. No programmes need to be installed on the hard drive of the computer (PC only) on which the edition is consulted. The electronic edition is an autonomous closed package without links to the Internet. This meets the requirements Paul Brians (Washington State University) voiced in a discussion on the Humanist-list about CD-Roms in libraries and at home: "CD-ROMs at the least should be self-contained, and not require that files be installed on hard drives or permanent links be available to the Internet." (Humanist 13.0380, February 8th 2000) (Back to the text)
- 47. Multidoc Pro supports both command-line arguments and DDE commands (Dynamic Data Exchange). On launching, the edition will by default be opened at the beginning, i.e. at the title screen. By making use of command-line arguments and DDE commands, the user can open the edition at any specific location from the DOS prompt (the location of an ID attribute, the location specified by a TEI extended pointer, the first hit of a search command). Combined with the SGML query language, this provides the user with the possibility to take maximum advantage of the SGML encoding in the edition. The argument Mdpcd doc\Teleurgang.sgm -s ""("<P> cont Mira")" and "("<P> cont kattin in <CORR>")"" for instance, opens the edition at the first occurrence of a paragraph which contains both the word 'Mira' and the word 'kattin' inside an element <CORR>. Command-line arguments, DDE commands and SGML query language are explained in the Manual provided on the CD-Rom. The embedding of SGML query language in advanced search strategies and the context search feature enables the user to maximally profit from the SGML markup in the edition. (Back to the text)
- 48. Shillingsburg (1996a, 161-171). Cf. supra. (Back to the text)
- 49. Tanselle (1989, 33). (Back to the text)
- 50. The choice of hardware and software, and the parameters decided on when batch converting a TIFF file to a lossy format such as Jpeg (e.g. the application of an Unsharp mask filter) are non-objective moments in the digitization process and highly influence the eventual result. (Back to the text)
- 51. Quotes from Shillingsburg (1996b, 28). Cf. supra. (Back to the text)
- 52. It goes without saying that the amount of versions one can orderly consult on the screen

entirely depends on the size of the screen, the screen resolution, and the skill to work with multiple windows. (Back to the text)

- 53. It would be interesting to see how the Flip Zoom Method as described in Holmquist (1998) would render the edition. "Currently, we are constructing a browser which lets users examine an electronic version of a text side-by-side with scanned images of the actual manuscript pages, which can contain alterations and corrections by the author which may or may not turn up in the final version." (150) (Back to the text)
- 54. Pang (1997). (Back to the text)
- 55. Users can establish hyperlinks between two strings of texts, between two spots on digital facsimiles, and between strings of texts and spots on digital facsimiles. (Back to the text)

References

(All URL's checked on May 28th 2000)

Bolter, Jay David (1992). Writing Space. NJ: Erleben.

Bowers, Fredson (1964). "Some Principles for Scholarly Editions of Nineteenth-Century American Authors." *Studies in Bibliography* 17. 223-228.

Bowers, Fredson (1966). "The Method for a Critical Edition." *On Editing Shakespeare*. Fredson Bowers. Charlottesville: The University Press of Virginia. 67-101.

Bowers, Fredson (1992). "Notes on Theory and Practice in Editing Texts." *The Book Encompassed. Studies in Twentieth-Century Bibliography*. Ed. Peter Davidson. Cambridge: Cambridge University Press. 244-257.

Bush, Vannevar (1945). "As We May Think." *The Atlantic Monthly* 176 (July 1945). 101-108. http://www.theatlantic.com/unbound/flashbks/computer/bushf.htm Carmody, Steve, W. Gross, Theodor H. Nelson, David E. Rice, and Andries van Dam (1969). "A Hypertext Editing System for the /360." *Pertinent Concepts in Computer Graphics*. Eds. M. Faiman & J. Nievergelt. Urbana:University of Illinois Press. 63-88.

Deegan, Marilyn (2000). "Introduction: ten years of CTI Textual Studies" *Guide to Digital Resources for the Humanities 2000*. Eds. Frances Condron, Michael Fraser & Stuart Sutherland. Oxford: CTI. http://info.ox.ac.uk/ctitext/resguide2000/intro.shtml. DeRose, Steven J. & Andries van Dam (1999). "Document Structure and Markup in the FRESS Hypertext System." *Markup Languages: Theory & Practice* 1/1. 7-32. De Smedt, Marcel (1996). "Uit de ontstaansgeschiedenis van De teleurgang van den Waterhoek." *De vos en het Lijsternest. Jaarboek 2 van het Stijn Streuvelsgenootschap*. Eds. Rik Van Daele & Piet Thomas. Tielt, Lannoo. 309-326. De Smedt, Marcel & Edward Vanhoutte (2000). *Stijn Streuvels. De teleurgang van den Waterhoek. Elektronisch-kritische editie/electronic-critical edition*. Amsterdam University Press/KANTL.

De Tienne, André (1996). "Selecting Alterations for the Apparatus of a Critical Edition." *TEXT* 9. 33-62.

DiNunzio, Joseph (1998). "Review: Hypertext 2.0." *Computers & Texts* 16/17 (Winter 1998). http://info.ox.ac.uk/ctitext/publish/comtxt/ct16-17/dinunzio.html **DuRietz**, Rolf E. (1996). "Böcker, texter och editioner — av alla de slag." *Fiktionens förvandlingar? En vänbok till Bo Bennich-Björkman den 6 oktober 1996*. Eds. Dag Hedman & Johan Svedjedal, Uppsala: avd. för litteratursociologi. Uppsala univ.

DuRietz, Rolf E. (1999). Den tryckta skriften. Termer och begrepp: grunderna till bibliografin för biblioteken och antikvariaten, för bibliografer och textutgivare, för bokhistoriker och boksamlare. Uppsala: Dahlia Books, 1999.

Goldfarb, Charles F. (1995). *The SGML Handbook*. Oxford: Clarendon Press. (first published 1990)

Holmquist, Erik (1998). "The Zoom Browser: Showing Simultaneous Detail and Overview in Large Documents." *Human IT* 3/1998. 131-152.

Landow, George (1992). *Hypertext: The Convergence of Technology and Contemporary Critical Theory*. Baltimore: Johns Hopkins University Press.

Landow, George (1997). *Hypertext 2.0: The Convergence of Contemporary Critical Theory and Technology*. Baltimore & London: Johns Hopkins University Press.

Lanham, Richard (1993). *The Electronic Word: Technology, Democracy, and the Arts*. Chicago: University of Chicago Press.

Lavagnino, John (1995). "Reading, Scholarship, and Hypertext Editions." *Text* 8. 109-124.

McGann, Jerome J. (1992). A Critique of Modern Textual Criticism.

Charlottesville & London: The University Press of Virginia.

McGann, Jerome (1996). "The Rationale of HyperText." *Text* 9. 11-32. http://www.village.virginia.edu/public/jjm2f/rationale.html

Mumford, Lewis (1968). "Emerson Behind Barbed Wire." *New York Review of Books*, 18 January 1968.

Pang, Alex Soojung-Kim (1997). "Hypertext, the Next Generation: A Review and Research Agenda." *First Monday* 3/11 (november

1997). http://www.firstmonday.dk/issues/issue3_11/pang/index.html

Pang, Alex Soojung-Kim (1999). "Old Wine for New Bottles: Making the Britannica CD Multimedia Timelines." *Human IT* 1/1999. 95-118. http://www.hb.se/bhs/ith/1-99/askp.htm

Robinson, Peter M. W. (1996a). "Is There a Text in these Variants?" *The Literary Text in the Digital Age*. Ed. Richard J. Finneran. Ann Arbor: University of Michigan Press. 99-115.

Robinson, Peter (1996b). Geoffrey Chaucer. *The Wife of Bath's Prologue*. Cambridge: Cambridge University Press.

Shillings burg, Peter (1996a). *Scholarly Editing in the Computer Age. Theory and Practice*. Third Edition. Ann Arbor: University of Michigan Press.

Shillings burg, Peter (1996b). "Principles for Electronic Archives, Scholarly Editions, and Tutorials." *The Literary Text in the Digital Age*. Ed. Richard J. Finneran. Ann Arbor: University of Michigan Press. 23-35.

Shillings burg, Peter (1997). "The Dank Cellar of Electronic Texts." Unpublished Paper. Toronto Editing Conference. (Generously made available to me).

Sperberg-McQueen, C.M. & Lou Burnard (1994). *Guidelines for Electronic Text Encoding and Interchange (TEI P3)*. Chicago/Oxford: TEI.

Sperberg-McQueen, C.M. & Lou Burnard (1995). *TEI Lite: An Introduction to Text Encoding for Interchange (TEI U5)*.

http://www.hcu.ox.ac.uk/TEI/Lite/teiu5 en.tei,

http://www.hcu.ox.ac.uk/TEI/Lite/teiu5 en.htm,

http://www.hcu.ox.ac.uk/TEI/Lite/teiu5 en.pdf

Streuvels, Stijn (1999). De teleurgang van den Waterhoek. Tekstkritische editie

door Marcel De Smedt en Edward Vanhoutte. Antwerpen: Manteau.

Svedjedal, Johan (1998). "Almqvist on the Internet." *Human IT* 3/1998. 175-198. http://www.hb.se/bhs/ith/3-98/js.htm

Svedjedal, Johan (1999). "Åter till bastexten." *Vid texternas vägskäl. Textkritiska uppsatser*. Eds. Burman, Lars and Barbro Ståhle Sjönell. Stockholm: Svenska Vitterhetssamfundet. 22-32.

Svedjedal, Johan (2000). *The Literary Web. Literature and Publishing in the Age of Digital Production. A Study in the Sociology of Literature*. Stockholm: Kungl. Biblioteket.

Tanselle, G. Thomas (1989). "Reproductions and Scholarship." *Studies in Bibliography* 42. 25-54

Tanselle, G. Thomas (1993). *The Life and Work of Fredson Bowers*.

Charlottesville: The Bibliographical Society of the University of Virginia. (Reprinted from *Studies in Bibliography* 46).

Tanselle, G. Thomas (1995). "Critical Editions, Hypertexts, and Genetic Criticism." *The Romanic Review* 86/3. 581-593.

Tanselle, G. Thomas (1996). "Textual Instability and Editorial Idealism." *Studies in Bibliography* 49. 1-60.

Thorpe, James (1972). *Principles of Textual Criticism*. San Marino, CA: The Huntington Library.

Tuman, Myron (ed.) (1992). *Literacy Online: The Promise (and Peril) of Reading and Writing with Computers.* Pittsburgh: Pittsburgh University Press.

Tuman, Myron C. (1993). *Word Perfect: Literacy in the Computer Age*. Pittsburgh: Pittsburgh University Press.

van Dam, Andries & David E. Rice (1971). "On-Line Text Editing: A Survey." *Computing Surveys* 3/3. 93-114.

Vanhoutte, Edward (1999). "Where is the Editor? Resistance in the creation of an electronic critical edition." *Human IT* 1/1999. 197-214. http://www.hb.se/bhs/ith/1-99/ev.htm

Van Hulle, Dirk (1999). *Textual Awareness. A Genetic Approach to the Late Works of James Joyce, Marcel Proust, and Thomas Mann*. Ph.D dissertation. University of Antwerp, UIA.

[Van Vliet, HTM] (1992). Algemene verantwoording van de Volledige Werken Louis Couperus. Amsterdam/Antwerpen: L.J. Veen.

Zeller, Hans (1975). "A New Approach to the Critical Constitution of Literary Texts." *Studies in Bibliography* 28. 231-264.

(To the top)

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Return to Human IT 1/2000