The Electronic Explication

The *explication de texte*, also known as commentary or critical appreciation, was a regular feature of my life as a student of literature from about the age of fourteen onwards. By the time I graduated from my degree at the age of twenty-two, I found that I was actually quite good at this exercise, firstly because it could be quite short, and secondly because I enjoyed the processes of taking a text apart, especially a poem, searching for the underlying patterns and putting back together in my own words.

So when Elizabeth Woodrough from the French Department at the University of Exeter mentioned that she wanted to interest a new generation of students in the *expication de texte*, we decided to investigate the processes involved.

The *explication de texte* has a distinguished record in the history of French education. It originated in biblical exegesis and by the Seventeenth Century it had became a fundamental component in classical training. An extract of a text was seen as a microcosm of the whole work: close examination of it should lead to deeper understanding of the complete work, in the case of a poem, the complete *œuvre* of the author. This method of study was systematised by educational dogmatists who dominated the Académie Française in the first half of the twentieth century. But it became a focus of the pre-68 intellectual crisis, when it was increasingly subject to suspicion and challenge (Nurse, 1969, p.2). However, it remains today one of the principal methods of studying the works of French authors and testing student competence in textual appreciation in Britain and France alike.

With its requirement for different orders of commentary on context, culture, form and content, structure and lexis, meaning and mise-en-scène amongst other considerations, it is clear that this classic exercise can be enhanced and also adapted by recent developments in electronic publishing.

The study of old texts requires easy access to associated materials so that as well as the literary, linguistic and dramatic aspects, the social and political contexts are also understood. It is already well recognised that computer-based tools can be of benefit to the undergraduate who has yet to gain a basic background knowledge of the texts, especially texts which present linguistic barriers. So a traditional commentary in which the writer has to think critically about a passage can benefit from tools such as electronic dictionaries and reference material such as topic-specific websites. These materials can be used instead of looking things up in traditional paper dictionaries and other reference works. Electronic critical editions of the texts themselves with associated materials are excellent aids to the preparation of the traditional *explication de texte* and the form is constantly evolving. The recent developments in internet technologies have meant that opportunities for developing electronic editions with new functionalities for specific purposes and at reasonably low cost have increased. It follows on therefore that the ways in which students approach and write about old texts should also be evolving.

Two different websites have been designed by the authors of this paper specifically with the *explication* in mind. The first project, created by Elizabeth Woodrough and based at the University of Exeter, is **Hypertexteplications** which provides information relating to seventeenth-century theatre studies: it contains the texts of several plays by Corneille, Molière and Racine with associated background materials that the students can refer to via a web browser.



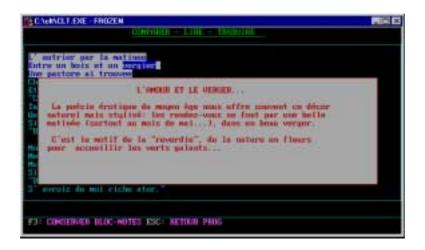
One of the central ideas was that students and staff should contribute their own commentaries, linking their ideas to the main text and to the reference material both on and off the site.



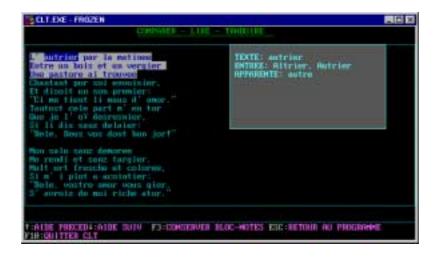
This site was created in hypertext markup language and the project showed many of the advantages and problems of the format. For example, it was relatively easy for non-technical students to learn but it was time consuming to change the site and add material quickly in a dynamic, interactive way. It was also difficult to change the structure of the site without a big redesign of the data. However, it did provide new ways of accessing and handling texts for students on a traditional literature course, and it did give the authors the chance to think about the *explication de texte* in terms of the electronic environment: how do students of early literature read a text, interpret an edition, respond to highlighted text, respond to annotated text? Can annotation be a hindrance or a help?

The other site, **MedFrench**, is a prototype web version of a DOS program published and produced by Brian Levy and Alan Hindley of the French Department at the University of Hull.

This DOS version was created using an authoring package called **Cognate Language Teacher** (CLT) which was developed to teach students how to read text in one language using another related language. MedFrench teaches medieval French using modern French as part of the interface. Students were presented with a series of short texts and notes ("perles de sagesse") containing grammatical and commentary type information, lexical information and translations of selected passages.



There was detailed sentence structure analysis and a glossary function containing partof-speech information, root forms and modern French equivalents.



It was designed specifically with the idea of guiding the reader through the materials in a linear way. The students had a notepad facility so that they could save some of this information and make their own comments about the text.

There was a lot of information in the original MedFrench, making a variety of excercises possible for the teacher of medieval French language and literature. However, it was difficult to use. The navigational methods were not intuitive: you had to know obscure key combinations (e.g. shift+F1), you had to move linearly through the text, it was difficult to move back up. Text on a black or grey background looks a bit dated now. It was difficult to redisplay some of the "pearls of wisdom": you saw them once, but you did not get a chance to have a reread. In a networked version of this program it was difficult for the students to save their notepad comments or print them out. The students who could really benefit from using such a tool were turned away from using it because of the efforts involved. Also they were used to point-and click technologies and the easy-on-the-eye text of the web browsers.

Obviously a more user-friendly interface was required. A program such as this containing highly annotated text seemed an excellent basis from which to develop initial ideas about the electronic *explication* conceived through the earlier project.



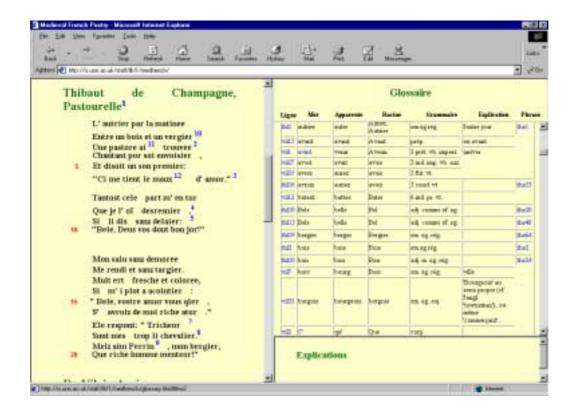
In a web prototype of MedFrench, the texts are marked up in XML using a Document Type Definition created using the Text Encoding Initiative Pizzachef incorporating various suitable tagsets.

A collection of XSLT stylesheets was developed to extract the data and convert it into a various html files that offer the user rich possibilities in terms of cross-linking. These stylesheets were originally created by Sebastian Rahtz at the University of Oxford and were developed further by Michael Beddow, a freelance consultant at the University of Leeds. For the specific purposes of MedFrench, one of the authors (Katherine Fenton) developed them still further to achieve some of the functionality that was thought to be lacking in the original DOS version of the program.

Because the original program contains more or less consistent information about every single word in the corpus, we were able store that information as attributes to word elements in the xml markup. So every word is marked up with its root form, its modern French equivalent, and its part of speech; for example:

```
<w lemma="Altrier, Autrier" function="autre jour"
type="sm.sg.r&eacute;g."> autrier </w>
```

With every single word marked up in a consistent way we have developed the stylesheets not simply to extract all the information relevant to a particular word but to build up glossary of all words and their associated attribute contents.



Previous experience in developing concordances has revealed how a variety of word indexes can open up to the reader different ways of accessing the text (Cameron, 2000). Every single word has been marked up with a unique identifier, and this has been carried through to the html to provide cross-linking between the main text and the glossary.

Another area of the original program that allows for rich possibilities in terms of xml markup and xslt manipulation is the storage, retrieval and display of syntactic information. In the DOS version if you pressed Shift F2 you got a breakdown of a particular phrase's syntactic structure.

```
COMPARER - LIRE - TRADUIRE

L' autrier par la natinea
Entre un bois et un vergier
Inse pastore ai trouvea
Chantant por soi envoisier,
Et disoit un son prenier:
"Ci me tient li maus d' anor."
Tantost cele part n' en tor
Que je l' o' desresnier,
Si li dis sanz delaier:
"Bele, Deus vos dont bon jor!"

Mon salu sanz denoree
Me rendi et sanz targier.
Mult ert fresche et coloree,
Si n' i plot a acointier:
"Bele, vostre anor vous gier,
S' avroiz de noi riche ator."

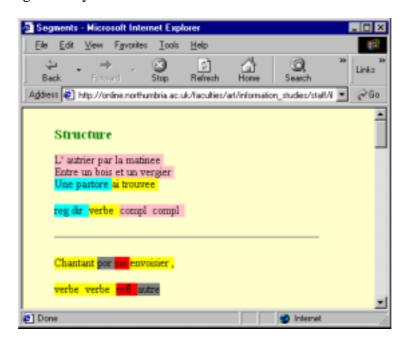
REG DIRVERSECOMPLEUTER

ESC:RETOUR AU PROGRAMME F18:QUITTER CLT
```

This syntactic information has also been included in the xml version: every syntactic section is marked up as a segment with attributes describing its syntactic type and its relationship to other segments:

```
<l id="th13"><seg id="ths3" corresp="ths1" type="reg dir"
function="1"><w id="thw12" lemma="Un"
type="art.ind&eacute;f.f.sg.r&eacute;g.">Une</w>
<w id="thw13" lemma="Pastor Pastre" function="berg&egrave;re"
type="sf.sg.r&eacute;g.">pastore</w></seg><seg id="ths4" type="verbe"
corresp="ths1" function="2"><w id="thw14" lemma="Avoir Aveir"
function="employ&eacute; comme vb. aux.:'avoir'"
type="1 ind.pr.vt">ai</w><w id="thw15" lemma="Trover"
function="Note l'accord au f&eacute;minin avec
le mot-r&eacute;gime pr&eacute;c&eacute;dent."
type="pp.f.sg.vt">trouvee</w></seg></l>
```

In terms of the retrieval and display of this syntactic information, we have reproduced this exactly as it was in the original program, with the same colours and terminology and the same positioning of the syntactic terms.



At the moment we are at an early stage and this is still a pilot project so it is interesting to see what problems and possibilities the incorporation of syntactic and part-of-speech information in this way brings. There is a lot of repetition in the markup making the editing process extremely slow. Maybe this can be reduced by having single instances of syntax information saved externally and then using linking and pointing methods to retrieve it.

Future plans include storing the xml files on a web server to allow for on-the-fly serverside conversion from xml to html and dynamic linking to external materials. The glossary can
then be changed so that the words are sorted not according to alphabetical word entry order but
instead, say, to the order of the root form, the conversion to html being triggered by the click of
a button Also there are possibilities for those interested in researching into, say, particular
phrasal structures to have the xml retrieved and converted according to specific parameters
provided by the user.

A similar approach could be taken with storage of the footnote type information.



At the moment some of this information is repetitive and lengthy, particularly if it is concerned with grammatical or lexical features that recur throughout the texts. Much of this information could be stored in external xml files which could be searched for and the relevant chunks only converted to html at the user's request. So, a user might want to search across all the annotations only of all the texts for a particular term, and have just the relevant sections retrieved.

The issues relating to the *display* of editorial annotations and their references are also complicated: do you have symbols or numbers cluttering up the main text but readily accessible to the reader? Again we find ourselves asking the question, does highlighted text hinder or help the student to grapple with the text? If we signal an area of the text as being discussed elsewhere in the program, does the student then approach that part of the text differently, thinking that this must be important or hard or complicated but not discuss other areas of the text that might be of equal importance to the student's critical appreciation. With old texts like the ones contained in MedFrench aren't we happier for the students to be given any information up front so that they are not made to feel too distanced from the text? If we were to think of applying the display methods to more modern texts for commentary purposes then maybe hiding the links would be an interesting route to go down in terms of getting the students to articulate their own responses to the text, without any editorial prodding.

So far we have looked at how electronic editions of texts can be produced to help the creation of the traditional *explication*. Can the new methods of digitisation and electronic publishing allow for a new style of *explication*? Could the process of creating an electronic edition constitute a form of *explication* as well?

One idea that has been raised in the creation of both Hypertexteplications and MedFrench is that students themselves should be involved in the process of creating the electronic texts. The idea of students creating their own electronic editions is not new. Programs such as the **Poetry Shell** provided a friendly interface and easy to learn tools for the students to perform their own linguistic and literary analyses of a text and add their own textual and graphic materials. But this program, based as it was on proprietary software, shielded the students from grappling with some important issues relating to text encoding and the ontology of text.

In Hypertexteplications, we experimented with a variety of models to allow for students to mark up and submit their texts.



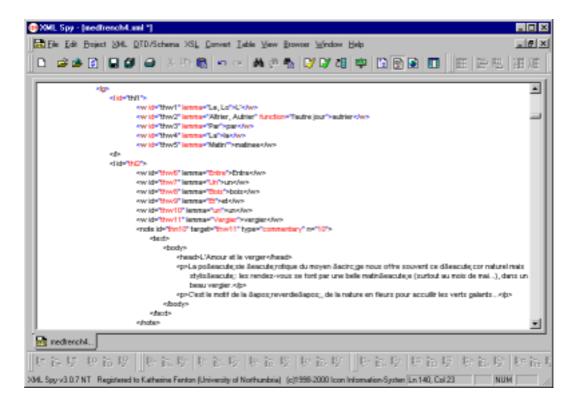
One idea was that each student should mark up the text with html to highlight words or phrases that were relevant to a particular theme or critical point. For example, in this extract from Bérénice all the references to combat have been marked up in a distinctive colour.



In the same section, there are references to eyes and seeing, which would require a different style of presentational markup. And what if you wanted to incorporate simultaneously markup that indicated particular verbal structures?

It could be cone but html is actually quite restricting and distracting for this purpose by the fact that it is largely a presentational markup language, thereby imposing an extra, interfering, layer between the student and the text.

In MedFrench, a student could study XML and the TEI Guidelines, and then mark up a copy of the text using *structural* markup. This might present the student with a difficult learning process but it should also expose the student to textual issues that he or she might never have had to think about before.



The markup of words, phrases, sentences, together with cross-references to notes containing more discursive analysis of the underlying themes, can then be a direct representation of the student's understanding of the text and the vocabulary. XSLT stylesheets

will be developed which, when applied to all the collected documents marked up by students, will extract and display different facets of the encoding of the collection as a whole. For example, you could retrieve all the material that students have marked up as being motifs of courtly love. Or you could compare the way in which different students approach the process of marking up a single text.

This system does not have to be restricted to the teaching of medieval texts. One area that we would like to investigate is the markup of versification of later French poetry to see how aspects of rhyme and metre can be represented in xml and displayed in a dynamic way. Also this system does not have to be restricted to the teaching of just literature; teachers of documentary history have shown interest in the distance-learning aspects of the annotation and server-updating systems involved.

In Seventeenth Century Paris, at the Petites Ecoles de Port Royal, where Racine was a pupil, the practice was for a master to mark the text ("marquer le texte") with different signs representing ideas, sentences, words or phrases for comment (Rohou, 1992, p.32). By encouraging the students to mark up a text, the original practices of *explication de texte* as experienced by Racine himself at Port Royal are revived. But now the student is empowered to guide the master rather than simply follow his example.



Katherine Fenton, Northumbria Elizabeth Woodrough, Exeter September 2001

Bibliography:

P.H. Nurse, ed., *The Art of Criticism: Essays in French Literary Analysis*, Edinburgh University Press, 1969

J. Rohou, *Jean Racine entre sa carrière*, *son œuvre et son Dieu*, Fayard, 1992 K.C.Cameron, ed., technical support Katherine Fenton, *Concordance des Oeuvres poétiques de Philippe Desportes*. (*Travaux d'Humanisme et Renaissance*, CCCXXXVIII). Geneva, Droz, 2000: 55pp + CD-ROM. ISBN: 2-600-00421-1.

Relevant Internet Sites:

Hypertexteplications http://latis.ex.ac.uk/frenchweb/

MedFrench: A Pilot Project http://is.unn.ac.uk/staff/ilkf1/medfrench/ http://piglet.ex.ac.uk/~kjfenton/medfrench/