Hypertext and Commentary Writing:
the Postmodern Bible Commentary project by Tim Bulkeley

commentary

The commentary is a traditional genre of scholarly communication in the humanities. Whatever definition of "humanities" one works with, disciplines concerned with human thought and culture inevitably focus on the study of previous communications. This means that commentary, that is a text that explains, interprets or otherwise annotates another pre-existing piece of communication (text, music, artwork etc.), has some claim to be the most basic form of communication in these disciplines. Such commentary has, in scholarly work, traditionally come to include information concerning the historical and social setting of the original work, features of its linguistic expression, its interests and so on.

In Biblical Studies, commentaries have been common since before the beginning of the Common Era. Until the enlightenment biblical commentary was produced within a confessional setting for religious purposes. In that period a commentary's main function was to explain the religious meaning of the text. Early examples of the genre are found among the manuscripts from Qumran (Dead Sea Scrolls) from about 200BCE.

4Q166 (4QpHosa)
Parchment
Copied late first century BCE
Height 17.5 cm (6 7/8 in.), length 16.8 cm (6 5/8 in.)
Courtesy of the Israel Antiquities Authority (6)
http://www.ibiblio.org/expo/deadsea.scrolls.exhibit/Library/hosea.html
hypertext

Most definitions of hypertext derive from Ted Nelson's classic: "non-sequential writing text that branches and allows choices to the reader, best read at an interactive screen."¹ The word "best" in this definition has often been taken as prescriptive. Thus the definition:

"A computer-based text retrieval system that enables a user to access particular locations in webpages or other electronic documents by clicking on links within specific webpages or documents."²

However, when considered as a structure or system rather than as a particular example, there is no reason why other technologies should not be used to produce hypertext. The interactive novels my pre-teen son used to enjoy were both hypertext, but at the same time codices printed on paper. A wider definition of hypertext includes non-sequential writing that branches and allows choices to the reader, permitting jumps from one textual locus (or "lexia"³) to another, whatever the technology which enables it.

commentary/hypertext

If this is the case then the very nature of commentary - as text referring to another text - is hypertextual. However, the limitations of manuscript and even more of print technology have historically operated to restrict the hypertextual nature of commentaries. Watching a user read a printed commentary illustrates both of these tendencies. Fingers and eyes move backward and forward between text and comment, between the material dealing with a section of text to one dealing with a particular word or sentence. The physical layout of recent print commentaries reflects this.

Pages from Ralph P. Smith Micah-Malachi (Word Biblical Commentary 32)
Waco: Word, 1984

¹ Theodore Holm Nelson Literary Machines 93.1 Sausalito, CA: Mindful Press, 1992, 0/2
³ The term is adapted from Roland Barthes, and has been commonly (following George Landow Hypertext in Hypertext. Baltimore: Johns Hopkins UP, 1993, 52) used to speak of the textual units within a hypertext.
Different sorts of material are often presented in sections marked off typographically one from the other. Often one needs to refer back to a collection of material about the book as a whole, separated from the comment on particular passages, in a section labelled "introduction". Other material treating some question in depth may be relegated to an "excursus". One recent commentary series even advertises itself as "as close to multimedia as you can get in print" while claiming to be "a new paradigm in Bible commentaries".

Yet with the exception of colour pictures these new models of commentary are actually not new.

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Within my field of Hebrew Bible the very editions of the text that we are familiar with are based on manuscripts like the Leningrad codex which contain the Massoretic notes as a sort of hypertext reference system. Is it fanciful to see the decorated text of the carpet pages as another attempt to break free of the limits imposed by sequential text? Contemporary printed editions take a further step towards hypertextuality with their addition of text critical apparatus.

But in this they only follow earlier Jewish editions of the Bible which were highly hypertextual, in particular the editions known as Rabbinic Bibles (Mikra’ot Gedolot). The first of these Great Bibles was prepared by Felix Pratensis and printed by Daniel Bomberg in 1516-17. It used large format pages to offer:

- **Hebrew text**

- **variant readings** from the manuscript evidence available (often handled in footnotes in modern print commentaries)

- **Massoretic notes** on the text designed to assist scribes in accurate copying, but also offering information on issues such as rare word usage

- Aramaic translations or **Targums** of the text

- **commentary** by various authors surround the biblical text commented

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On the Torah page shown, the biblical text appears at the top right of the double page spread; the Massoretic notes are associated with the text. To the left of the text across the double spread are a band of Aramaic translations (Targumim) with the Toledot Aharon - a system of cross-references to other Jewish writings mainly the Babylonian Talmud (but occasionally other well know material).

Below these on the right hand page is Rashi's commentary on the text (Rabbi Soloman ben Isaac was a particularly authoritative interpreter from the second half of the eleventh century, with a strong commitment to the plain meaning of the text).

Below this is Ramban (Rabbi Moses ben Nahman, Nahmanides in Latin guise) from the 13th century, who often discusses both Rashi and Ibn Ezra's interpretations, adding to the hypertextual feel of the printed work. Rabbi Obadiah Sforno's Renaissance Italian commentary fills in the bottom of the right page.

Below the Targumim on the left page are Ba'al Ha-Turim to the Torah (the name is interesting as it refers to the author of these playful comments on the wording of the text by reference to his best known work - a Jewish law code in 4 columns ('arba'a turim).

Ibn Ezra's commentary (already mentioned as being commented upon at least by Nahmanides) appears below. It dates from the first half of the 12th century.

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6 From Eliezer Segal Interactive Rabbinic Bible http://www.ucalgary.ca/~elsegal/TalmudMap/MT.html downloaded 2 August 2001
Ibn Ezra tended to be so brief that his commentaries have spawned their own commentaries - again a move toward hypertextuality!

Rabbi Samuel ben Meir (Rashbam), also from the twelfth century, completes the double page.

I have attempted briefly to show that the art of commentary is inherently hypertextual, that the nature of commentary is hypertext - at the very least in the interrelation of text and comment. Beyond this basic hypertextuality however engagement with a tradition of comment produces its own latent hypertext - seen in the copious footnotes and bibliographical information in most modern commentaries, or in the inclusion of substantial quotations from previous commentators in works such as Yitzhak Broch's Koheleth.\(^7\)

Given the nature and history of biblical commentary it is ironic that current offerings in the field are either:

- determinedly "modern" in their attempt to present a coherent body of text (*Old Testament Library* or *Interpretation*)

- or, at the other extreme, like most of the *Hermenia* volumes, and even more obviously the new *Smyth & Helwys Bible Commentary* series, straining the seams of the old media.

The Smyth & Helwys series actually offers a CD-Rom pdf version of the text to allow easier navigation of its links! This together with the slogans "as close to multimedia as you can get in print" and "a new paradigm in Bible commentaries" suggest that the future of commentaries will be even more hypertextual than their past.

**hypertext**

True fully developed hypertext (of the kind that electronic publication makes possible) demands a different style of writing from traditional academic communications.

Writing for screen is not like writing for print; users use the media very differently.

Jakob Nielsen has conducted usability studies on hypertexts for many years. Some conclusions regarding the writing of hypertext are evident. Two related criteria have clear implications for commentary writing:

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"users do not read on the Web; instead they scan the pages, trying to pick out a few sentences or even parts of sentences to get the information they want"

"users do not like long, scrolling pages; they prefer the text to be short and to the point."

Morkes and Nielsen (2000) studied 81 users reading Web pages. They not only obtained qualitative data on how users read, but also sought to quantify the benefit of adapting material to new writing styles. In this section I will interrelate their conclusions with the experience of producing a hypertext commentary begun in 1995-6. Some of the changes described arose out of predecessors of this sort of usability study (largely those by Neilsen); others came about from direct user feedback.

**Users want Information Fast**

Users of codices are used to a leisurely pace of reading, even to glancing back to re-read a sentence or two, understanding before moving on. This leads to a discursive style and to long screeds of material. The unconscious assumption, that this was how text worked, meant that the early versions of the Amos commentary were like a series of interlinked "virtual scrolls". In an extreme case the glossary material was originally one long file, which could be scrolled or one could "jump" to a particular locus. (Like using "bookmarks" in a word processor document.)

However, it soon became clear that such interlinked scrolls risked undermining the hypertext enterprise.

Three other conclusions follow from the interaction of this first conclusion with limitations of the computer screen.

**Text should be Scannable**

"Scanning can save users time… 15 participants always approached unfamiliar Web text by trying to scan before reading it. Only 3 participants started reading text word by word… elements that enhance scanning include headings, large type, bold text, highlighted text, bulleted lists, graphics, captions, topic sentences, and tables of contents."

This list concerns the layout even more than the writing, but already (e.g. bulleted lists) points away from the discursive model of print commentaries.

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8 Nielsen, J. "Be succinct! (Writing for the Web)"
http://www.useit.com/alertbox.9703b.html (downloaded 30/06/00)

9 John Morkes and Jakob Nielsen “Concise, SCANNABLE, and Objective: How to Write for the Web”
http://www.useit.com/alertbox/writing.html (downloaded 30/06/00)

10 Ibid.
The current state of the text of my Amos commentary reflects my gradual journey from traditional discursive academic writing (like the style of this paper, still closely based on the rhythms of speech) to a more visual style, using elements like bullet points and bold text to encourage scanning. Compare my notes on 5:3\textsuperscript{11} with my entry on "calendar"\textsuperscript{12} that was written more recently. Although the highlighting of hyperlinks may help the reader scan the commentary, this is more haphazard than the way in which the bullet points and use of bold type in the later lexia enable the reader to pick out the sections which interest them.

**Text should be Concise**

A popular New Zealand guide to effective writing for the web, based on studies like Nielsen's and on the accumulation of hearsay and experience found in Usenet groups, suggests that a web page should use 50% or less of the words in an equivalent paper document.\textsuperscript{13} Morkes and Nielsen confirmed this, finding that simply reducing the number of words (to about half) increased usability by 58% for their sample text.\textsuperscript{14}

Traditional academic writing has sometimes valued style, and always completeness, over brevity. Hypertext here permits a useful compromise, more detailed discussion can be placed in a linked lexia, allowing brevity in the first material yet permitting interested users to access greater depth of discussion.

Not all readers of comment on Amos 4:13\textsuperscript{15} will be interested in discussion of the nature and function of the hymnic fragments in Amos. However a link permits the interested user to access this discussion.\textsuperscript{16} As we saw above, in a print commentary such material is often the subject of an excursus.

**Users like Summaries and the Inverted Pyramid Style**

We teach our students to progress from evidence to their conclusion. That was how we wrote our theses. It is how we compose our articles. Yet writing for screen should do the reverse, what has been called an "inverted pyramid".

As McAlpine puts it:

> Traditionally, people scan English language documents by reading the first few words of each paragraph. For this reason, put only one idea in

\textsuperscript{11}http://bible.ge.nz/amos/commentary/5_3.htm
\textsuperscript{12}http://bible.gen.nz/amos/culture/calendar.htm
\textsuperscript{13}Rachel McAlpine *Web Word Wizardry* Wellington: Corporate Communications 1999, 91
\textsuperscript{14}Jakob Nielsen "Inverted Pyramids in Cyberspace" http://www.useit.com/alertbox/9606.html,
\textit{Alertbox} June 1996
\textsuperscript{15}http://bible.gen.nz/amos/commentary/4_13.htm
\textsuperscript{16}http://bible.gen.nz/amos/themes.htm#997523
each paragraph. And put the main idea right up front, in the first few words… Never tease people and force them to guess your point.”

Since hypertext is built of linked lexias, summaries can link to elements giving fuller discussion of the issue. In an extreme case, this can continue to at least four levels; from heading, to summary, to full discussion, to background information. Footnotes are the nearest traditional academic writing has come to this practice.

**hypertext commentary**

Alongside these changes to the nature of the writing comprising the Amos commentary, discussed briefly above, the organization and presentation of material has also changed. This time the developments were not a result of published usability studies, but rather came about in response to thought concerning the nature of commentary and its workings, and to the remarks of actual users of the Amos material.

This process has changed the style and working structure of the Amos commentary from a collection of interlinked scrolls to a multi-window layout, which in turn has been simplified to allow easier navigation.

The function of commentary – discussion of a text – suggests a basic layout with two windows, one for text, the other for comment. Placing the "text window" above (or in Western cultures to the left of) the "commentary window" indicates its priority.

Navigation tools are of vital importance in any complex hypertext, and the *Postmodern Bible - Amos* commentary currently contains thousands of files – any of them potentially the lexia currently being displayed. Presently a sense of "place" is provided mainly by retaining the biblical text on display, while the other material changes.

In the first multi-window interface design hyperlinks in the text and within the commentary itself were the only means to "travel" through this space. This was soon found to be inadequate, as users wanted to access material to which hyperlinks had not been provided. This was particularly true of the glossary and Bible Dictionary type material which was included in order to make the comment accessible to "lay" users who do not share a basic training in the discipline.

Links to this material were at first provided through an alphabet above the existing windows, with corresponding numbers to navigate the nine chapters of the text. The alphabet led to lists of articles, which opened in the commentary window. This was somewhat disconcerting to users, and

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17 McAlpine *op.cit.* 98
navigation by chapter, and then scrolling, was not precise enough for the text, so the current navigation box was developed. Moving the text and comment windows one above the other made space for this to the left (navigation tools are traditionally found to the left or top of the screen).

For the text, this allows navigation by chapter and then by discourse unit (limitations of screen space and the desire to avoid scrolling meant that verse-level navigation was not possible), and for the glossary and dictionary material, alphabetical lists open in a dedicated window.

This leaves room for a new window where discussion of Hebrew words and phrases can appear without displacing other comment from the main commentary window. A further pop-up menu has been added to give access to features of the site that are less integral to the commentary - a compromise necessary again because of limited screen space.

The basic paired text and commentary windows, with added navigation tools is likely to become a standard screen layout for commentary writing. It allows simultaneous access to both text and commentary, yet does not overburden users with too many information sites. An alternative, which I am exploring for the successor to the Amos material, is greater use of pop-up windows, which would allow more depth of information onscreen at a time. Currently limitations of html make this less attractive than it may become (pop-up screens either need to be defined in the particular page calling the material, or they do not close automatically and can get hidden behind other material including the “main” screen).

in conclusion

Two essential features of electronic hypertext, the interlinking of lexia, and the possibility of hypermedia elements, offer new possibilities for enriching commentary.

Print-based commentary is limited in the range of users it can effectively address. Constraints of space mean the authors must narrow the range of comment offered, and focus it at a particular level of education in their readers. Using electronic storage to present each user with the information they select as appropriate, through interlinked lexia and appropriate navigation tools, enables a wide range of user to make effective use of a hypertext commentary. Recent users who have commented favourably on the Amos material include people preparing Sunday School lessons, students and teachers in tertiary theological education and teenagers exploring the text for a bible study evening.

The inclusion of pictures and sounds further enhances both the experience of all users, and assists the beginners. Students have valued the opportunity to learn how technical terms are pronounced, and several users have
commented on the value of colour photographs of places and objects being discussed.

Interface design has been an issue, even for print commentaries, but becomes a central and often a determining factor for electronic communication.

For designers of print commentaries, limitations of the technology restrict them to text and pictures. Space also limits the size and number of the pictures it is economic to include. Writers are similarly limited in the range of users and issues they can address, and need to write in as near to a single coherent sequential text as is possible.

By contrast design for screen faces its own space restrictions, not on the total quantity of material, but on the quantity that can be on screen at any one time. Designers for screen must also give more thought both to navigation, and to providing their user with a sense of place, than is necessary in a codex. The writers of electronic commentary are freed to explore more open and comprehensive approaches to their task, but they must learn new styles of composition in order to maximize scannability and minimize the quantity of text.

In this paper I have argued that the art of commentary writing is inherently hypertextual, even in its print-based form; and that electronic forms make this hypertextuality easy and explicit, and so are the natural progression beyond the commentary as codex. This means that the future of commentary writing is not in refinements of print design, but in electronic hypertexts, and the age of the printed commentary may be near its end.

Currently my task of writing the commentary on the historical and literary features and background to the text of Amos is nearing completion. It is that phase of the project that I have described in the body of the paper. I will now briefly outline the next phase of the Amos commentary which will follow this background material.

In this phase the intention is to make possible a kind of commentary rarely offered in any but a prescriptive way.

Alongside the background historical and linguistic information contained in the current Amos commentary, traditional commentaries often suggested ways in which their readers might connect text and world. In print where such suggested applications are univocal, this material is inevitably prescriptive telling its readers how the text applies to their world. The user has only two options, either to accept, or to argue with, the suggested application.

Hypermedia opens up the possibility of suggesting connections without this prescriptive tendency (or at least with its force greatly reduced). Material will be collected which might suggest connections between text and world:
pictures of various sorts, sounds, statistics and news reports, poems and songs… only the laws of copyright limit the possible materials. These will be offered to the user as a menu of choices from any particular passage of text.

My intention is to use groups of people brainstorming ideas to suggest materials and also to suggest texts that might be linked to particular material.

Thus in the selection of material and the production of the hypertext, a wide range of possibilities will be presented. Finally each user will make their own choice among the material offered, as well as each responding to such open-ended materials in their own way. At this stage the commentary will have become not merely post-modern (the original spelling of the project name) but genuinely postmodern in its style and functioning. And by ending with this dream, the section I have headed "inconclusion" is shown to be thoroughly inconclusive.