Demo Proposal: Variable Length Document presentation

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Abstract

This demonstration will present a system for *variable-length document presentation*: on-line documents whose length can be adjusted to the user's demands. The system depends on an initial marking-up of document text using an *RST Markup Tool* - a graphical interface for marking up the dependency (rhetorical structure) between segments of text. During presentation, this rhetorical structure is used to prune the text down to the size requested by the user, allowing retention of the essentials of the text.

1 Variable Length Documents

This demo presents an experimental system for on-line text presentation – whereby the user specifies how long they want the document to be, and a text of that size is provided. The user might choose to see the hundred-word version, or the thousand-word version, or somewhere between.

Figure 1 shows the web browser (Netscape) interface to the system, also showing (part of) the text before it is reduced. Figure 2 shows the same document, although with a 200 word limit set. The text is mostly coherent, with however some minor problems. One can see these as the cost of this sort of summarisation.

This technique, what we call *variable-length text presentation*, involves two steps:

1. **Document Preparation**: the document is marked-up according to its rhetorical structure. For this we use an RST Analysis Tool, which allows a user to graphically link segments of text into an RST-tree. (This tool might be shown in the demo, or screen dumps).

2. **Document Presentation**: a web-connected program is then used to present such documents. In response to a user's request, the program 'prunes' off less essential branches of the RST-tree until a text of the required size is produced.

Because of the time-cost of document markup, this technique is most useful for documents with a longer shelf-life. We must weigh the cost of marking up the original document against the benefits of having a variable-length on-line document.

The demo will consist of showing a document in full-length, and then selecting versions at different lengths. The settings can also be adjusted to allow different types of information to be favoured in pruning, so we can, for instance, place a higher emphasis on places and dates than on causes, reasons, etc.

2 The Demo

- **Presenter**: Dr Mick O'Donnell is a research associate at the Dept. of AI, university of Edinburgh. He can be reached on (44 131) 60 2728. Email: micko@aisb.ed.ac.uk.

- **Hardware Requirements**:
  - any machine connected to the internet. Preferably with a monitor over 15 inches.
  - OHP slate for that machine (if possible)
  - Overhead projector

- **Software Requirements**:
  - Netscape Navigator 2.0 or later.

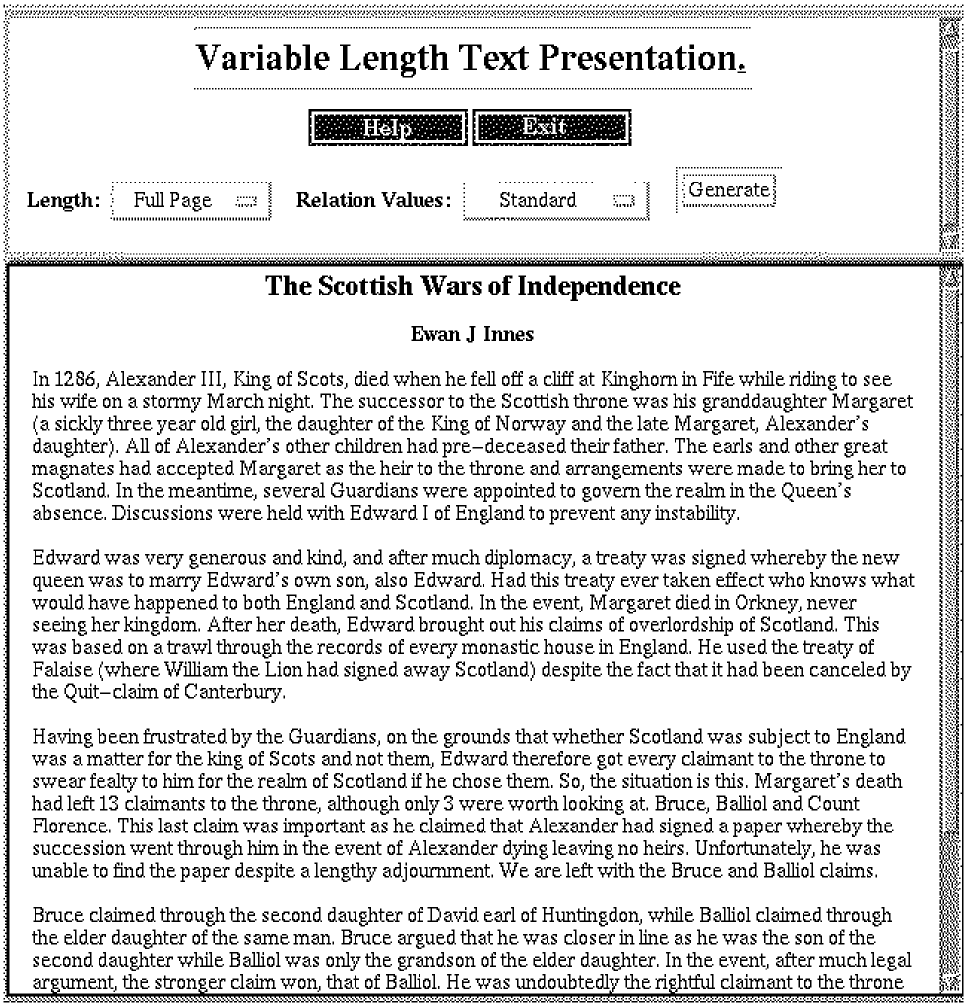

Figure 1: The VLTP interface

The Scottish Wars of Independence

Ewan J Innes

Alexander III, King of Scots, died. The successor to the Scottish throne was his granddaughter Margaret. The earls and other great magnates had accepted Margaret as the heir to the throne and arrangements were made to bring her to Scotland. In the meantime, several Guardians were appointed to govern the realm. Discussions were held with Edward I to prevent any instability. A treaty was signed whereby the new queen was to marry Edward's own son. Margaret died. Edward brought out his claims of overlordship of Scotland. Edward therefore got every claimant to the throne to swear fealty to him for the realm of Scotland if he chose them. Margaret's death had left 13 claimants.

Bruce claimed through the second daughter of David earl of Huntingdon, while Balliol claimed through the elder daughter of the same man. Bruce argued that he was closer in line. The stronger claim won, that of Balliol. Balliol was crowned and he was faced with constant pressure from Edward. He refused to do so. Edward gave the Scots an ultimatum. And the Scots instead signed a treaty of mutual aid with France. Edward invaded Scotland instead.

Figure 2: Scottish History text at 200 words