

The Jabberwocky Parser (Version 1.0)

USERS' GUIDE

1. Installing and running the parser

1.1 System requirements

The Jabberwocky Parser requires Windows 95 or later and around 1 megabyte of free space on your hard drive.

1.2 Installation

To install, simply unzip the file *PARSER.ZIP* to a folder of your choosing.

1.3 Running the program

To run the parser, simply double-click on the *PARSER.EXE* file in the folder you have created. The program will automatically search for default data files when it is run. Make sure the default files are in the same folder as the *PARSER.EXE* file. To have a default lexicon file load automatically, name it *DEFAULT.LEX*. To have a default dependency file load automatically, name it *DEFAULT.DEP*. To have a default text file load automatically into the text area, name it *DEFAULT.TXT*. Some default files are distributed with this version for demonstration purposes.

2. Overview of controls (Main Window)

The screenshot shows the main window of 'The Jabberwocky Parser'. The window title is '+ The Jabberwocky Parser'. The menu bar contains 'File' and 'About...'. The text area contains the sentence: 'T was brillig, and the slithy toves did gyre and gimble in the wabe.' The text 'and' is highlighted. To the right of the text area are icons for file operations (copy, paste, save, print) and a scroll bar. Below the text area is a navigation bar with a book icon, left and right arrows, and a '0.4s' timer. Below the navigation bar is an analysis table with the following data:

Token	Mother	Branch	Dep	Lexeme
0	1	/	K	(('t) () (K) ())
1	-	-	-	((was) (is) (T) ())
2	1	\	AGR	((%is) (be) (AGR) ())
3	2	\	AUX	((%be) () (AUX) ())
4	3	\	PRED	((brillig) () (PRED) ())

Below the table is an analysis bar with a refresh icon, left and right arrows, and a '1/1' indicator. Below the analysis bar is the collection area containing the following text: '(PRED) ()) (17 19 L ((and) () (COORD) ())) (18 17 R ((gimble) () (PRED) ())) (19 - - ((in) (aa) (PRED) (OBLIQUE) ())) (20 19 AA ((%aa) () (AA) ())) (21 20 K ((the) (the) (K) ())) (22 21 DNUM ((%the) (the) (DNUM) ())) (23 22 D ((%the) () (D) ())) (24 21 NUM ((wabe) (wabe) (NUM) ())) (25 24 N ((%wabe) () (N) ()))'. To the right of the collection area are icons for file operations (copy, paste, save, print) and a scroll bar. At the bottom of the window, it says '13 lexemes loaded. 14 dependencies loaded.'

Labels on the right side of the image indicate the following areas:

- Text area and text controls
- Navigation bar
- Analysis area
- Analysis bar
- Collection area and collection controls

2.1 The text area and text controls

The **text area** is an editable area containing the text to be parsed. The control buttons to the right of this box allow the user to perform various functions like opening and saving of text files. The functions of these buttons are summarised below.



Creates a new text document clearing all old text from window.



Allows user to open an existing text file and load it into the text area.



Saves the current text.



Saves the current text under a new name.



Toggle navigation mode on or off. When on, the user can use the navigation buttons to parse and skip through text. When off, text is parsed as the user types it in the text area.

2.2 The navigation bar

The controls on the **navigation bar** have the following functions:



Opens lexicon editor. See the users guide for the lexicon editor for a detailed description of its operation.



Go back to previous sentence in the *text area*.



Go to next sentence in the *text area*.



Parse currently selected word only and stop. Press repeatedly to add a sequence of words to the analysis one at a time.



Parse the sentence that is currently selected in the text area.

2.3 The analysis area

The **analysis area** displays the structural analysis of the current sentence. Each row specifies the properties of a different token in the sentence. Each token is assigned a unique number which is listed in the first column. The second column lists the number of each token's mother (for all but the root token). The third column displays the orientation of the branch that links the token to its mother. The fourth column displays the type of the dependency that links them. The fifth and final column displays the details of the token's lexical entry.

2.4 The analysis bar

The **analysis bar** contains controls affecting both the analysis area and the collection area. Their functions are summarised below.



Resets analysis area to recommence parsing from scratch.



Purge from memory analyses other than the one currently displayed in the analysis area.



Display an alternative analysis for the current input if it is ambiguous. Repeated presses cycle through all analyses back to the starting analysis. Each analysis is identified by a number at the right-hand edge of the *analysis bar* (e.g., "1/2" means "analysis 1 of 2").



Same as above but cycles backwards through the set of analyses instead.



Adds the currently displayed analysis to the *collection area* where it is displayed in LISP-style list format. The list of analyses placed in the collection area can be saved using the *collection controls*.

2.5 The collection area and collection controls

The **collection area** displays a list of the analyses that the user has copied there by pressing the down arrow on the analysis bar. The analyses displayed here are formatted as LISP-style lists. This text is fully editable and can be saved using the **collection controls** at the right-hand side. The collection control buttons function in the same way as the corresponding ones from the *text area*.

3. The lexicon editor

You can open the lexicon editing window by clicking on the book icon as discussed in section 2.2. The lexicon editor allows you to view and edit the lexical and dependency entries that describe the syntax of the language. This window also allows the user to test how a lexical entry will be derived, which dependencies a lexical feature will trigger, and what properties a dependency has.

