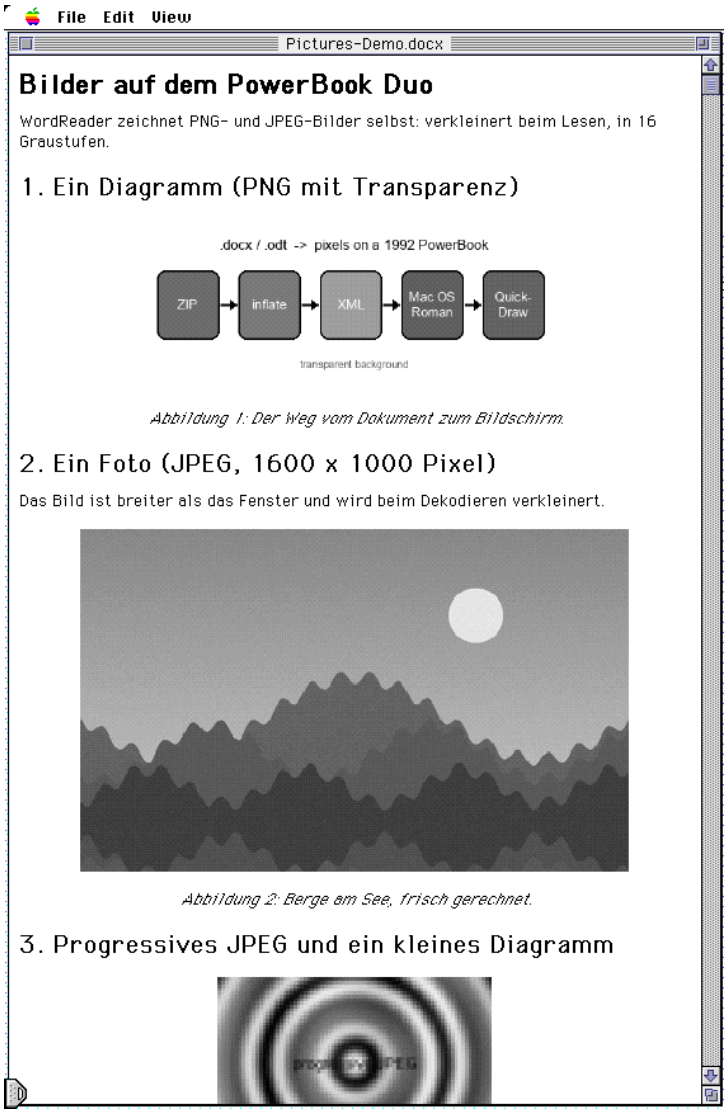
WordReader 1.3

Word (.docx) and OpenDocument (.odt) with pictures and footnotes,
on a 68k Macintosh under System 7



Pictures-Demo.docx on a PowerBook Duo 230

User Manual · Freeware (MIT licence)
https://github.com/LoetLuemmel/MacWordReader

1. What WordReader does

WordReader opens the documents people send today — Microsoft Word **.docx** and OpenDocument **.odt** (LibreOffice, Pages export, Google Docs download) — on a 68k Macintosh. It reads the file itself (ZIP, XML, Unicode); no converter on another computer is needed. It is a reader: documents are shown, can be copied from and saved as plain text, but not edited.

It shows:

- Paragraphs with their spacing, left and hanging indents, centred and right-aligned text
- **Bold**, *italic*, underline and text size per run
- Headings (Title, Heading 1–3, also German *Überschrift*)
- Bulleted lists, with a second level indented
- Tables, one row per line with the cells separated by tabs
- Tabs and line breaks
- **Pictures**: PNG and JPEG, in 16 greys (black and white on Macs without Color QuickDraw). Other picture formats (GIF, EMF, …) appear as a labelled frame.
- **Footnotes and endnotes**: a small raised number in the text, the notes themselves after the text (new in 1.3)

Left out: comments, headers and footers, page layout and columns.

2. Requirements

Computer	Any Macintosh with a 68000 processor or better (Plus, SE, Classic, LC, II, PowerBook, Duo …). Tested on a PowerBook Duo 230 (68030, 33 MHz).
System	System 7.0 or later.
Memory	1 MB preferred, 384 KB minimum. Pictures need more; book-length documents too (see section 8).
Display	Greys need Color QuickDraw (68020 or later with a grey or colour screen). Otherwise pictures are drawn in black and white.

3. Installation

WordReader comes in two forms. Use whichever your Mac can read:

- **WordReader-1.3.dsk** — a 1.44 MB HFS floppy image with the application, the demo documents and a Read Me. Write it to a floppy, or mount it in an emulator (Basilisk II, Mini vMac, SheepShaver) or with Disk Copy.
- **WordReader-1.3.bin** — the application alone, MacBinary encoded. Decode it with StuffIt Expander or MacBinary II+ on the Mac. Do not unpack it on a modern computer: the program lives in the resource fork, which only MacBinary preserves.

Copy WordReader to your hard disk. No extensions or control panels are needed.

The disk contains six demo documents: **Duo-Demo.docx** / **.odt** (formatting and special characters), **Pictures-Demo.docx** / **.odt** (PNG and JPEG pictures) and **Notes-Demo.docx** / **.odt** (footnotes and endnotes).

4. Opening a document

- Choose **File › Open…** (Command-O) and pick the document, or
- drop the document onto the WordReader icon in the Finder, or

- double-click a document that already carries WordReader's type.

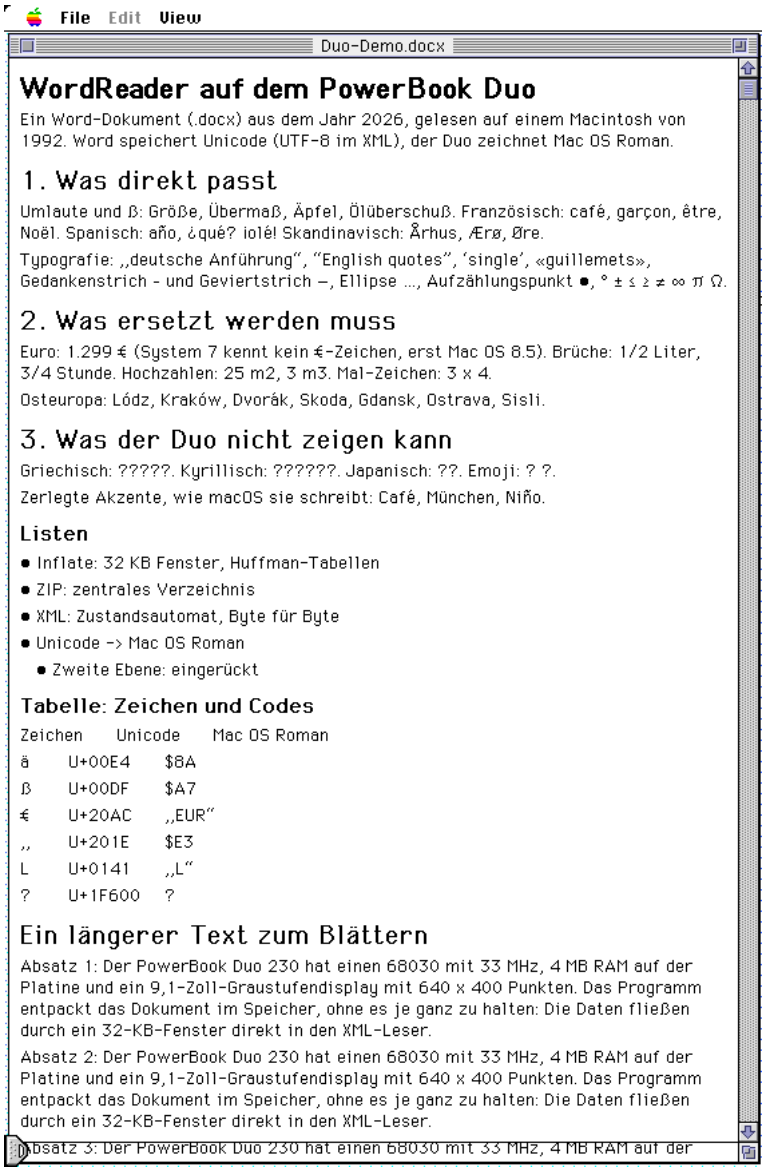
Files copied from a PC, a USB stick or a modern Mac usually have no Mac file type. WordReader lists all files in the Open dialog and recognises a document by its contents, not by its name or type. The file name does not need an extension.

Several documents can be open at the same time, each in its own window. **File › Close** (Command-W) closes the front window.

Supported files

File	Result
.docx .docm .dotx .dotm	Word 2007 and later (Office Open XML, Transitional and Strict)
Word 2003 XML, Flat OPC .xml	Word's single-file XML formats (UTF-8)
.odt .ott	OpenDocument text (LibreOffice, OpenOffice, Pages export …)
.fodt	Flat OpenDocument (single XML file)
.doc (Word 97–2003), password-protected .docx	A message explains that the file is a binary or encrypted Office file
.rtf	A message: open it with a word processor
.xlsx .pptx .ods .odp	A message: an office document, but not a text one

5. Reading



Duo-Demo.docx: headings, accented letters, typography, the euro sign, a list and a table

Scrolling

Key	Action
↑ ↓	one line up / down
Page Up, Page Down, Space	one window up / down
Home End	start / end of the document

The scroll bar works as usual. Long documents are not limited to 32 KB of text.

Text size

The **View** menu sets the base size: 9, 10, 12 (default), 14 or 18 point. Sizes in the document are scaled with it and snapped to the bitmap sizes of Geneva, so text stays sharp. The window keeps the paragraph you were reading in view.

Pictures

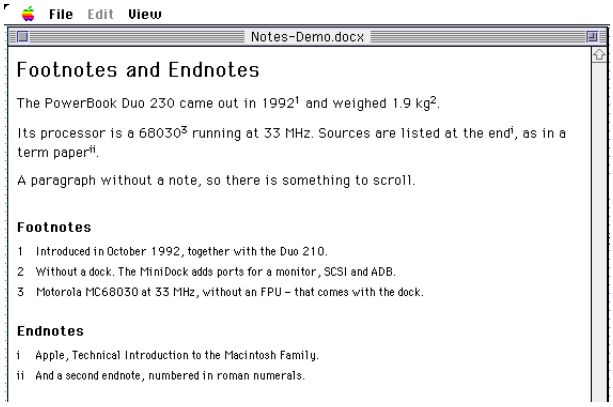
Each picture gets a line of its own and is shrunk to fit the window. It is decoded the first time it scrolls into view (the watch cursor shows while it works). Decoding takes time on a 68k Mac: on a PowerBook Duo 230 a 1600 × 1000 pixel photo takes about 15 seconds, the text of a document typically 1–2 seconds. A picture is decoded only once; scrolling back to it is immediate.

Decoded pictures are kept in purgeable memory: when memory gets short the Mac takes it back, and the picture is decoded again when it is next shown.

PNG (all kinds, with transparency over white) and baseline JPEG are drawn in full. A progressive JPEG is shown from its first scan, at reduced resolution. A CMYK JPEG, a GIF or a vector picture appears as a frame with its type written in it.

Footnotes and endnotes

A note reference appears as a small raised number in the text: 1, 2, 3 for footnotes and i, ii, iii for endnotes, as Word and LibreOffice number them by default. WordReader shows the document as one long page, so the notes follow the text, under the headings **Footnotes** and **Endnotes**, in a smaller size with the number in the margin.



Notes-Demo.docx: three footnotes and two endnotes

A note with its own mark instead of a number (Word's *custom mark*) shows that mark in the text, and the note follows without a number. Numbering styles chosen in the document (for example footnotes in roman numerals) are not followed.

6. Special characters

Word stores Unicode; System 7 draws Mac OS Roman, which has about 220 characters. WordReader converts as follows:

- **Everything Mac OS Roman has** is shown as is: ä ö ü ß é ç ñ å ø æ, « » „ “ ‘ ’, – —, …, •, ° ± ≤ ≥ ≠ ∞ π Ω and more.
- **The euro sign €** does not exist in System 7 fonts (Apple added it in Mac OS 8.5). WordReader draws it itself. Copy and Save as Text write it as “EUR”.
- **Characters with a close substitute** are spelt out: ½ → 1/2, ² → 2, × → x, Polish Ł → L, Czech Š → S.
- **Characters without one** (Greek, Cyrillic, Chinese, Japanese, emoji) appear as “?”.
- Accents written as separate marks (as macOS does in file names and some documents) are combined into the proper letter.
- Where the screen font has no picture of a character (Geneva lacks „ ‰ fi fl), a stand-in is drawn, e.g. ,, for „. Copied and saved text keeps the real character.

File › Document Info counts how many characters were substituted or could not be shown.

7. Copy, Save as Text, Document Info

Selecting and copying

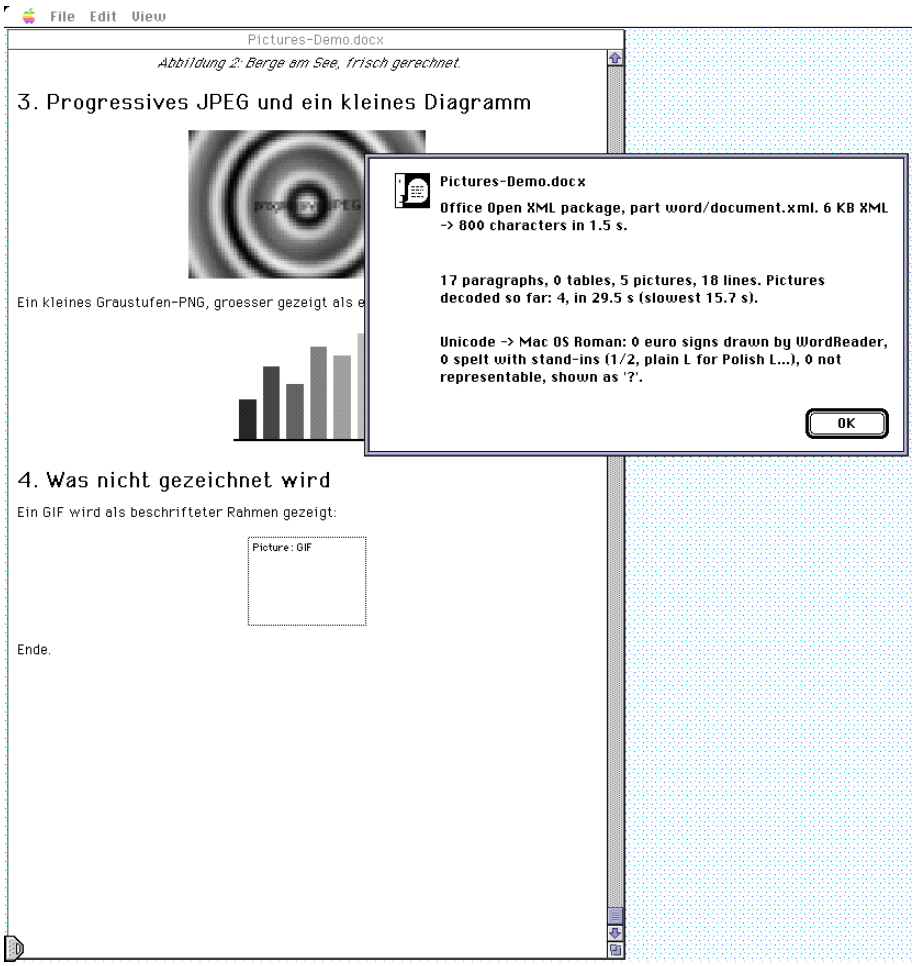
- Drag across text to select it; Shift-click extends the selection.
- Double-click selects a word.
- **Edit › Select All** (Command-A) selects the whole document.
- **Edit › Copy** (Command-C) puts the selection on the clipboard as plain Mac text. Paragraphs end in a return, table cells are separated by tabs, pictures become “[Picture]”, note references become “[1]”.

Save as Text

File › Save as Text… (Command-S) writes the whole document as a SimpleText/TeachText file (Mac OS Roman, one return per paragraph). Any word processor of the time can open it.

Document Info

File › Document Info… (Command-I) shows what was read and what the conversion had to do: the file format and part, how long the text took, the number of paragraphs, tables, pictures, footnotes and endnotes, how long the pictures took, and how many characters were replaced.



File › Document Info for Pictures-Demo.docx on a PowerBook Duo 230

8. Memory

WordReader never unpacks the whole document: it reads the compressed file piece by piece and keeps only the resulting text. A typical letter or report needs well under 1 MB. Pictures need about half a byte per shown pixel each, and are released when memory runs short.

If a document is too large, WordReader shows the beginning and says so. To give it more memory: quit WordReader, select its icon in the Finder, choose **File › Get Info** and raise the **Preferred size** (e.g. to 2048 K).

9. Messages

Message	Meaning / what to do
This is a binary Office file …	An old Word 97–2003 .doc, or a password-protected .docx. Save it as .docx (without password) on another computer.
This is an RTF file, not a .docx.	Open it with a word processor that reads RTF (e.g. Word 5, WriteNow, ClarisWorks).
… an office document, but not a text one	A spreadsheet or presentation (.xlsx, .pptx, .ods, .odp).
This XML file is UTF-16 encoded …	Save the Word XML file as UTF-8.
This is not a document WordReader knows …	The file is not .docx, .docm, .dotx, Word XML, .odt or .fodt.
The package has no main document part …	The file is incomplete or damaged — copy it again.
The document is encrypted.	Remove the password on another computer.
… compressed data is damaged.	The file was damaged in transfer (often: a text-mode FTP or an unpacked .bin). Copy it again in binary mode.
Not enough memory …	Raise the memory size in the Finder's Get Info (section 8).
Picture: not enough memory / too large	Give WordReader more memory, or read without that picture.
Picture: this kind of JPEG (CMYK?)	The JPEG type is not supported; the frame stays empty.
Picture: disk full / no temporary file	Pictures from Word files are unpacked to a temporary file on the start-up disk. Free some space.

10. GitHub: source, updates, feedback

WordReader is developed in the open on GitHub:

https://github.com/LoetLuemmel/MacWordReader

- **Downloads** — new versions appear under *Releases* (https://github.com/LoetLuemmel/MacWordReader/releases), always as a floppy image (.dsk) and as MacBinary (.bin).
- **Source code** — the complete C source for MPW, plus the host test harness and build tools. The README describes how the decoders work and how to build WordReader yourself.
- **Problems and wishes** — report them under *Issues* (https://github.com/LoetLuemmel/MacWordReader/issues). A sample document that shows the problem helps most; the text of File › Document Info too.

11. About

WordReader 1.3 · © 2026 !Beaker · Freeware under the MIT licence (see LICENSE on GitHub).

Built with MPW (SC 8.9, Universal Interfaces 3.4). ZIP, DEFLATE, XML, PNG and JPEG decoding are WordReader's own code, written for 16-bit arithmetic on the 68000.