An introduction to
Wordwise Plus

by JACQUETTA MEGARRY

Computer Concepts

INTRODUCTION
TO
WORDWISE PLUS

PLEASE NOTE

IT IS VITAL THAT THE REGISTRATION CARD SUPPLIED
WITH WORDWISE PLUS IS RETURNED TO US, WITH YOUR
NAME AND ADDRESS FILLED IN. THE CARD IS POSTAGE
PAID FOR THE U.K. IF FOR ANY REASON A REGISTRATION
CARD IS NOT SUPPLIED, YOU MUST CONTACT THE
DEALER FROM WHOM THE PACKAGE WAS PURCHASED.
THE SERIAL NUMBER ON THE REGISTRATION CARD
SHOULD BE PRINTED INSIDE THE MANUAL. YOU MUST
QUOTE YOUR SERIAL NUMBER IN ANY
CORRESPONDENCE WITH REGARD TO WORDWISE PLUS.

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SETTLEMENT AGAINST ANY DEALER, SCHOOL,
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OTHER COMPUTER CONCEPTS SOFTWARE PACKAGE.

Wordwise and Wordwise Plus are designed and distributed by
Computer Concepts.

Wordwise Plus is supplied with two manuals, this Introduction
and a Reference Manual by John Coll and Andrew Myers.

Both manuals were typeset direct from Wordwise files by
Quorum Technical Services Ltd., Cheltenham.

The abbreviation BBC Micro for British Broadcasting
Corporation Microcomputer has been used throughout this
book.

Computer Concepts cannot be held responsible for any loss of
data due to the use of Wordwise Plus.

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SECTION 1

1. How to use this Introduction

The sequence of material in this Introduction has been carefully arranged so that you can just read the bits you need. Newcomers to Wordwise vary in how much they know, what printer they are using and whether they have difficulties in getting it started and so on. You may find you can skip all the parts that deal with possible problems. If you are new to this field you may find some of the terms unfamiliar, so a Glossary has been provided (Section 11). If you are already aware of the general principles of word processing you may want to skip Section 2 and go straight to Section 3 for an overview of the Wordwise system.

If you are in a hurry to start getting processed words onto paper, just skim through Section 3 before working through Sections 4, 5 and 6. Section 4 deals with typing in and editing your own words at the keyboard: all you need is a BBC Micro with Wordwise fitted and a screen to display the results. Section 5 covers reading text in from a cassette or disc, so you will also require a cassette recorder or disc drive. Section 6 looks big because it deals with all aspects of printing. You should only need Section 6.1 the first time around. Then read Sections 6.2 to 6.5 and only refer to 6.6 if you are having problems. You can omit Section 6.7 at a first reading.

Section 7 can also be left until you are ready to deal with documents longer than a page. It's a good idea to experiment with the example document (supplied on the cassette) before you have to use any of these commands in earnest.

Section 8 introduces segments. The segment idea is unique to Wordwise Plus. It allows you to work on several documents at once, and also to program extra facilities into the system using procedures. In effect, procedures allow you to add custom-built facilities to Wordwise Plus. This opens the door to all sorts of possibilities that Section 8 can only hint at. However, most beginners won't want to bother about segments at first. You can get along fine without them; tens of thousands of satisfied Wordwise users did so before Wordwise Plus arrived.

If you are already familiar with Wordwise you may want to start with Sections 8 and 10, using the Index to find out about the new embedded commands. You should also check Sections 6.7 and 9 against your own experience and habits.

Whether you use Wordwise Plus occasionally or every day, you will find that reading the printed manuals helps you to get the most out of your word processing. This short *Introduction* only attempts to help you to get started. If you want to use the full power and flexibility of the system you will need to read the *Reference Manual* by John Coll and Andrew Myers.

SECTION 2

2. What is word processing?

2.1 The advantages

A word processing system makes it easy:

- to alter anything that you write, so you can correct mistakes, swap words around and even move large sections of text
- to produce finished versions without a single mistake or sign of having been altered
- to print finished copies rapidly and without having to stand over the printer
- to write a document to fit an exact number of pages or a limited number of words without having to count, retype or produce unsatisfactory versions
- to experiment with the effect of different formats, styles and page sizes for the same text
- to store standard documents like letters, contracts and minutes, and to produce variations to suit different purposes without having to retype or check the bits that stay the same.

The BBC's keyboard looks a bit like a typewriter's with some extra keys at the top and sides. Fitting the Wordwise Plus chip turns the computer into a friendly and flexible word processor. What is the difference between a typewriter and a word processor? One advantage you will discover very soon is that you can type much faster on a word processor. Once you find out how easy it is to correct mistakes, you will realise that it was partly fear of making mistakes that was slowing down your typing before.

Word processing gives you a great feeling of freedom compared with typing. If you compose a document while sitting at a typewriter, you have to plan what you want to say, choose your words, hit the right keys and arrange the lines and paragraphs on the page all at the same time. If you find that the finished page contains serious mistakes or is badly laid out, you'll probably have to retype it. Although there are ways of correcting mistakes, the system doesn't encourage you to change your mind.

2.2 Enter, edit, format and print

In word processing, each stage is separate; this means that you can concentrate on one thing at a time. First you put words in (**enter** them) by pressing keys on the keyboard. You see the words appear on the screen but nothing will be produced on paper yet. They are being stored in the computer's memory for the time being. You can now rearrange your words as much as you like. This stage is known as **editing**. You can insert extra words freely, without worrying about whether they will fit; if you want to delete a whole section, the other words squeeze up automatically.

Once you are completely satisfied with the wording, you **format** the document. This means deciding about things like margins, spacing and page lay-out. Only then are you ready to put the words onto paper by pressing the **print** button. This tells the computer to send the final document to the printer.

2.3 Save and load

Finally, if you think you might ever want to use the same text again, you make a permanent copy of it: you **save** it onto disc or cassette. When you switch the computer off, it forgets everything in its memory and so your document will be wiped out. If you have first saved it, at a later time you can **load** it in again from disc or cassette. Then you can print it out again, or perhaps change it to serve a different purpose. No matter how many changes you make, the final print-out will always look letter-perfect.

To summarise, the stages of creating a document are:
- enter
- edit
- format
- print
- save

Of course if you are working on a long document you might save it at the editing stage; if you can use a disc drive it is sensible to save your document frequently. Even so, most people like to print a copy out quite early on, even if it is a rough draft. Final editing and formatting might then be done at a later stage.

3. Wordwise: an overview

The Wordwise system encourages you to get your wording right before you decide about lay-out, margins and line length. All the editing is done in large type which shows only 40 characters on each line of the screen. The screen display bears no relation to the appearance of your finished document, which can have up to 200 characters per line (as long as your printer can cope). But the 40-column display is easy to work with, easy to read even on a colour television, and leaves plenty of memory to spare for your text.

3.1 Embedded commands

Wordwise uses embedded commands to control all the special effects like bold or underlined letters and enlarged or condensed type styles. These are commands embedded into the text but separated from it by two special characters. These make all the embedded commands appear green (on a colour television or monitor). It doesn't matter if you use a black-and-white television or monochrome monitor as the embedded commands will still look noticeably darker than your text. Embedded commands are shown in green in some of the diagrams in this *Introduction*.

3.2 Preview

Before you print out your document, however, you may want to see how the embedded commands will affect the printed page. Wordwise provides a **preview** option that shows you what you will get when you print it, usually with an 80-column screen display. (What you see on the screen never shows *exactly* what you will get on paper, among other reasons because the screen is a completely different shape from the printed page.) The preview option shows you the effects of things like margins, indents, justifying, line length, centered headings and multiple line-spacing. It also shows you where page breaks will fall and how headings and footings will appear. Wordwise Plus also allows you to preview printer effects like underlining and double-strike.

3.3 Menu control

Both Wordwise and Wordwise Plus are controlled from a Main
Menu. You just press a number to select the option you want.
The Menu below is for Wordwise Plus; it is identical to the
Wordwise menu but for the addition of a ninth option.

```
           WORDWISE-PLUS
        (C) Computer Concepts 1984

    1)   Save entire text
    2)   Load new text
    3)   Save marked text
    4)   Load text to cursor
    5)   Search and replace
    6)   Print text
    7)   Preview text
    8)   Spool text
    9)   Segment menu

    ESC Edit Mode

    Please enter choice
```
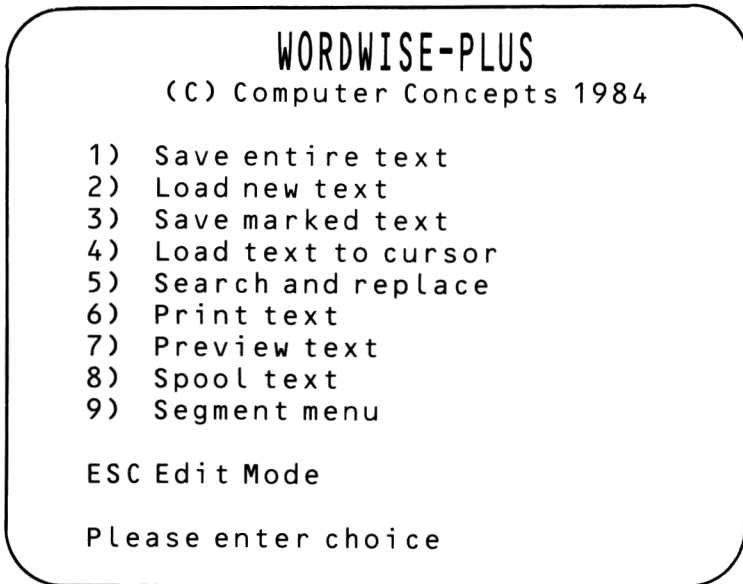
Options 1 and 3 are for saving text (in whole or in part).
Options 2 and 4 are for loading or joining text. Option 5 allows
you to search through a document for all the occurrences of a
particular word or phrase; you can then replace some or all of
them by another phrase if you want. Option 6 prints the text
and option 7 is for preview. Option 8 is useful if you need to
send a Wordwise document to someone who hasn't got
Wordwise: it saves the text in its formatted state. Option 9 takes
you into a whole new menu that controls segments.

3.4 Moving around the whole system

```
┌─────────────────────────────────────────────────────────┐
│                                                           │
│   ┌──────────────┐   ┌─────┐   ┌──────────────┐           │
│   │              │◄──│ ESC │──►│              │           │
│   │    Main      │   └─────┘   │     Edit     │           │
│   │    Menu      │             │     Mode     │           │
│   │              │             │              │           │
│   └──────────────┘             └──────────────┘           │
│                                                           │
│  ┌────┐  ┌────┐  ┌──────────┐     ┌─────┐                 │
│  │★B. │  │★W. │  │ Option 9 │     │ ESC │                 │
│  └────┘  └────┘  └──────────┘     └─────┘                 │
│                                                           │
│   ┌──────────────┐             ┌──────────────┐           │
│   │              │             │              │           │
│   │    BBC       │             │   Segment    │           │
│   │    Basic     │             │    Menu      │           │
│   │              │             │              │           │
│   └──────────────┘             └──────────────┘           │
│                                                           │
└─────────────────────────────────────────────────────────┘
```
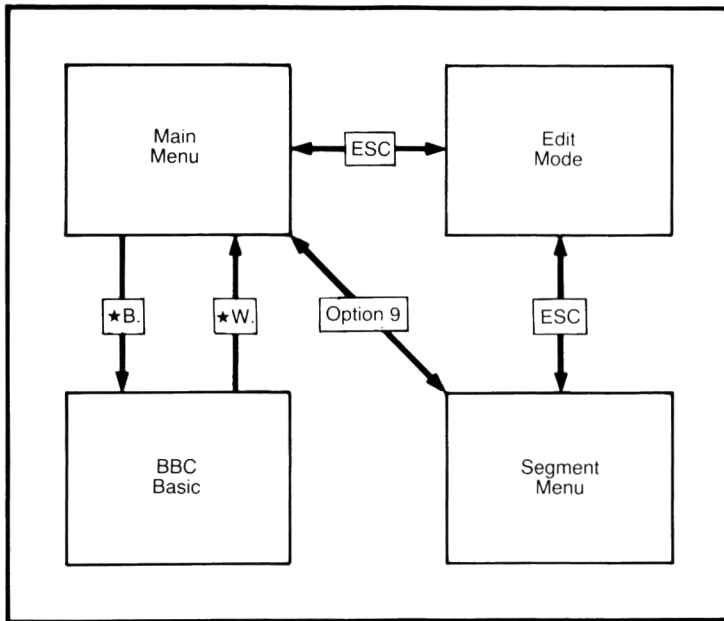
Most of the time when you are word processing you will be in Edit Mode, entering or editing your text. Pressing **ESCAPE** switches you into Edit Mode from the Main Menu and *vice versa*.

You can also turn your system back into a normal microcomputer running BBC BASIC by typing ★BASIC (or ★B.). However, you should save any text before running a program. Typing ★WORDWISE (or ★W.) returns you to the Main Menu.

Wordwise Plus has a whole new range of features controlled by things called segments that are explained in Section 8. The Segment Menu is reached from option 9 of the Main Menu and *vice versa*.

3.5 The BREAK key: a warning

The best way of learning word processing is to experiment freely. Nothing you type at the keyboard can possibly damage your BBC Micro or Wordwise. The only key you have to be careful of is the BREAK key (to the right of the **f9** key). The placing of this key is unfortunate: its effects are drastic and it cannot easily be disabled. Avoid it altogether if you can. If you press BREAK while using menu options 6, 7 or 8 your text will probably be lost from memory.

Fortunately, Computer Concepts managed to provide a safety-net for the BREAK key in Edit Mode, where in practice you will spend most of your time. In previous versions of Wordwise, if you pressed BREAK while editing, you would see a question
Old text? (Y/N)
to which the answer had to be Y if you wanted it to try to restore your old text (ie the text you had in memory). Wordwise Plus automatically assumes that you have pressed BREAK by accident and tries to restore your text if it can. When you load new text (menu option 2) you will automatically clear any old text from the memory. Otherwise use the method described in Section 4.5. You will sometimes see prompt:
Press any key
Naturally, this means that you can press any key you like except the BREAK key!

SECTION 4

4. Getting Started

4.1 The Main Menu

In this section I am assuming that you have access to a BBC Micro with a Wordwise or Wordwise Plus chip fitted, the keystrip in position above the red **f1** to **f0** keys and that you are ready to start word processing. The first step is to tell the computer to select Wordwise in place of its usual BBC BASIC. Just type

<div align="center">

★WORDWISE **RETURN**

</div>

Actually you can abbreviate this to ★**W.** **RETURN** if you like.

You will now see the Main Menu, which should look similar to the diagram on page 6. The flashing line after the words **Please enter choice** is called a cursor. All it means here is that Wordwise is waiting for your instructions.

You're not ready to choose any of these options because you haven't put any words in yet. (If you want to start off by loading some text off the cassette supplied, refer to Section 5.) In order to enter or edit your words you always have to press the **ESCAPE** key (top left of the black keys). Once you are in Edit Mode you can easily return to the Main Menu by pressing **ESCAPE** again. Try it a few times. This toggle action is like the kind of push-button light-switch that you press once for on and press again for off.

4.2 Putting words in

Once you're ready to put some words in, go into Edit Mode (if you aren't already). Type a few words; they will appear in capitals, in the middle of the screen between the **Start** and **End**. To get normal lower-case letters, press the **CAPS LOCK** key (it's two rows below **ESCAPE**). The red caps lock indicator light should go out and you will be in lower-case from now on. When you want the odd capital letter it is easier to use the **SHIFT** key (to the right of the shift lock) just as you would on a typewriter. If later you want to go back to having words appear all in capitals, just press **CAPS LOCK** again: it's another toggle. Normally you should release the caps lock at the beginning of each word processing session.

Before you can practise editing, you need some words to work on. Don't worry about what you have already typed in; just press the █RETURN█ key a few times. This will leave a gap beneath your experiments. Now type in several sentences *as fast as you can*: you need some mistakes to work with! You can copy the words in any paragraph of this *Introduction* if you like; just ignore any special effects like Italic and Reverse printing. *Don't touch* the █RETURN█ key and don't worry about where new lines will occur; this is all taken care of automatically. *Only* press █RETURN█ at the end of each paragraph (twice if you like double-spacing between paragraphs like this).

4.3 Cursor control

Notice that the cursor is now at the end of your paragraph. The cursor is very important because it marks your place in the text. To correct a mistake you first have to get the cursor to the right place on the screen. Find the arrow keys (upper right on the keyboard) and try pressing the ← or ↑. If you use a light touch, the cursor will just move one character left, or up by one line. If you hold a key down too long, however, it will move several letters or lines. This is because the arrow keys, like most of the keys in Wordwise, have a feature called autorepeat. This means that if you hold down a letter key (say **x**) what you will actually get is something like **xxxxxx**. This is very useful once you are accustomed to the system, but to begin with you may have to be a bit careful. Try adjusting your touch: use a light, short keystroke, like a pianist playing "staccato".

If you want to move the cursor in larger jumps, try pressing the arrow keys *while holding down* the █SHIFT█ key. (Press the █SHIFT█ key *before* you press the arrow key and don't release it until *after* you release the arrow key.) The cursor will instantly leap to the beginning or end of the line at a touch of the ← or → keys, and to the top or bottom of the text at a touch of ↑ or ↓.

As the diagram below shows, there is an in-between level of operation using the █CTRL█ (Control) key which you'll find just above the █SHIFT█ key. You may like to use █CTRL█← and █CTRL█→ to move the cursor one word each way, but don't worry about using the Control key with ↑ or ↓ yet as our text occupies less than a screenful. Whenever you use a "master" key like █SHIFT█ or █CTRL█ keys to change the effect of other keys, depress it *first* and release it *last*.

Arrow key on its own	left/right one letter	up/down one line
Arrow key with CTRL	left/right one word	up/down one screenful
Arrow key with SHIFT	beginning/ end of line	top/bottom of text

Controlling the cursor: the arrow
keys and the effect of CTRL and SHIFT

4.4 Insert and Overwrite

Cursor control is crucial to word processing, so it's worth
spending some time mastering the different ways of controlling
the cursor. Once you feel ready to start editing, take the cursor
to the top of your paragraph and type
I am inserting this sentence.
It is added to the beginning of your paragraph, confirming that
you are in Insert mode. This is the normal situation; you will
see the letter I in the top right-hand corner of the screen as a
reminder. (If you can't see the top line properly, press `ESCAPE`
to return to the menu and type ★TV 255,0 `RETURN`. This
should move everything down a line.)

Now press `f0`, the leftmost of the red function keys. The bleep
is to warn you that you have left Insert mode, and the I at the
top of your screen becomes an O (for Overwrite). Position the
cursor over the beginning of the sentence you just inserted and
type
Now I am in overwrite mode...
You should see exactly what overtyping means! Now press the
`f0` key again to go back into Insert mode. *Always* return to
Insert mode after using Overwrite: otherwise you may lose text
by accident.

Now it's time to start correcting some of those mistakes. If you

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have simply transposed a pair of letters like htis you need four steps:

1.   Cursor to first letter
2.   Press **f0** for Overwrite
3.   Type th in the correct order
4.   Press **f0** again for Insert

4.5 How to delete

Unless the change needs an equal number of letters it is probably easier to remain in Insert mode and delete the unwanted letters instead. There are two methods of deleting single letters. The **DELETE** key always removes the letter to the *left* of the cursor. Try it, but don't hold it down unless you want to delete lots of letters because it has autorepeat too! If you want to delete the character *at* the cursor use **CTRL a**. Try using both methods to make some more changes to your paragraph. Each has its advantages, but at first you may prefer to stick to just one.

To delete one word at a time, position the cursor at the beginning (or anywhere in the middle) of the word and press **CTRL d**. Beware the autorepeat or this will gobble up words to the right of the cursor for as long as you hold it down!

To delete a sentence, put the cursor at its beginning and press the **f6** key. A flashing **Delete to?** message will appear at the top of the screen. Press the full stop and the sentence will disappear. If instead you press the **RETURN** key, the paragraph will disappear. Practise deleting parts of your text using all these methods.

To delete the entire text and start again, it is best to insert a character at the end of your text, and use the **f6** key to delete to it. I generally use an @ for this purpose, but any symbol will do as long as it doesn't appear in your text. When you have finished with your experiments, try this out:

1.   Cursor to the bottom: **SHIFT** ↓
2.   Insert @
3.   Cursor to the top: **SHIFT** ↑
4.   Press **f6**
5.   Press @

There are quicker ways of doing this job, but this method is useful because in practice you will often want to retain embedded commands at the top of your document. When you are word processing in earnest you will hardly ever want to delete the *entire* text, because loading new text automatically clears the memory.

4.6 Capitals and small letters

You've seen how the CAPS LOCK key makes your words appear all in capital letters when its red light is on, and in small letters when it isn't. There is an easy way of reversing this if you change your mind later. To swap upper-case letters for lower-case ones, and *vice versa* just press **CTRL s**. Use one touch for a single letter, or hold both keys down to change a whole line. (Remember to press **CTRL** *before* the s or you will insert a string of sssssss's instead!) Practise this on a sentence or two, then restore the original by repeating the process. This control is very useful if you leave the CAPS LOCK on by mistake, as you can exchange the letters for lower-case without retyping.

Wordwise allows you to use lower case or upper case letters for most purposes. Whenever you are asked a safety net question like
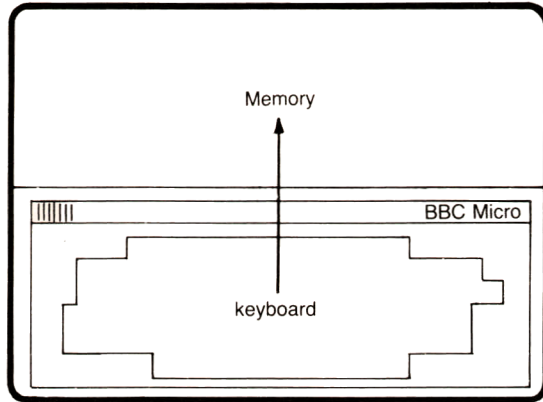   **Are you sure? Y/N**
you can confirm using either **Y** or **y**.

SECTION 5

5. Saving and loading

The text in the last section was simply typed in and edited from the keyboard. It was stored in the BBC's memory which is housed inside the same box as the keyboard. You can picture it as follows:

Suppose you enter the text of a letter that you want to reuse later. Let's follow through all the operations involved in saving, loading and editing the document. Because most people who use word processing quickly find that a disc drive is indispensable, the diagrams and text refer to discs. However, the same principles apply to cassette loading and saving. Cassette users should read the special notes at the end of this section.

5.1 Using filenames
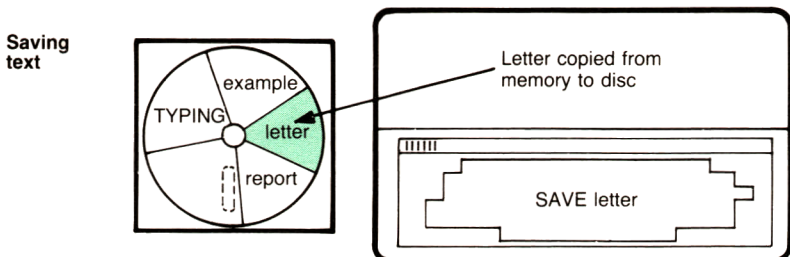
When you are satisfied with the text, press option 1 (Save entire text) and you will be asked

Please enter filename

The filename is the name under which you want the system to file this document. Any name of up to 7 characters which has not already been used for a different document on that disc will do. In this case suppose you just call it **letter**. You would type in

letter `RETURN`

and your letter will be saved. You can check this by typing `★CAT` (or `★.`) to catalogue the contents of the disc. The filename **letter** should now appear in the catalogue, along with the names of any other text files. At the bottom is the instruction

Press any key

Once you have done this (*don't* pick the `BREAK` key!) you can continue as normal.

It's a good idea to stick to lower-case filenames for Wordwise files, especially if you (or anyone else who uses the discs) also keeps BASIC programs which have filenames in upper-case, like TYPING. That way it is immediately obvious when you catalogue the disc which files are Wordwise text and which BASIC programs.

After switching on

TYPING
example
letter
report

Memory blank when first switched on
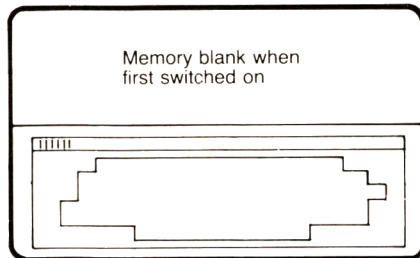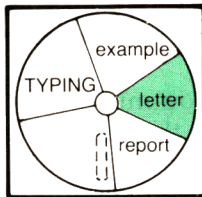
If you now switch off the computer (remember to remove the disc from the disc drive first!), its memory will be wiped. So when you switch on again, the picture is as above: **letter** and all the other files are still safely on the disc but the BBC's memory is empty.

Loading
text

Letter copied into
memory from disc

example

TYPING

letter

report

LOAD letter
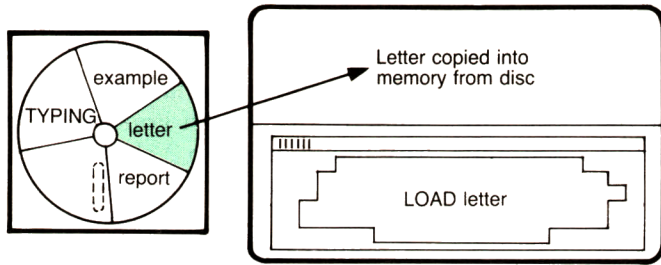
Now press option 2 in the Wordwise Main Menu (Load new
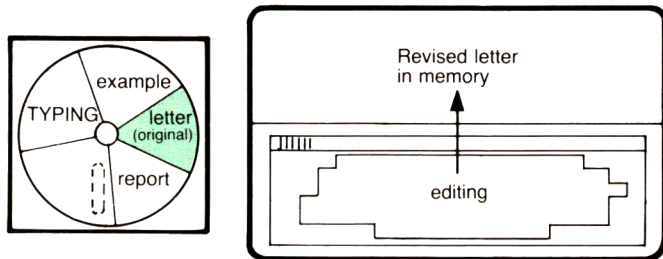text). Again you will be prompted:

Please enter filename

To reload your letter, type

letter █RETURN█

Now you can edit your letter, perhaps to make it suitable for a
different person to receive. The position is now:

Editing
text

Revised letter
in memory

example

TYPING

letter
(original)

report

editing

Before you save the revised version you must think carefully
about filenames. If you want to retain the original version of the
letter you must give the revised version a new filename (eg
letter2 or **revised**). Otherwise the revised version will overwrite
the original on the disc. On the other hand, if you've no further
use for the original, it is better to re-use the same filename
rather than clutter up your disc with material that you will later
have to delete:

Page 16
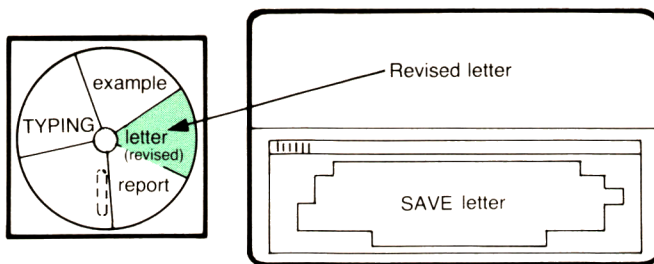
To make sure that you don't overwrite an old filename by
mistake, in Wordwise Plus you will be asked
Replace old file (Y/N)?
if a file with that filename already exists on disc. If you press Y,
the new file will overwrite the old. Otherwise, the save will be
abandoned, and the message
File NOT saved!
will confirm this.

Wordwise Plus has another safety net to prevent accidental loss.
If you tell it to load new text while you have text in memory, a
message will ask you to confirm:
Are you sure?
Press Y only if you have already saved the text to memory, or if
you no longer want it.

Notice that filenames *never* include any spaces. If you tried to
call successive version of a letter **letter 1, letter 2** and **letter 3**, the
computer would regard them all as called **letter** and overwrite
each one by the next!

5.2 How much text can you store?

Wordwise allows you to feed in nearly 4000 words in each file.
That is as many as the BBC's memory can hold at one time.
However your text can be as long as you like: I have written
several full-length books using Wordwise. Although a long
chapter might have to be split between two files, the whole
book still fits on a couple of discs. It's impossible to generalise
about how much text you can store on each disc as it depends
both on the quality of disc and the performance of the drive. As
a rough guide, a disc described as 100 K will hold a full memory
four times over (roughly 17,000 words). Other discs can hold at
least four times as much again.

In general, it is safe to predict that you will save almost everything you write to begin with and quickly find that you need far more discs than you expected! Some advice about disc housekeeping is offered in Section 9.5.

5.3 Cassette loading for disc users

Even if you normally use a disc drive it may be necessary on occasion to resort to a cassette recorder. For instance, you may want to load a document from cassette (eg the **example** document supplied). You can change systems easily without having to leave Wordwise. Just type
<div align="center">★TAPE</div>
from the Menu page. You will see a message:
<div align="center">Press any key</div>
Again, this means any key *except* **BREAK**! You can then load from cassette by choosing option 2 as usual. (Read the section below if you are unfamiliar with cassette operations.)

You will remain in cassette mode until you reverse the process. So if you want to save the document onto disc, you must first type
<div align="center">★DISC</div>
and then press any key again. Now you are ready to save to disc using option 1.

5.4 Notes for cassette users

Saving to cassette is generally straightforward. After selecting option 1 you will be prompted by **Please enter filename** exactly as for disc users. The only difference is that the filename can be up to 13 characters long. (So you may have to shorten it if you want to copy the file to disc.) Once the filename has been typed in you will see **RECORD then RETURN** and should press the Record button on the cassette recorder followed by **RETURN**.

Even experienced users often have problems with loading files recorded on other cassette recorders. For this reason anything important is usually recorded twice over and it's always worth trying the second copy. Always have the tone control on your recorder set to maximum treble, try setting the volume at around three-quarters and cross your fingers tightly! If you type
<div align="center">★OPT 2,1 RETURN</div>
the system will give you some information about problems as

they arise. This will enable anyone with cassette-loading experience to help you out.

SECTION 6

6. Formatting and printing

Your BBC Micro can be connected to any one of hundreds of different computer printers. Unfortunately, printer manufacturers have never agreed on a set of standards, and there are all sorts of fiddly things that can go wrong when you first connect your printer, especially if it was designed for a different computer. This can make your first experience of printing rather disappointing. Don't be put off too easily: most of the problems are easy to solve once you have found the information you need. Unfortunately, some printer manuals are so difficult to understand that it may be easier to seek help from someone else who has the same printer!

This section does not try to explain *why* so many problems crop up, nor why the solutions work. It simply attempts to get you going. Once you have found out how to make your printer do whatever you need, you can do several things to make life easier for yourself:

- Make a list of all the codes, ★fx commands and standard instructions that you use regularly
- Consider sticking a copy to your BBC or your printer as appropriate
- If you find them a nuisance to type in, let a disc do it for you (see Section 6.7)

The last point is important. If your printer happens to need no setting-up commands and your layout needs are simple, it may not arise. But lots of people find word processing a terrible chore because they have never learned to get the computer system to do the setting up. At first, you probably won't want to bother, but it is a mistake to fall into the habit of typing in the same old things every time you switch on. The small effort of learning how to make the computer do this for you in will be rewarded time and again. You may want to skip Section 6.7 on a first reading, but remember that it's there to refer back to.

6.1 First time around

Suppose you want to print your first document. Let's assume that it is less than a page. The first job is to make the printer

ready. That means it must be

- connected to your BBC
- switched on at the mains
- set to ON LINE
- loaded with paper

Now try selecting option 6 from the Main Menu. If the text comes out roughly as you would expect you can skip straight to Section 6.2 (and count your blessings!) If it doesn't, press ESCAPE; this is always the first thing to do as it should restore you to the Main Menu. (If you press it a second time, you should see your text still in memory; return to the Main Menu.) Then try any of the following quick fixes that seem appropriate. If none of them works, seek help from someone with experience.

6.1.1 Nothing happens

If there is a problem at the printer end, the system will "hang up" with a few words on the screen and no output at the printer. Regain control by pressing ESCAPE.

Perhaps you have a serial printer? The BBC assumes a parallel printer unless you tell it otherwise. If your printer is connected by wide "ribbon cable" and plugs in underneath the BBC, it is parallel and the problem must be elsewhere: confirm that your printer was ready (all four points above) before looking for help.

If the printer does *not* use ribbon cable and plugs into the back of your BBC (the hole is actually labelled RS423), it is a serial printer. All you have to do is tell the system this important fact. Type
<p align="center">★FX 5,2 RETURN</p>

If the printer now produces garbled text, it may be because you need to match the speed at which the BBC sends information with the printer's ability to receive it. The system assumes a setting of 9600 baud: if your printer needs something different you will have to refer to the printer manual and to page 407 of the official *BBC User Guide* to sort it out.

If you succeed in curing the problem, the code(s) will have to be entered *every* time the BBC is switched on – unless you follow

the suggestions at the end of this section.

If you still have problems, it is not unknown for printer cables to be wrongly wired. If you have access to an alternative cable or printer, it is well worth swapping things round to try to identify where the problem lies.

6.1.2 No line feeds

If all the lines of text end up on top of each other, the problem is that the printer thinks it's supposed to ignore line feeds. Although the results look drastic, the cure is simple. Just type in

<div align="center">

★FX 6 `RETURN`

</div>

Once you have pressed any key, hit 6 again and all should be well.

You may want to settle for typing this in each time you switch on. If not, you can usually reset a switch inside the printer once and for all, so that it will always pay attention to line feeds. I did this to my own Epson printer when it first arrived and have never regretted it: the job is a bit fiddly because you have to take the casing of the printer and poke around inside, but it is neither difficult nor dangerous.

6.1.3 Unwanted double-spacing

If you get double-spacing when you haven't asked for it, perhaps someone has typed in a **★FX 6** command before you started using the machine? On a printer that is already producing its own line feeds, that will create double-spacing by mistake. The solution is to reverse the command by typing
<div align="center">

★FX 6,10 `RETURN`

</div>

6.2 Formatting

Default is a useful piece of computer jargon for the assumptions the system makes unless you tell it otherwise. If you haven't had to read the above section on problems, it means that your printer works with the default settings assumed by the BBC Micro, so you won't have to over-ride them.

Wordwise allows you to control every detail of the format of your final document – if you want to. At first, you may be

happy enough to use most or all of the default settings. Your text will come out single-spaced, with 70 characters to the line, no left margin and a ragged right edge (unjustified).

Once you're ready to take your own decisions about how it should look, you will need to use embedded commands. As soon as you want to write documents of more than a page you will need these anyway (see Section 7). The first time you use embedded commands you may prefer just to have a paragraph or two of text, so that printing out your experiments doesn't take too much time or paper.

6.3 Some examples of embedded commands

You embed commands into your text while in Edit Mode to tell Wordwise how you want the text formatted and printed. Embedded commands don't take effect until the text is output in some way (previewed or printed). Even then, they only take effect from the moment they are reached, so embedded commands placed halfway through the text only affect the second half of the document.

While you are in Edit Mode, embedded commands can be edited just like ordinary text. You use exactly the same methods to insert, delete, and overwrite them.

6.3.1 Left margin and line length

Some embedded commands need a number after them. For example, **lm18** inserts a left margin of 18 spaces, and **ll60** changes the line length to 60 characters. There must be *no* space between the letters and the number in an embedded command. Others don't need a number; for example, **jo** turns justify on (straight right margin), and **nj** tells Wordwise not to justify. Others again can be used on their own *or* with a number: **ce** centres only the words that follow it on the same line, whereas **ce6** centres the next six lines.

To distinguish them from your text, Wordwise needs a signal for the start and end of each embedded command. Normally the **f1** key signals the start, the **f2** key the end. For example, if you want a left margin of 8 spaces throughout your text, take the cursor to the top of your text in Edit Mode and insert:

<p align="center">f1 lm8 f2</p>

The **f1** and **f2** won't actually appear on the screen. You should see something like this:

<div align="center">lm8</div>

Try out the effect of varying the line length, the justify and anything else you feel like. Multiple line-spacing can be very useful: **ls2** gives you double-spacing, **ls3** produces triple-spacing, and **ls1** will return you to single spacing. There is a full list of the embedded commands available, and their default values, in the *Reference Manual*.

Suppose you wanted to start a document with left margin 13 and double-spacing, you would type

<div align="center">**f1** lm13 **f2** **f1** ls2 **f2**</div>

at the top. If you later wanted to increase the left margin and reduce the line length, you might insert

<div align="center">**f1** lm18 **f2** **f1** ll60 **f2**</div>

somewhere in the text. From that point on, all the text would be printed in the new format.

6.3.2 Combining embedded commands

If you want to string several embedded commands together, you can omit all the **f2**s except the last, as long as the string doesn't overspill a single line. This is because if Wordwise receives another **f1** when it's expecting an **f2** it assumes that you're adding another embedded command. So you can safely type

<div align="center">**f1** lm18 **f1** ll60 **f2**</div>

in place of the string above.

6.3.3 Indents

To indent a chunk of text by 5 spaces, insert an **in5** embedded command at the beginning. At the end of the chunk you must either cancel the indent using the command **ci**, or override it with a different indent.

You can also set temporary indents to affect the current line only using the **ti** command. Wordwise Plus has an additional command called fully indent for putting words hard up against the right-hand margin. **ti** is temporary: you must enter it on each line you want fully indented.

fi

fi

fi

ce

:-in5

in10

in5

ci

:-

The diagram above shows you how to achieve some useful indent effects. The best way to learn is to experiment freely. The

indent (and all other) embedded commands are fully explained in the *Reference Manual*.

6.4 Preview

By now it should be obvious how useful it is to preview the effects of your embedded commands on the screen before printing. The preview option (7) saves doing all those draft print-outs, and allows you to experiment with different layouts for your text.

When you choose option 7 from the menu Wordwise interprets the embedded commands in the same sort of way as when it prints (option 6). The difference is that the formatted text is sent to the screen, not to the printer. In fact options 6, 7 and 8 all format the text according to the embedded commands that it contains (see below):
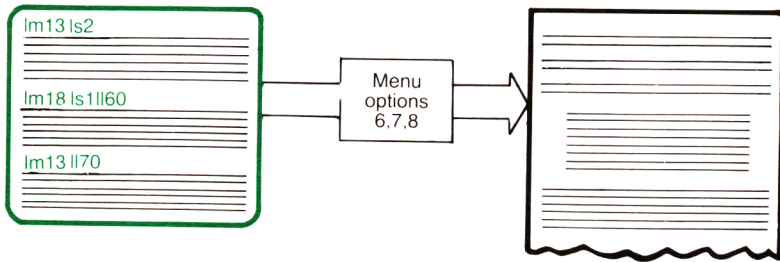
Even in 80-column mode, a screenful of text cannot display as much as a printed page, and your text may scroll past too quickly. In Wordwise Plus you can stop the scrolling by hitting the space-bar (in Wordwise you may have to press CTRL–SHIFT together). To restart the preview, press the space-bar again (or release CTRL–SHIFT).

Pressing ESCAPE once will return you to the Menu; a second ESCAPE will put you back into Edit Mode. Now you can change any of the embedded commands (or text) until you are completely satisfied with the appearance of your document. Then you should print it, not forgetting to save it as well if appropriate.

Your normal Wordwise working sequence should be something like this

- enter and edit
- preview
- edit
- preview again
- print
- save

It never does any harm to save intermediate versions, but you should always also re-save the document in its final form. If your first print-out is still not satisfactory, you may want another cycle of edit, preview, print and save.

6.5 Printer effects

Printers can produce a variety of special effects, like underlining and double-strike letters (sometimes called shadow, emphasised or bold). Some have separate commands for bold and double-strike, and can also combine both effects for maximum blackness. You can control all the effects your printer can produce using embedded commands: it's just a matter of finding out the relevant codes and remembering to switch them on and off. For example, you must switch underlining on *before* the first letter to be underlined and switch it off *after* the last.

Wordwise Plus gives priority to two of the most useful effects: underlining and double-strike. You can preview their effect using option 7. Underlining appears wherever you have switched it on, and the words to be printed in double-strike appear reversed out like **this** on the preview screen. Because so many people have Epson printers, two special embedded commands have had the Epson codes built into them: **us** and **ue** start and end the underline, and **ds** and **de** start and end the double-strike.

Even if your printer is not an Epson, it's worth trying these commands as many printers use the same codes. If not, you can still use these short codes if you want, by redefining them to produce the ones you need. This involves the use of the **rs** (redefine sequence) command which is fully explained in the *Reference Manual*. Redefining these codes could also be useful if you are going to make frequent use of some other special effect like subscripts in a document.

The normal Wordwise method of obtaining other printer special

effects (eg subscripts and superscripts, alternative typefaces and international character sets) is to use the output control (**oc**) embedded command followed by a code sequence which you will have to dig out of the printer manual. Often you will actually have to type **oc27**, followed by the code number(s) (in decimal) between presses of the **f1** and **f2** keys. (The 27 is a code for Escape.) Suppose you want to use single sheets of paper on an Epson: you will have to disable the paper-end detector, otherwise it automatically switches off when the paper goes past a certain position. The code given in the Epson manual is decimal 57: what you would actually have to type in Wordwise is

<div align="center">

f1 oc27,57 **f2**

</div>

Even experts find printer control codes tricky so don't be discouraged if you don't achieve instant results. If trial-and-error fails, consult a friend. Most of the problems come at the beginning; the main thing is to keep a careful note of what works and what doesn't, and to concentrate on the effects you find most useful.

If you are using a daisy-wheel printer and want to change the daisy-wheel in the middle of a page, you should insert a new Wordwise Plus embedded command **pa** to produce a pause at the place where the new typeface is to start. Remember to build in another pause when you want to revert to the original.

6.6 Common problems

6.6.1 Spaces missing from print-out

Because the **f1** and **f2** characters don't appear on the screen, they can cause odd effects if you leave stray ones lying around. An errant **f1** will usually give itself away by turning the words that follow it unexpectedly green. Misplaced **f2**s are trickier. Often they will only trip you up when you find a space missing in your print-out even though the space appears on the screen: usually this means that an unwanted **f2** is lurking! Take the cursor to the right of the apparent space, delete it and substitute a true space from the space bar and all will be well.

6.6.2 Embedded commands not working

If you string too many embedded commands together they will

overspill a line and what should be green turns white.
Commands in white are no longer embedded! You must
separate your string into two lines, each one beginning with an
f1 and ending with an **f2** .

6.6.3 Difficulties over the £ sign

There is no internationally agreed convention about how to
represent the £ on a computer. This often leads to difficulties
over printing it. The problem may be at three levels

- finding out whether the printer can produce the £ sign
- finding out which key on the BBC's keyboard produces the
  £ sign
- reconciling the print-out with what appears on the screen

Most printers have a test routine that prints out the full
character set. This should quickly show whether the printer is
capable of producing the sign. (Some daisy-wheels may not
even have one!)

6.6.4 Lay-out with proportional spacing

Some printers give you the choice of how your characters are
spaced. You might have the option of fixed spacing (eg 10, 12 or
15 characters per inch) or proportional spacing. In the latter, the
space occupied by each character is proportional to its width: an
"m" might be three times the width of an "i",for example, like in
this booklet. Proportionally spaced typefaces are easy to read,
and especially suitable for correspondence work. However
Wordwise has no way of knowing how you have set up your
printer, so facilities that depend on fixed spacing, like the
justify and tabs, will not work normally. The simplest policy for
beginners is not to try to justify with proportional spacing: it
only makes a letter look less personal, by drawing attention to
the fact it was word processed!

6.6.5 Enlarged and condensed typefaces

Many dot-matrix printers give you the option of varying the
size of the characters. Enlarged letters can make effective
headings, and condensed ones are handy for squeezing a lot
onto a page. You control these effects with an embedded **oc**
command. For example, on Epson printers, the sequence

f1 oc15 **f2**

makes the text that follows come out condensed (20 characters to the inch), and

f1 oc18 **f2**

restores the normal size (12 characters to the inch).

When using non-standard type sizes, remember that Wordwise sets margins, adjusts line lengths and does centring on the assumption that each character is the same size. If you mix different sizes in the same document, you will have to change the margins and line length to correspond. To take an example, suppose you have set **lm18** and **ll60** in normal letters and then switch to enlarged (**oc27,87,1** on an Epson). If you want the enlarged letters to line up, you will have to change to **lm9** and **ll30** to compensate for the double width of the letters.

6.7 Customising

In your first few sessions of word processing you will probably be far too busy getting familiar with the controls to want to experiment with all the format commands and printer effects that are available. You may then go through a phase of experimenting with a variety of special effects and lay-outs. This is excellent, as there is no substitute for practical experience in building confidence and speed.

Soon you will realise that there are certain sequences of embedded commands that you are typing in repeatedly. The time has come to consider customising your word processing. The first stage is to make the list of standard instructions and codes mentioned at the beginning of this section. Then ask yourself if you are the kind of person who will keep a master disc or cassette safely and load it in before each session. If not, you may still want to set up the red keys to produce various effects you use often.

6.7.1 Programming the red keys

You can get the red keys to store any words, phrases or embedded commands you want. This doesn't interfere with their effects in Wordwise in any way. Once you have programmed a red key from the Main Menu, getting it to produce its contents in Edit Mode is easy: you just have to press

the red key with your right hand while holding down
CTRL−SHIFT with your left. (This may sound awkward but it
quickly becomes second nature if you use it regularly.) The key
goes on producing whatever you told it to until you switch off
the BBC (or re-program the key).

When I want Key 5 to produce my signature to put at the
bottom of letters, all I have to do is type
        ★key5 Jacquetta Megarry **RETURN**
from the Menu. Then whenever I finish entering a letter, I just
press **CTRL−SHIFT−f5**
and out it comes! Try it with your own name, or surprise a
friend by secretly programming their name onto a red key.
Notice that there is *no* space between **key** and **5**, but you *can* use
spaces in the string of letters that you program. You can
program all ten red keys (by programming key0 to key9), but
then remembering what you put where can become a problem! I
find the best solution is a simple home-made extension to the
keystrip showing what each key contains.

In practice, some of the most useful sequences are bound to
include embedded commands. These can also be programmed
onto the red keys using special codes for the **f1** and **f2** keys.
Wordwise users will find these explained in their manual.

6.7.2 Storing your custom program

Whichever short-cut you use, you won't want to to go on typing
in all those codes each time you switch on for ever. There are
two methods of storing your short-cut on disc or tape.

Suppose you just want to keep a set of embedded commands,
perhaps to produce a standard letterhead. The simplest answer
is to save an *empty* letter ie one that has all the embedded
commands you need but no text. You could call it **empty** or
lethead (or anything you like). You will have to load it before
you start typing a new document, so you will need to copy it
onto each new disc. (Cassette users may not find this
worthwhile.)

Alternatively, if you want to store a standard set of function key
programs, you can use a simple BASIC program. If you (or a
friend) know even a little BASIC, this is very easy. To store the
program for key5 you would enter BASIC (★**B.**) and type:

10 ★key5 Jacquetta Megarry **RETURN**
with extra lines for any other keys you want programmed.

The advantage of this method is that any other commands you
need to get going can be built into the program too: you can
type your ★TV255,0 or ★FX6 for the last time! The last line of
the BASIC program can tell the system to go into Wordwise
automatically. If you are a disc user, it is also easy to make the
whole program autoboot ie load and run automatically just by
pressing **SHIFT−BREAK** when you switch on. If you have no
experience of saving, loading or editing BASIC programs you
will want help to carry this out.

If you don't want to have to leave the Wordwise Plus system,
another possibility is to store your instructions in a segment.
The segment idea is introduced in Section 8.

SECTION 7

7. Longer documents

This section introduces commands that you will find useful as your experience grows, especially when you deal with longer documents. If possible have some text in the BBC as you read through, for instance the document **example** supplied on the cassette. Remember, you have the original safely on the cassette or disc so it is quite safe to make even drastic deletions to the version in memory – as long as you don't overwrite the original by the revised version!

If the **example** document is not available for any reason, you can quickly build up a long document by using the markers and copying a couple of paragraphs that you've typed in, as explained in section 7.2. It is best to start with a document of 1400 words or less, as the preview will be more accurate.

Because of the unfortunate memory restriction of the BBC Micro, longer documents cannot be previewed in 80-column mode unless you fit a memory extension to your computer. Although the preview on long documents looks strange at first, you will find that it is adequate for checking page breaks and other final details prior to printing. In Wordwise Plus a dotted line indicates the page break precisely, and line numbers can also be made visible in preview mode (Section 7.4.3).

7.1 Word counts

It is often useful to know how many words there are in all or part of a document. The **words** number at the left of the status line gives you a running total as you enter, and also tells you the total word count for any document you load.

You can also count words in selected sentences or paragraphs. Take the cursor to the beginning of any paragraph and press `f5`. Watch the status line. The flashing **Word count to?** question is asking you to tell it where to count to. If you press the full stop, it will count the words in the first sentence and replace the running word count by the total for that sentence.

Return the cursor to the beginning of the paragraph and press `f5` again. This time press `RETURN` and you will get the total

for the paragraph. You can count to any symbol you specify. I often insert an @ symbol at the exact position I want to count to. Try this method now to restore the word count for the whole document:

Press **SHIFT** ↓ , insert an @, then press **SHIFT** ↑ followed by **f5** and @.

The result should be the word count you started with.

7.2 Block operations

Four of the red keys allow Wordwise to work on large blocks of text. It is often useful to mark out a section that you want to save, delete, move or copy. The first step is to mark the beginning and end of your block by inserting markers (press **f3**). The flashing red blobs in the top right-hand corner are just to remind you that markers have been set. Now you are ready to operate on your block of text.

7.2.1 Save marked text

If you decide that a section of text belongs in a different place but you're not yet certain where to put it, it is often useful to put it one side for later. The sequence is to mark, save and then delete it. Once you have marked it, return to the Menu and choose option 3 (**Save marked text**), giving it a filename that will remind you what it is.

7.2.2 Delete marked text

If you then return to Edit Mode and press **f7** (**Delete marked text**), your block will disappear. If it was a large one, you will be asked to confirm the instruction before it is wiped out. Typing anything but Y in response to **Are you sure?** automatically cancels the request. Practise deleting small and large blocks of text: you can always reload the whole document and start again.

7.2.3 Move marked text

Suppose you decide that a paragraph is out of place. Just mark it as usual and then move the cursor to wherever you want it to begin. Then press **f8** and it will instantly move to its new position. The markers are released automatically.

7.2.4 Copy marked text

If you want to repeat a section of text, the drill is very similar. Mark the text, move the cursor to where you want copied text to begin, and press the **f9** key. The only difference is that your markers remain set in case you want to put another copy somewhere else.

7.2.5 Release markers

Markers can be deleted just like normal characters when they are finished with. (When marked text is deleted, the markers are released automatically.) In addition, Wordwise Plus has a special command to release both markers: just press **CTRL r**.

Once you have deleted the markers you can insert them elsewhere and operate on a different block of text.

7.3 Search and replace

Menu option 5 allows you to search for any words or phrases you specify. Make sure you have a saved copy of the text in memory as we are about to muck it about! Also, check that the cursor is at the *top* of the text. *All* search-and-replace instructions are obeyed from the cursor onward *only*. So if you leave the cursor at the bottom of the text, nothing will happen!

Now select option 5 and you will see a flashing question
Global or selective? (G/S)
This question simply means "Do you want it to process the whole text automatically, or do you want to check each substitution personally?". Choose S to begin with so you can see what's going on. You will now be prompted
Please enter search string
Type in any word that occurs in the text that you might want to search for. Suppose we wanted to exchange **that** for **it**. The search string should be
it **RETURN**
Next you will be asked
Please enter replace string
Enter
that **RETURN**.

You should now see your text in Edit Mode with the cursor

marking the position of the first **it**, and a flashing **Replace? (Y/N)** question. If you press Y the exchange will be made; pressing anything else will leave the text unchanged. Either way you will be moved forward to the next occurrence of the search string. Press Y or N as you prefer until you have reached the end. When you have seen enough, press **ESCAPE** and you will return to the Menu.

By now you may have discovered that the search-and-replace is unexpectedly literal in its approach. It treats **it** and **It** as two different strings: you can confirm this by searching for one and replacing with the other. And the space after **it** in the search string is important if you don't want to find all the instances of its, itself and so on. In fact *any* words that include **it** in any position will be located. You need a space *before* the **it** as well as after if you don't want to find all the occurrences of **with**, **written**, **hit** and so on.

It is safer to stick to selective searches until you are really familiar with this powerful facility. That way, if you don't get what you expect you can always say **N** to the **Replace?** question. Once you are used to it you may want to use it for things like substituting names in standard letters.

If you simply press **RETURN** when asked for the replace string, the replacement will delete the search string. If you just want to search, not replace, make the search Selective and press N at each occurrence.

If you are doing successive search-and-replace operations on the whole text, remember to return the cursor to the top of the document after each one.
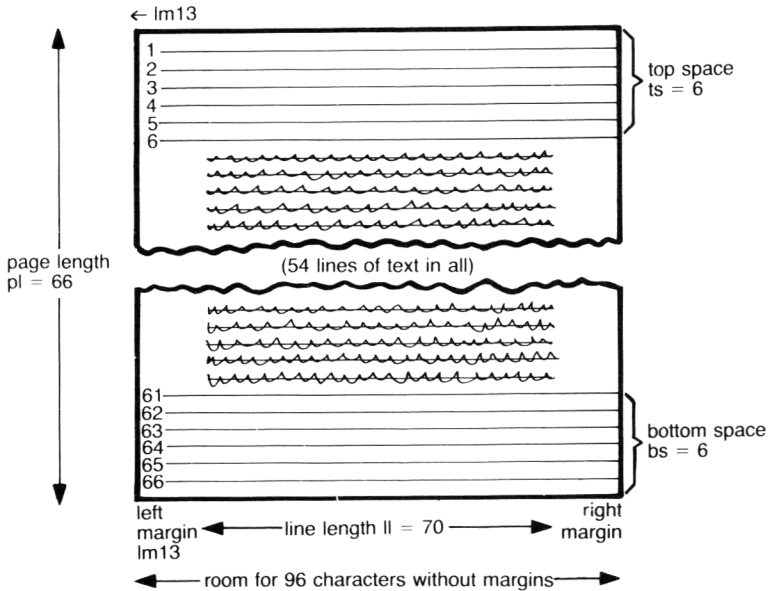
7.4 Output in pages

Up to now, your text has been produced as one long document, though you may have noticed that the **example** document supplied was paged ie chopped up into page-length chunks. The embedded command **ep** is the key that unlocks all the paging commands (see diagram opposite). It stands for enable paging, and it should come at the beginning of every document which you expect to overrun a page.

Start

ep
command

page
breaks

End
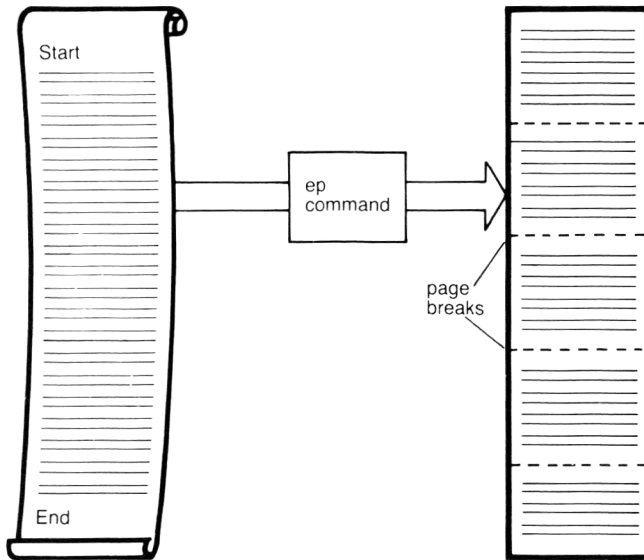
7.4.1 Paper-handling

If you feed your paper into the printer in single sheets, you will
also need to type **f1** **em** **f2** immediately afterwards. This
stands for enable message: it sends a message to the screen,
stops the printer and makes the BBC Micro beep to signal that
another sheet of paper is needed. Once the printer is ready
again, press any key (except **BREAK**) and printing will restart
on the next sheet.

Perhaps you are using tractor-fed standard fanfold paper (11″ by
9.5″)? At the usual line spacing (6 lines to the inch) you will find
that the default page length (66 lines per page) and top and
bottom spacings work neatly. Each page-sized chunk falls onto a
page with plenty of margin around the perforations. As long as
you start the printer on a set of perforations you will find it can
safely be left to print long documents unattended.

← lm13

1
2
3
4
5
6

} top space
ts = 6

(54 lines of text in all)

page length
pl = 66

61
62
63
64
65
66

} bottom space
bs = 6

left
margin ◄──── line length ll = 70 ────► right
lm13   margin

◄──── room for 96 characters without margins ────►

Note All embedded commands assume the values shown by
default **except** for left margin (lm) which should be set.

The diagram above shows you the default values for paged
mode. There is *no* need to type *any* of these in except **lm13**
unless you want to override the default settings. The single
command **ep** automatically sets up your page as illustrated
except for the left margin. You need only use these embedded
commands if you want to vary the layout or use a non-standard
character size. All embedded commands are described in full in
the *Reference Manual*.

7.4.2 Headings and footings

Any document that runs to more than a page should normally
have some kind of heading on each page, even if it is only a
page number. The embedded command **f1** **pp** **f2** automatically
prints out the value of whatever page you are on. The
embedded command **f1** **dh** **f2** defines a heading. It will print
everything you type after it (until you hit **RETURN**) at the top
of each page. For example
f1 **dh** **f2** Report, page **f1** **pp** **f2** **RETURN**
would produce
Report, page 1
Report, page 2

Report, page 3
Report, page 4
and so on, at the top of each page automatically. If you want the headings centred, you can insert **f1** ce **f2** after the **dh**. Option 7 is useful for previewing the headings and page numbers.

Wordwise allows you footings as well as headings. You can use embedded commands within both to centre or fully indent them (using **ce** or **fi**). Full details are in the *Reference Manual*.

7.4.3 Line numbers

It is often useful to show line numbers on the screen at the preview stage. The embedded command **f1** lns **f2** allows you to preview line numbers as long as you have already enabled paging. They will not be printed on paper, and do not interfere with Edit Mode. They are very useful for sorting out problems like adjusting the page length to make a document fit an exact number of pages. Option 7 is very useful for previewing headings, page numbers and page breaks.

7.5 Merging files

In section 7.2 I described a method of marking, saving and deleting a block of text. How do you put it back exactly where you want it?

Menu option 4 provides a very useful way of merging files. Its effect is quite different from option 2 which clears the existing text from memory. Option 4 *adds* the file it is loading to the text in memory, it does not replace it. Furthermore it will add text to the beginning, the middle or the end: just position the cursor where you want the file to end up.

7.6 Moving around a long document

It is important to use the **CTRL** ↑ and **CTRL** ↓ method of moving the cursor when scanning through a long document (section 4.3). This presents one screenful (23 lines) at a time (see diagram). If you just hold down the arrow keys and let it scroll one line at a time you will probably find you soon feel giddy!
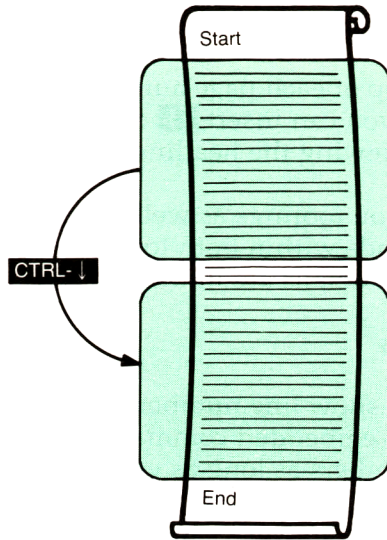
You may find another method of cursor control useful when dealing with long documents. The **f4** key makes the cursor move forward in one jump to any character you specify. To test this, take the cursor to the top of your text and insert an @ character to mark the place at which you might want merge a file. Now press **f4** followed by @. The cursor leaps into position, and if you now press option 4, the saved file will be inserted. The **Cursor to?** method allows you to move the cursor to any character including the marker, just like the **f5** and **f6** keys.

7.7 Documents over 3500 words

For really long documents it is worth keeping an eye on the word count at the top of the Edit screen. When it goes past around 3500 you should be looking for a good stopping-place to save the existing file. This allows you to choose a logical place or a page-break for the beginning of a new file, instead of being forced into it by running out of room completely. Once the **Characters free** count drops down to 256 you won't be able to add any more text anyway, and it may be impossible to get the cursor to the bottom of your text.

8. Segments

In Wordwise the BBC's memory is treated as a single unit to be filled up with text. Wordwise Plus introduces a whole new set of possibilities by segmenting the BBC's memory. There can be up to ten segments and they are numbered from 0 to 9 to correspond with the **f0** to **f9** keys that call them up.

If you aren't ready to use segments yet, you don't have to worry about them. Unless you put something into the segments, they don't take up any memory space. If you never read the section below and never choose option 9 from the Main Menu, you need not even see what's on the Segment Menu. But that would be a pity, because you will be missing some very powerful and surprisingly easy-to-use facilities.

The main idea to grasp is that each segment can store either text or a procedure. Procedures are instructions about what to do with text. These instructions are written in a special language whose rules are fully explained in the *Reference Manual*. You can see an example of it in Section 8.3.

You don't have to worry about how much memory is allocated to each segment or to the main text. Think of the divisions between segments as like movable partitions in a public hall. They cannot change the overall size of the hall, but by putting them in suitable places they can permit a number of simultaneous meetings to take place without interfering with each other. Since the partitions can also be removed altogether, the full-size hall is still available for use for large public meetings. In Wordwise Plus, the memory space given to each segment adjusts itself to what you need without you having to think about it. The diagrams below suggest some of the possible arrangements.

Whole
memory occupied
by main text
(up to 4000 words)

SEG0   SEG1

Main text
area

SEG5
text

Main
text
area

SEG1
procedures

SEG0

SEG5
text

Main
text
area

SEG6
text
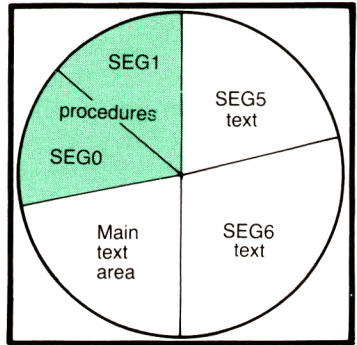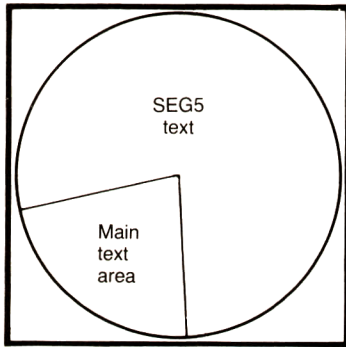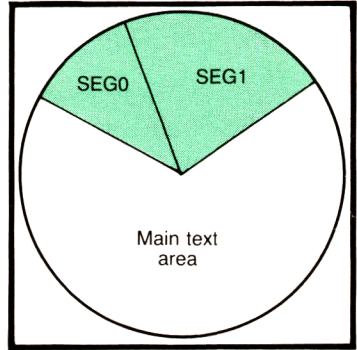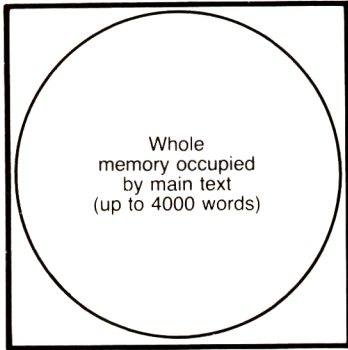
8.1 The Segment Menu

When you press option 9 from the Main Menu, here is what you see:

```
            SEGMENT MENU
      (C) Computer Concepts 1984

   1)  Save segment
   2)  Load segment
   3)  Save marked text
   4)  Load text to cursor
   5)  Select segment  (0)
   6)  Print segment
   7)  Preview segment
   8)  Delete segment
   9)  Main menu

   ESC Edit Mode

   Please enter choice
```
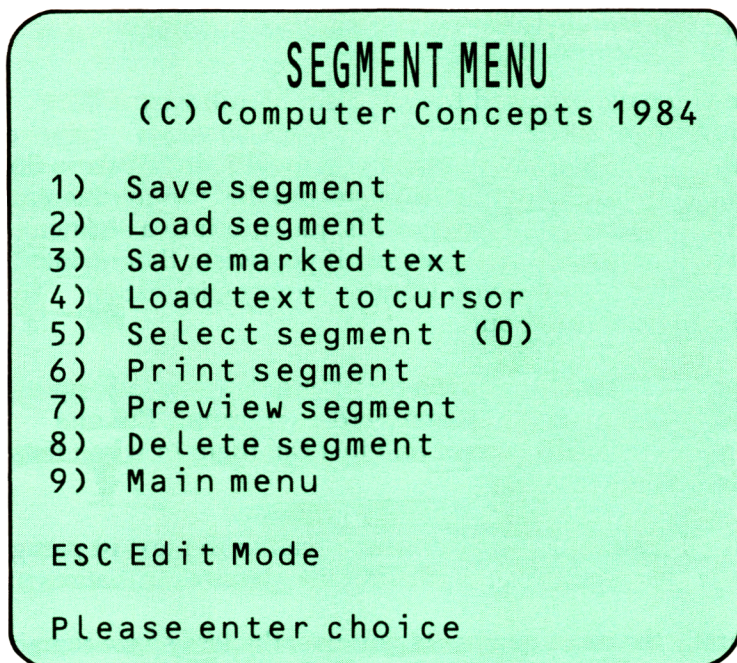
Options 1 to 4 are exactly like their Main Menu counterparts, the only difference being that they affect the segment selected, not the main text. Option 5 tells you which segment is selected: it is always segment 0 to begin with, as you can confirm by pressing ESCAPE. Although you haven't put anything into segment 0 yet, you can see that you are in segment 0 from the **SEG 0** that replaces the usual main text **START**.

Press ESCAPE again to return to the Segment Menu and press option 5. The message
Select which segment? (0-9)

prompts you to choose a number. Pressing 6 selects segment 6, as you can easily confirm by pressing **ESCAPE** again.

Options 6 and 7 are identical to their Main Menu counterparts. Option 8 gives you a quick way of deleting whichever segment is selected at the time (press Y to confirm). Option 9 simply returns you to the Main Menu.

8.2 Using segments for text

Once you have explored the Segment Menu, why not try putting some text into a segment? Suppose you were in the middle of a long document and you need to break off to do a quick memo or address label. Instead of having to save your main text and reload it afterwards, just nip into a segment, write what you need, edit and preview if you wish, then print it out. You can also save it if you want to. Your main text is undisturbed throughout.

Suppose you want to write a number of letters made up of different arrangements of standard paragraphs. Put one paragraph in each segment and just call them in when they're needed. You just type
:TYPE SEGMENT 5
from the Main Menu if you want to call in the text in paragraph 5. You can work on up to 10 different pieces of text at once.

Naturally the more segments you use, the less space remains for each one and for your main text. If you filled all 10 spaces and main text area with documents of equal length, you could only have about 350 words in each. But you'll get plenty of warning if you try to put too much into a segment, so in practice you don't need to keep track.

8.3 Using segments for procedures

Suppose you have completed a long document and you want to print several top copies onto fanfold paper without having to stand over the printer to restart each copy. If you type a simple four-line procedure, Wordwise Plus can take care of the whole job for you automatically. If you prefer, you can store the procedure on a disc, and then you won't even have to type the four lines.

Even if you don't understand how this works, you may like to try it out. You can use a short document (even a single sentence) just for practice. This will give you a feeling for how procedures operate. Suppose your document is in the main text area. If you want each copy to begin a new page, make sure that paging is enabled (using **ep**) and that the text ends with a final embedded command **f1** bp **f2** (begin page). Now enter the Segment Menu and press **ESCAPE** to put this procedure into segment 0. If you want six copies, just type

    SELECT TEXT
    DOTHIS
    PRINT TEXT
    TIMES 6

as if it were a poem (ie press **RETURN** after each line). Return to either Menu and press
                      SHIFT−f0
and your six copies will emerge automatically.

The last line of your procedure can be adjusted to suit the number of copies you want: **TIMES 1** will just make one copy, **TIMES 250** will keep your printer busy for days! Again, if you had put the procedure into segment 3, instead of segment 0, you would call it up by pressing **SHIFT−f3**.

8.4 More about procedures

Any segment can store either text or procedures. If you are using a mixture of text and procedure segments, it is good practice to store the procedures in the lower-numbered segments and to put text in the higher-numbered ones. This should help to remind you what you put where.

The example above was chosen because it is so quick to type in. More powerful examples are supplied on the cassette. Even if you never intend to write any procedures of your own, trying them out will let you see how easily Wordwise Plus can be extended to include any features that you want.

This short *Introduction* cannot do more than touch on the importance of procedures. Because Wordwise Plus can obey *any* sequence of instructions written in this language, there is no limit to the operations that a procedure can control. For

example, a procedure can perform automatic indexing on the text of a book.

SECTION 9

9. Advice to disc users

The manual supplied with your disc system should give full information about its operation. In case you are new to disc operations, this section lists some of the most useful disc commands for Wordwise users for convenience.

Wordwise gives you access to all ★ commands, allowing all the normal abbreviations. You can use lower-case letters in place of the usual capitals if you prefer. You can even use ★ commands *within* your text using the embedded command ★. This can be useful if you want to control other ROMs eg using *Printmaster* you can include fancy styles of lettering and pictures in your text.

9.1 Using "safe" ★commands

The commands in this section are "safe" in the sense that using them won't affect the text in memory at the time.

If you have a single disc drive, it is known to the system as drive 0. This is the default drive ie the one you are controlling unless you say otherwise. Owners of twin or double-sided drives will need to control drive 1 as well, or perhaps drives 1, 2 and 3. To change to another drive from within Wordwise, type
<p style="text-align:center">★drive 1</p>
while in Menu Mode. Saving and loading will then be carried out on drive 1 instead of drive 0. If you just want to know what is on another drive *without* changing over, type
<p style="text-align:center">★cat 1</p>
It is up to you to keep track of which drive you are controlling. If you send an impossible command (like trying to catalogue a disc when there isn't one in the drive) you can escape by hitting **ESCAPE**; your text will still be in memory.

If you get a message saying
<p style="text-align:center">Disc full</p>
when you are trying to save something, you will have to use another disc or else delete something on the present disc to make room for your text. You can do this without danger to your text using ★DELETE. Suppose the file you want to delete is called **rubbish**. Type

★delete rubbish

from the Menu. If you then catalogue the disc you should see that **rubbish** has gone. As long as your text in memory is not longer than **rubbish** was, it should now be saved without difficulty.

9.2 Other useful ★commands

Warning: the commands mentioned in this section are *not* "safe". Do not attempt to use any of them until you have first saved the text in memory.

9.2.1 Copying one or more files

If you want to copy a file called **lethead** from one disc to another, the process is different according to whether you have just one drive or more than one.

It's easier with two or more drives: type
★copy 0 1 lethead
to copy the file **lethead** on the disc in drive 0 to the disc in drive 1. If you want to copy *all* the files on drive 0 without having to name each one individually, type
★copy 0 1 ★.★

If you only have one drive, you still use the **copy** command; but since you have to copy from drive 0 to drive 0, it is important not to mix the discs up or you may end up copying a blank disc onto your master! So, taking great care, type
★copy 0 0 lethead
or
★copy 0 0 ★.★
as appropriate, and follow the screen prompts to insert the source disc (your master) and destination disc (the blank one) alternately.

9.2.2 Compacting the disc

If a disc has had files deleted from it in the past, it may have lots of small spaces scattered around the disc. To make this space available to store a long document you will have to tidy up the disc using ★COMPACT. Like ★CAT, this will operate on the default drive unless you include a drive number in the command. Type

<center>★compact</center>

or

<center>★compact 1</center>

as appropriate from the menu.

It's a good idea to compact your discs routinely after deleting some files. This keeps the spaces tidied up and reduces the risk of being caught with text in memory and too little space to save it in.

9.3 "Can't extend"

The **Can't extend** message may appear if there isn't enough space in the place on the disc where saving is attempted. Wordwise users may get this message when trying to re-save text to an existing filename, even on a comparatively empty disc. It just means that the system was trying to put the revised text back into the same place as before and it no longer fits. The solution is simple. Delete the old file and *then* press option 1 (Save) again. This makes the system look for a new space anyway. This problem should arise far less frequently with Wordwise Plus than with Wordwise for technical reasons.

9.4 Safety precautions

No matter how careful you are, nor how carefully designed the system's safety-nets (and Wordwise Plus has plenty), sooner or later you will do something silly and wipe out a vital document. Most people do. Unless you take sensible routine precautions against losing important text, you will find out the hard way – by laboriously having to re-key a document that had already cost you hours of effort. Even if you never make mistakes (!), disc drives occasionally break down, buildings get burgled and children, animals or power cuts can wreak havoc.

Save your text often, and keep at least one back-up copy of any important files on a *separate* disc. If your text is really important, be sure to keep the back-up copy separate from the original, otherwise the same fire/theft/accident will affect both!

Occasionally discs develop faults, and people sometimes delete a file by mistake! One day this may happen to you with a file you haven't made a back-up copy of. Murphy's Law suggests that it will be something particularly vital that you haven't even

<center>Page 49</center>

printed yet. However, it is possible to retrieve the disaster, because deleting a file doesn't actually destroy its contents: it just tells the system to forget where it's been stored. Normally the text can be recovered from the disc more-or-less intact, for example using a product like *Disc Doctor*. The main thing is to stay calm and obey one simple rule: *do not attempt to save anything onto that disc*. Otherwise you will make rescue impossible. Put the disc aside and seek help from someone who has experience of this problem.

9.5 Disc housekeeping

Unless you get into some good habits early on, you will quickly find you have filled up an astonishing number of discs and have none free to save the text you want. You will have discovered the need for disc housekeeping.

For any disc used for long-term storage, it is handy to keep a printed list of its contents. The quickest way of printing a catalogue of a disc's contents from within Wordwise Plus is simply to enter **f1** ★**cat** **f2** as text and press option 6. (In Wordwise use **f1** OS"CAT" **f2**). This printed catalogue can be kept with the disc itself. When you delete or add files, remember to update it (either by hand or by repeating the print-out).

If a document you are working on goes through lots of different versions, be sure to delete all previous versions once it is finalised. It can take a surprisingly long time to sort out which version is which at a later date. I usually write the filename and date onto the printed copy of each document; in fact I usually build this information into the top of each document, deleting it only just before the final print-out of the finished text.

Because saving is so quick and easy with Wordwise Plus, it is tempting to save everything "just in case". From time to time it is important to weed out the files you no longer need. If you do this regularly, it won't take long as you'll still remember what each one is from the filename. If you leave it, you'll end up having to reload each file to decide if you can delete it or not. After a session of deleting is the ideal moment to compact the disc.

SECTION 10

10. Wordwise and Wordwise Plus

Wordwise Plus is a more powerful system than Wordwise. By loading different procedures, users can obtain almost unlimited extra features. Wordwise Plus has also added a great many minor improvements to Wordwise and speeded up its loading and saving dramatically. Nevertheless, great care has been taken to design Wordwise Plus so that it is fully compatible with Wordwise. Experienced Wordwise users will not have to change their habits nor amend their Wordwise text files in any way when moving up to the new system; even the default values of the embedded commands have been kept identical.

Many of the extra features of Wordwise Plus have been mentioned in the appropriate places in this Introduction; they are documented fully in the Reference Manual. The summary below simply lists some of the most important:

- disc loading and saving at least ten times faster

- safety-nets prevent you from accidentally overwriting an existing file or loading new text without first saving text in memory

- segments permit up to 10 additional documents to be processed simultaneously

- procedures within segments allow powerful extra facilities to be added by users whether they can program or not

- special embedded commands give easier access to printer effects like underlining and double-strike

- more detail shown in preview, including printer effects like underlining and double-strike, and exact position of page-breaks

- many additional embedded commands, eg pause for daisy-wheel change, fully indent, for commands within text.

SECTION 11. GLOSSARY

40-column   Screen mode showing 40 characters on each line.

80-column   Screen mode showing 80 characters on each line.

40-track   Each complete circular groove on a disc is called a track. A 40-track disc drive can only read 40-track discs.

80-track   Other things being equal, 80-track discs can hold around twice as many words as 40-track discs.

Autoboot   Discs can be made to load and run a special program called !BOOT automatically. The process is called booting, or autobooting, the disc.

Autorepeat   The repeat action of a key when it is held down for more than an instant.

Back-up   A spare copy of a file, taken as a precaution against loss or damage. Also the process of copying is called backing up.

!BOOT   Name of the special file that makes autobooting a disc possible.

Case change   Exchanging upper-case letters for lower-case and *vice versa*.

Catalogue   Process of cataloguing a disc or tape is one of listing its contents. Catalogue also means the place on the disc where this information is stored.

Character set   The collection of all the symbols that can be displayed or printed.

Cursor	Flashing line that marks the place on the screen
Daisy-wheel	Daisy-wheel printers produce electric typewriter quality, but cheaper ones can be very slow. The daisy-wheel is a removable wheel containing the character set.
Default	The value or setting that is assumed in the absence of instructions.
Disable	To put out of action; opposite of enable.
Disc	Short for floppy disc: a flimsy circular sheet of magnetic material, capable of storing large amounts of text (usually in the range 16,000 words to 64,000 words). A **disc drive** saves and retrieves the text on the disc at high speed.
Dot-matrix	Some printers form characters from a matrix of tiny dots. Dot-matrix printers are usually fast and reliable compared with daisy-wheel printers of comparable price, but the finished appearance of the text is not as good.
Edit	To correct, improve or rearrange text.
Embedded commands	Wordwise commands placed between **f1** and **f2** characters that control format and printer effects.
Enable	To switch on an effect or command.
Fanfold	Computer paper is usually sold folded into a long zig-zag consisting of thousands of sheets joined end-to-end by perforations, with columns of tractor-holes at each margin. Fanfold paper can be bought with detachable tractor-holes.
File	A document or program stored on disc or

cassette. Wordwise files can be any size from a few words up to nearly 4000 words.

Filename
The name by which a file is known to the system. The normal BBC disc system can only cope with up to 7 characters in a filename. In cassette mode, filenames of up to 13 characters are allowed.

Footing
A standard piece of text, perhaps a page number, printed out at the foot of each page.

Format
Verb or noun with two sets of meanings:
1. The lay-out of text on a page, including margins, line spacing and line length. Unformatted text can be arranged in a great variety of ways.
2. To format a disc is to prepare it to receive data or text. With the BBC Micro, discs may have 40- or 80-track formats according to the disc drive in use.

Global
Operation like search-and-replace carried out on the whole text.

Heading
A standard piece of text, perhaps a page number, printed out at the top of each page.

Insert
To add words to existing text. In Wordwise, Insert Mode is the norm. Contrast Overwrite.

Justify
To justify text is to impose a straight right margin by adding extra spaces to short lines.

Justification
is the name of the process.

Keystrip
The strip that can be placed alongside the red function keys on the BBC's keyboard to remind users what their effect will be.

Linefeed	The signal to the printer to move the paper up by a line of single-spacing.
Load	To load text is to transfer a copy of what is on the disc or cassette into the computer's memory.
Lower-case	Small letters (as opposed to capital letters).
Marker	Wordwise has two square blobs called markers that identify a section of text, usually so that it can be deleted, moved or copied.
Menu	A display to remind the user what options are available. Wordwise is controlled from a Main Menu; Wordwise Plus also has a Segment Menu.
oc code	Short for output control code. The numbers after the oc control various printer effects.
Overwrite	1. To replace existing text with new words. In Wordwise, Overwrite Mode is the alternative to Insert Mode. 2. When saving files, if a new version is saved to an old filename it will overwrite (replace) it on the disc or cassette.
Page-break	The gap between pages that prevents lines falling on the perforations in fanfold paper. In Wordwise Plus, a dotted line allows users to preview the exact position of the page-break.
Preview	Before printing a document it is often useful to check its appearance. Wordwise's option 7 shows the text approximately as it will appear on paper.
Procedure	The name of a program stored within a Wordwise Plus segment. Not the same as a Procedure within BBC BASIC.

Prompt	A message reminding the user what to do next.
Proportional spacing	A style of typeface in which a wide letter like an 'm' occupies more space than a narrow letter like an 'i'.
Red (function) keys	The BBC Micro has a row of red keys at the top of its keyboard. These are sometimes called function keys or user-defined keys because their effects can be defined by the user. Many Wordwise commands depend on these keys, but they are also available for the user to store useful words, phrases or embedded commands.
ROM	Stands for Read Only Memory. Wordwise and Wordwise Plus are both programmed onto ROM chips for instant loading. This leaves all of the BBC Micro's memory available for text.
Safety-net	A check that the user really means an instruction which might lead to accidental loss of text.
Save	To save text is to transfer a copy of what is in the computer's memory to disc or cassette.
Screen mode	The BBC Micro has eight screen modes with various character sizes and memory requirements. Wordwise uses a 40-column screen mode for ease of editing and normally an 80-column mode for accuracy of preview.
Scroll	The action of the text in moving upward while the cursor moves downward and *vice versa*.
Search-and-replace	An editing facility that allows the user to search for any string of letters or words

	and replace some or all of them by another string.
Segment	An area of memory that can be used either for text or instructions (procedure) in Wordwise Plus.
Selective	Operation like search-and-replace carried out on parts of the text.
Sheet feed	The use of single sheets of paper as opposed to tractor feed of fanfold paper.
Spool	In Wordwise, to spool text is to save it in its formatted state.
String	A sequence of letters, symbols or spaces.
Tab stops	In Wordwise, tab stops are normally set at 10, 20, 30 ... spaces accross the page. If a tab character is inserted into text, (it shows as an arrow on screen) what follows will be output beyond the next tab position. Tab stops can be redefined using the embedded command **dt**.
Toggle	A toggle switch is one that you press once for on and again for off. Wordwise commands like Insert/Overwrite are said to toggle between the two states.
Tractor feed	System for pulling fanfold paper through a printer by means of tractor holes at each side.
Underline	Continuous line underneath characters. Sometimes called underscore to distinguish from underlining that does not carry over spaces.
Upper-case	Capital letters; opposite of lower-case.

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