

Some IBM equipment for the translator's office

Horace Mitchell

Office Systems Manager, IBM (UK) Limited, Basingstoke, UK

IBM equipment for translators ranges from workstation-based word processing systems through other office systems to special tools such as DTAF (Document Translation Assistance Facility) for those with access to a big IBM host computer. The kind of translation assistance offered can therefore be suited to different levels and purposes of translation.

(A) WORKSTATION-BASED SYSTEMS

1. Basic word processing

Even basic word processing offers substantial benefits to the translator, addressing:

- initial typing transcription of the translator's draft
- swifter revision and correction
- elimination of 'new errors' at the update typing stage
- swifter second and subsequent proofreading
- higher quality of the finished product
- ease of incorporating layout changes at any stage.

All IBM's Displaywriter workstations offer multilingual facilities, with an entry price of around £2,000 per workstation, comprising processor, keyboard, display screen and diskette drive.

2. Multilingual facilities

A Displaywriter delivered in the UK will normally be 'set' to a standard UK English, 96-character keyboard layout - the

familiar 'QWERTY'. By using a 'KEYBOARD CHANGE' key and typing a two-digit number, the typist can change this 'home' keyboard to any of around 100 alternatives which are held in the system's software (a selection of up to five are available concurrently - the remainder by a simple instruction to the software diskette). For the translator, some thirty or so of the current range of keyboards are relevant, covering a wide spread of languages. The remainder are special-purpose keyboards for data processing, for compatibility with other systems, or for particular needs in individual countries.

When you select a new keyboard, each key on the physical keyboard of the system changes its 'logical' role to match the particular new keyboard you have invoked. In many cases the typist can select the keyboard which will be easiest to use. For example, to type a piece of text in French, a typist accustomed to the French 'AZERTY' layout could select keyboard 31 (FRANCE/BELGIUM AZERTY), while a typist more at home with a standard UK layout would select keyboard 33 (FRANCE QUERTY). 'Dead keys' are provided to facilitate the marriage of accents with the accented character, although many accented characters are supplied as a single key choice within the 96 characters.

During typing in any selected keyboard, the screen will display each character typed in its correct form, complete with accents, as it will be printed. When there are switches from one language to another within the same document, each language will be displayed correctly.

3. Spelling verification

The basic spelling verification facility uses a dictionary of business English (or language of choice). A 'SPELL' key on the keyboard causes the Displaywriter to 'test' the document against this dictionary and highlight on the display any words which are not encountered in the dictionary. This provides a very swift - and surprisingly comprehensive - 'first pass' proofreading facility, reducing the need for the typist or translator to find the common typographic and spelling errors, and highlighting for attention likely errors in transcription.

If a word is highlighted because it is not in the system's dictionary, correction or acceptance at the keyboard causes it to be temporarily 'remembered' by the Displaywriter. The user can then choose to add the list of words so compiled into a 'supplemental' dictionary for future use (see Appendix). The same 'memory' also adds the new word to the existing dictionary while testing the remainder of the document, so that a special or unusual word encountered several times will be correctly tested by the system on

second and subsequent encounters within the text.

A supplemental dictionary may contain up to 4,500 characters, and the user can build any number of these supplements. For example, a special supplement could be constructed for the regular contract work done for a client in a specialist industry; this would contain technical words unfamiliar to both the typist and the translator.

4. Spelling check in multiple languages

A document will often contain passages in different languages. Upon each keyboard change, the typist can instruct the machine which language dictionary is to be used for the next portion of text. A special 'Languagepack' dictionary program is available, which contains eleven different language dictionaries: US English, UK English, German, Dutch, National French, Canadian French, Italian, Spanish, Swedish, Danish and Norwegian. Any selection of up to four of these can be resident on the system diskette at any time. On invoking the spelling function the operator selects which dictionary is to be used. The system then scans only those portions of the document which are typed in that language, highlights any unmatched words, and returns to the operator for selection of the next language.

5. Automatic or prompted hyphenation

If final layout requires that the text be hyphenated, the spelling dictionary can either carry out this task automatically, using predetermined hyphenation points, or can prompt the operator for acceptance or change of proposed hyphenations.

6. Spelling assistance

In US and UK English, spelling assistance is available. If, for example, the system highlights the word PARRALLEL and the typist cannot recall the correct spelling, the 'SPELLAID' key will cause the dictionary to display a selection of words which closely match the word it has highlighted. The typist can select one of these to replace the highlighted word.

7. Displaywriter product range

For simplicity, I have described some of the Displaywriter facilities of special interest to the translator, without going into detail on its total range of capabilities. There are many hardware and software options available and it is important to review your particular needs with your local IBM office or with another Displaywriter supplier. However, as a guide-

line, the great majority of Displaywriters bought use the 'Model A04' workstation, priced at around £4,000, together with a 60-characters-per-second printer with automatic sheet-feed paper handling, priced at around £3,000. You would need one printer for every two or three workstations, dependent on the nature of the workload. For two or more systems quantity discounts apply to these prices.

For each workstation, the 'Textpack 4' software would normally be recommended (£483), together with 'Language-pack' (£311).

Some more advanced functions are available in 'Textpack 6' (additional £424) and 'Languagepack 2' (additional £139); these require an additional memory (£513) in the hardware. In a multiple-workstation office one advanced workstation could be used alongside a number of lower-cost systems. All prices given here are for guidance only and should be checked with IBM against a particular planned configuration.

Displaywriter is of course, quite apart from the language facilities described, an outstanding typing, word processing, data processing and communications system.

(B) OTHER IBM OFFICE SYSTEMS

IBM offers a very wide range of office systems products, generally with language and spelling capabilities comparable to those of Displaywriter.

However, selection of individual products from within this range is related to the total range of tasks to be done by the user, and to the existing systems environment in which they are to be installed - for example, if they are to be linked to existing computer systems, and, if so, to what range of makes and models.

If you feel that your specific needs call for more than a straightforward 'word processing' approach, your local IBM office will be pleased to discuss your requirements and to recommend whether Displaywriter or others from our range would be appropriate.

The translation activity is frequently part of a broader publishing process. In this case there are significant advantages to an early capture of the text into machine-readable form, to avoid the costly and error-prone process of re-keying into different systems. Displaywriter and our other office systems can be used as a productive and convenient 'front end' to major computer systems, such as the DTAF product described below. These computer systems can in turn be used to format the final text in many ways, right through to final formatting in conventional printers' typestyles using the IBM 4250 printing system or other output devices.

(C) A HOST-COMPUTER SYSTEM

For the translator in a large-company environment, or with access to an IBM host computer, a wide range of text creation, editing, formatting and publishing tools is available. Many of these can be accessed by a Displaywriter, as well as by a conventional computer terminal.

One such tool, specifically developed to support the translator, is DTAF - the Document Translation Assistance Facility. For the technically literate, this runs under VM/370 and OS/VS2. In summary, DTAF offers:

1. multiple 'windows' (up to three) on the display
2. access to multiple online dictionaries
3. facilities for loading, creation and editing of dictionaries
4. facilities for creating glossaries related to the working text(s).

To give but two examples, a translator might use DTAF with three windows displaying

- the 'source' text in its original language
- a chosen dictionary
- the 'target' language text being created

or with three windows displaying

- the 'draft' of the translated text
- dictionaries for both the source language and the target language.

AUTHOR

Horace Mitchell, Office Systems Manager, IBM (UK) Limited,
Alencon Link, Basingstoke, UK.

APPENDIX

Supplemental dictionaries

As an example, this is the list of words highlighted by the UK English spelling dictionary when checking this document you have been reading.

A single key request has caused Displaywriter to create this list as a separate document; I can add it to a supplement in its entirety, or edit out words I am unlikely to use again.

AO	as in 'Model AO4'
AZERTY	
AZERTY'	
Canadian	
Danish	
Displaywriter	The main dictionary automatically adds
Displaywriters	in prefixes and suffixes, but a
	supplemental dictionary needs each word.
DTAF	
Dutch	
IBM's	
Italian	
Languagepack'	This looks like a 'glitch'; the system
	should not treat the apostrophe as part
	of the word!
Norwegian	
OS	
PARRALLEL	
QUERTY	
QWERTY'	
Spanish	
SPELLAID'	
Swedish	
Textpack	
VM	
VS	