Computing in Japanese
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Personal computers have transformed the way we work, or at least the way we work with Roman letters. The complexity of the Japanese character system has blunted the impact of computers on daily life in Japan. PCs are still surprisingly rare in Japan, given that Japanese rice makers and washing machines now include integrated circuits. The situation has been especially difficult for non-natives who use Japanese. Although Japanese PC’s, such as the NEC 98 series, and dedicated word-processors have been available for years, these gadgets have not been compatible with American software or, in many cases, with other Japanese machines. This situation has improved remarkably in the past eighteen months and there are now a number of ways to write in Japanese on standard American computers. In this review I will attempt a broad overview of the options for Japanese computing, focusing on Japanese operating systems. In later issues I will return to each option in greater detail.

Japanese character input methods can be grouped into three broad categories: stand-alone character generators, stand-alone word processors, and operating systems. Dependent character generators or non-system PEPs (front end processors) are applications that generate kanji to be pasted into other applications. Front end processor is the technical term for utilities which convert kana or romaji into characters. The term “front end” reflects that the PEP sits between the user and other applications, such as word processors, creating the kanji to be manipulated in the application. Dependent character generators, or non-system PEPs (front end processors), are applications that work under standard American operating systems. The best known and most widely used non-system PEP is Sweet JAM for the Macintosh. Sweet JAM runs under the standard English operating system, and the newest release supports System 7.0. It includes some 6,000 kanji and has a 20,000 word user-customizable dictionary. Sweet JAM supports four different kanji fonts, including the PostScript fonts Mincho and Gothic. Characters can be pasted into a wide variety of applications including MS Word, WordPerfect, MacWrite, Aldus PageMaker, MS Excel and MacPaint. SweetJAM is an excellent means of entering small amounts of Japanese text into these applications, but it becomes difficult to use on longer passages of text. Also remember that because the applications have not been modified to support Japanese (a process known as localization in computerese), operations such as search and replace may not work on kanji. SweetJAM is from A&A Corp. of Tokyo and retails for $349.00. It is available from several retailers including Cheng & Tsui in Boston and from Qualitas Trading in Berkeley. Qualitas offers a 20% academic discount.

A roughly parallel package for DOS machines is Bikan JALM from Knox Computer. JALM, which stands for Japanese Library Manager for Arts and Letters) is an FEP which runs under Windows. JALM generates kanji and kana from romaji input, and these can be pasted into most Windows and many DOS applications. Unfortunately, the characters must be pasted as graphics, making it very difficult to edit Japanese text once you have pasted it into your document. Graphics also swell the size of your text files and make scrolling and editing slower. JALM is extremely good at what it does, which is generate beautiful, scalable Japanese characters. The interface and documentation are clear and simple. If you work on graphic applications such as brochures or newsletters, JALM is ideal for generating small pieces of Japanese text. Unfortunately, it cannot be used as a word-processor. Bikan JALM retails for $695.00 and is available both direct from Knox and from Qualitas and Cheng & Tsui.

Stand-alone word processors are a more extensive means of entering kanji. The most popular stand-alone system in the US is EW+ by ITL of New York. This word processor runs on most 80286 or higher DOS machines and supports the most commonly required text management features including footnotes and indexing. EW+, however, runs independently from all other PC software: you cannot paste EW+ kanji into another document. Nor is EW+ compatible with multitasking environments such as Desqview or MS Windows. To input kanji in EW+ you must close all other applications and documents. (I have used only a demo version of EW+, but ITL reports that the package is not compatible with multitasking environments). Finally EW+ has a rather unintuitive interface. EW+ has its advocates: it is extremely fast and generally reliable, making it a favorite of English to Japanese translators. EW+ retails for $695.00 with a $45.00 discount.

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surcharge for English documentation. It is available direct from ITL or from Qualitas or Cheng & Tsu. Cheng & Tsu also carry two PC compatible stand alone packages that I have not examined: Yukara for DOS and Twinbridge, which runs under Windows. These application apparently allow you to paste kanji text into other applications, albeit as graphics.

Any of these word processors is probably adequate for letter writing. Their universal limitation is that they don’t allow for true bilingual work. None of these stand-alone word processors is adequate for general academic writing, so you will, of necessity have two sets of files, one for Japanese and one for English. A truly bilingual system allows the user to switch from English to Japanese at a keystroke. The advantages here are immense. When taking notes, you can switch from paraphrase to translation without changing applications: your notes on one monograph can be in one file. You can also enter personal or place names with problematic readings in the original, and sort the authoritative reading at leisure. Truly bilingual word processing at present requires a Japanese operating system. With a Japanese operating system, anything, including files or directory/folder names can be in Japanese, and kanji can be used in any localized application. The two Japanese operating systems for American machines are KanjiTalk for the Apple Macintosh and DOS-V 5.0 for IBM PS/55 and some clones.

KanjiTalk is the older and more established system. First introduced in 1986, it is now up to release 6.0.7.1 A Japanese compatible System 7.1 is scheduled for release next year. To the end user, KanjiTalk appears virtually identical to the English operating system save two features. First, the menus are in Japanese. Second, the system is designed to support a variety of FEPs, including TurboJIP, MacVJE, EGBridge and 2.0変換. All of these FEPs present an array of kanji choices corresponding to given kana or romaji input. All FEP’s present kanji in an order which reflects past usage. My FEP, for example, now presents 著 as the first choice for はん, corresponding to my previous choices. Most FEP’s also allow the creation of custom user dictionaries: my FEP now generates 造为 for そうろう.

KanjiTalk can reside happily on your hard drive along with the English operating system. Various shareware utilities, such as System Switcher or Blessor, allow you to boot up in either system. KanjiTalk will run, albeit slowly on 68000 processors, but a 68030 is far preferable. It needs a minimum of 2 MB RAM and 4 MB in order to run most applications smoothly. I have found 5 MB adequate, but not spacious. System 7.1 will probably need still more memory.

In the halcyon days before 1991 any software distributor could sell KanjiTalk and its was widely available for about $100.00. With release 6.0.7, however, Apple decided to restrict sales to authorized Apple dealers and to raise the price to roughly $225.00. The official double-talk was that this would provide for better support. The real story, apparently, is that KanjiTalk was available in the US for a fraction of the price in Japan. In order to prevent Japanese users from buying KanjiTalk in the US, Apple deemed it necessary to raise the US price. In order to make full use of KanjiTalk it is necessary to buy localized software: applications which have been modified to manipulate kanji. The list of localized applications is extensive. Word processors include MacWrite II, SoloWriter (a Japanese version of Nisus), WinSoft and EGWord. EGWord was developed by ERGSOFT of Tokyo largely for the Japanese market and its capabilities reflect its origins: it lacks basic features such as footnotes. For these reasons it is a poor choice for an academic word processor. Its major virtue is its widespread popularity in Japan.

MacWrite II and Solo Writer are more satisfactory choices for American users. MacWrite II is virtually identical to the American version so I will give it short shrift here. It is, suffice it to say, an easy to use, competent general purpose word processor. Solo Writer/Nisus, although largely overlooked in the US, has received rave reviews in Australia and the UK. It is quite fast, has extremely sophisticated search and replace capabilities, and a powerful, if complex, macro language. The search and replace wildcards are included in pull down menus, so it is easy to do, for example, search for every word in italics followed by one space and then a word in kanji. Its weaknesses include the awkward and complicated handling of columns and outlines. I also found the spell checker to give curious suggested corrections. I have been revising a manuscript under Solo Writer and have found it more than adequate for academic writing. Solo Writer can also handle basic desk-top-publishing, such as this newsletter. Lastly, the long awaited Japanese version of WordPerfect has been announced, to be released in November 1992.

One of the pleasant surprises of KanjiTalk is that much standard American, non-localized software works quite well. Japanese Macintosh magazines generally group applications into four categories: 1) fully localized; 2) not localized, but can display kanji with some mojibake (see above); 3) non-localized, works in English, but cannot display kanji; 4) either will not load or crashes the system. Most standard, American release applications fall into the second or third category: MS Excel 3.0, for example, displays kanji save for some cursor irregularity, as do many graphic applications. MS Word 4.0 is a curious case: it will display kanji with mojibake in PostScript but not bit-mapped fonts.

KanjiTalk will be rendered obsolete sometime next year with the release of System 7.1 and “World Script.” With System 7.1 the independent operating systems for Japanese and Korean will be incorporated as system extensions. System 7.1 will thus be
passively omni-lingual, displaying Japanese, Chinese, Korean and right to left languages such as Hebrew simultaneously. In order to input different languages you will have to switch system extensions, but this will be possible without rebooting the computer. Apple will release Japanese and Korean system extensions with System 7.1. A Chinese input system is on the back burner, although World Script will be able to display text generated under MacChinese, the Chinese OS.

World Script should make Japanese compatible software more usable and widely available. Currently, when developers localize their software for Japan, they rewrite the interface in Japanese, rewrite the manuals in Japanese, and market the product largely in Japan at Japanese prices. All this makes the product less appealing to most American users. With World Script, developers need only make their software “World Script aware,” in essence, double-byte character compatible. Menus and manuals will remain in English and software should ultimately be available through standard retailers. World Script should also make it easier to acquire high-end applications. A school which might balk at $1500 for Japanese database might site-license the application if it also handled Russian, Hebrew, Arabic and Chinese. Finally, System 7.1 should be the ideal system for any one doing truly multilingual (Sino-Japanese or Japanese-Korean) work.

Apple and WordPerfect have been showing a World Script aware release of WordPerfect at conventions throughout this year and System 7.1 has been in circulation in various beta for months. The system is currently being released to developers in a final “golden master” version. Apple is keeping mum about a public roll-out. It is reportedly concerned about laymen buying a Mac for its user friendly reputation and getting stuck in Cyrillic. We should, however, see System 7.1 with double-byte system extensions by next spring.

The DOS counterpart to KanjiTalk is IBM DOS/V, which was originally released in 1991. Like KanjiTalk, DOS/V supports a variety of FEP's and can reside on the same hard drive as standard DOS. Typing SWITCH at the C> prompt executes a warm reboot and loads the double-byte characters set necessary for Japanese. The command syntax of DOS/V 5.01 is almost identical to DOS 5: you enter commands in Roman letters but the computer will respond in Japanese. The major word processor available for DOS/V is WordPerfect. Ichitarō, a popular NEC 98 based word processor is also available, but, like EGWord, it is designed largely for the Japanese market.

Much of the furor over DOS/V centers on whether it will run on PC clones. Although DOS/V is an IBM product and is officially supported only on IBM PS/55 machines, many users have had good results with near clones. The problem with DOS/V is less that it will not run on many machines than that most software manufacturers will not commit themselves to supporting non-IBM users. IBM has an obvious vested interest in discouraging clones, whereas companies like Lotus are simply unwilling to confront the potential support costs resulting from the dozen or so BIOS configurations and hundreds of video cards available. WordPerfect has its toe in the water. In early September it described WordPerfect as an IBM PS/55 based product for the Japanese market. It has recently begun to describe it as a DOS/V word processor.

Because DOS/V runs on many clones but is not yet supported by most manufacturers, a split has developed between computer professionals and laymen. Many computer retailers in Japan see DOS/V as the death knell for the NEC 98 standard, which is enormously overpriced compared to clones. The Japanese computer retailer STEP, for example, launched a major DOS/V sales campaign earlier this year. As the chairman of STEP, Terada Yukio, observed, a fast 486 NEC 98 series machine runs under DOS/V clone packages. To STEP's chagrin, however, they continued to sell 30 NEC's for every DOS/V clone. These unrealized expectation are understandable. Since Terada had gotten DOS/V to run on his clones, he felt he was offering his customers a great value. To the end-user reading the box describing DOS/V as IBM PS/55 software, however, the clones seemed like the ultimate in caveat emptor.

Much of the confusion over DOS/V may resolve itself when Microsoft releases its own version, MS DOS/V. Unlike IBM DOS/V, MS DOS/V will have been tested on a variety of near clones and should run smoothly on a wide variety of machines. (Microsoft, unlike IBM, sells only software, and has no vested interest in protecting a hardware standard. Bill Gates, of course, is something of a megalomaniac, but that is another issue.) MS DOS/V should be released sometime late this year. In the interim, if you want to be the first on your block to run DOS/V, the following may be helpful. DOS/V is said to run out of the box on AMI BIOS machines. With the Phoenix BIOS you will probably have to rewrite your HIMEM.SYS file. Other BIOS situations are unclear: check BBS like Compuserve for software patches if you have problems. The DOS/V keyboard driver can be finicky: some users have had to buy new IBM keyboards. Some video boards cause problems. The Trident video card has been known to run in VGA mode but not SVGA. Finally, it is possible to get DOS/V running but still have problems with individual applications: Lotus 1-2-3 seems particularly problematic.

Perhaps more interesting than DOS/V itself is the release of Microsoft 日本語 Windows 3.0. Japanese Windows runs under DOS/V and is extremely similar to Windows 3.0, save, of course, for the Japanese menus. Like standard Windows 3.0, 日本語
Windows 3.0 remains slow and somewhat buggy. In order to run Japanese Windows without gnashing your teeth, you will probably want at least a 486 33 MHz system and at least 8 MB RAM. Again, as in standard Windows, the release of Windows 3.1 should increase speed and reduce the number of unrecoverable crashes. The importance of Japanese Windows is that it is platform independent. Although there are separate versions of Japanese Windows for NEC 98 machines and DOS/V machines, there is only one series of Windows applications: MS Word for Japanese Windows is the same irrespective of platform. It is here that many analysts see the threat to the NEC standard. As users switch from DOS to Windows they will want new machines. Since Windows applications, unlike DOS applications, can run on either machine, resistance to DOS/V clones should drop. Both MS Excel and MS Word, the two most popular windows applications, have been released for Windows-J. In both cases the Japanese versions are approximately one release behind the standard versions.

The stability of non-localized applications under DOS/V remains unclear. Most non-localized DOS applications will not run under DOS/V. The problem lies in the display protocol modifications which allow DOS/V to display double-byte characters. Many non-localized applications cannot emulate the DOS/V video protocols, thus generating a blank or unintelligible screen. Ironically, the applications often do not crash, but continue to run while producing a blank screen. MS DOS/V may improve the situation. It will reportedly be roughly as tolerant as KanjiTalk, running most non-localized without kanji and some with kanji but mojibake. Japanese Windows should provide a similar situation for non-localized Windows applications.

Should you switch to KanjiTalk or DOS/V? If you found the switch from pen and paper to computers a release rather than a burden, then you will probably feel similarly about the switch to a Japanese operating system. Should you choose Mac or PC? I will leave this silicon version of the Thirty-years War for another issue. Some parting advice, however. Do not be intimidated by the prospect of switching word processors, even across platforms. Commercial translation software will salvage virtually all of your text, including footnotes. Page layout and esoteric functions will be lost, but the transition is less burdensome than one might expect.

Early Modern Japanese Studies in France

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Despite French people’s growing interest in Japan, specialized publications on Japanese society, history, religion, thought, etc., are still dramatically few. This is especially true regarding the early modern period, a field where scholars often work in complete isolation. The situation for literature, however, is slightly better. Much modern Japanese literature (including Edo period literature) has been translated into French during the last decade and this work has reached a wide audience.

BIBLIOGRAPHY

Francine Herail’s Bibliographie Japonaise (Japanese Bibliography) is a valuable reference book in Japanese Studies. It provides the titles of basic European and American studies of Japanese language and civilization (HERAIL <2>).

GENERAL HISTORY

As far as I know, no major research work on Tokugawa Japan has been published in France during the past decade. Short papers dealing with different aspects of Tokugawa period were published in specialized reviews, but it would take too long to comment on them here.

We must however mention the recent publications of two good surveys of Japanese History. The first one (HERAIL <1>) is a convenient textbook for students (and teachers) in Japanese Civilization. It contains many translations of primary sources, genealogies, maps etc. Herail does not put forward any revolutionary thesis. In general, she follows the standard views of Japanese historians but she has her own distinctive approach and knows a lot about the ancient Imperial administration. HERAIL et al <2> is a collective work from Japan’s origins to modern times. This work, of a high quality (especially for the ancient and medieval periods), is intended for specialists as well as the general reader. Each contribution reflects recent trends in research in Japanese History. The modern period begins with the unification of Japan by Oda Nobunaga.

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