

Adventures in Multilingual Publishing

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<ftp://ftp.oreilly.com/pub/examples/nutshell/cjkv/doc/imug-012199.pdf>

The “Book”



- *CJKV Information Processing*

- Published by O'Reilly & Associates in January 1999
- 1,128 pages (ugh!)
- ISBN 1-56592-224-7
- Sequel to and complete replacement for *Understanding Japanese Information Processing* (September 1993, 470 pages)
- Written and typeset by yours truly
- 2400-dpi camera-ready mechanicals created on-site at Adobe Systems using an AGFA AccuSet 1500 with Viper software, imaged to photographic paper
- Complete contents of *CJKV Reference Guide* merged back in at the last minute

Hardware & Software



- **Hardware**

- PowerBook 1400cs then PowerBook G3 Series, both running MacOS-J
- Intermediate proofs printed on an Apple LaserWriter 8500

- **DTP Software**

- Adobe FrameMaker 5.5.6 for page composition
- QuarkXPress 4.02J and SMI EDICOLOR 2.2 used for some text blocks, especially in Chapter 7 (*Typography*)

- **Graphics Software**

- Adobe Illustrator 8.0 and Macromedia FreeHand 8.0J used for some text blocks, especially in Chapter 7 (*Typography*)
- Macromedia FreeHand 8.0 used by O'Reilly's graphic artist (Chris Reilley) to greatly enhance all figures

Creating Custom Fonts



- **Full Character Sets**

- Built CID-keyed fonts—some standard, some custom
- Shift-JIS CMap files (functionally-equivalent to TrueType ‘cmap’ tables) created to enable use on MacOS-J
- Largest CIDFont is 42MB, has 55,880 CIDs, and supports CNS 11643-1992 (See Appendix G)

- **Small Sets of Characters**

- Built custom single-byte-encoded Type 1 fonts

- **Vietnamese and Forms for Transliteration**

- Modified ITC Garamond family at the source level to accommodate Vietnamese, Pinyin tone marks, and macroned vowels

Chinese, Korean, & Vietnamese



- MacOS-J as Basic Operating System
 - Primarily supports only English and Japanese
 - Shift-JIS encoding or else!
- No Input Methods Besides “Character Code” Input
 - Bummer...
- Chinese, Korean, and Vietnamese handled as Shift-JIS—
94×94 character sets fit nicely into the Shift-JIS encoding model
 - Big Five support was an *intense* hack
 - Each CNS 11643-1992 plane—all seven of them—handled as separate Shift-JIS–encoded font instances
 - Japan’s JIS X 0212-1990 handled in the same way

Firing Up The Imagesetter!

- **Agfa AccuSet 1500 CPSI-based RIP**
 - Viper software runs on Macintosh
 - Installing CIDFonts and CMaps to printer hard disk (Macintosh CPU) was effectively a Drag&Drop operation
 - Type 1 fonts downloaded with “Downloader” application
- **PostScript Files Generated by Adobe FrameMaker**
 - Spooled to imagesetter from Unix
- **Imaged at 2400-dpi**
 - Photographic paper
 - Approximately one minute per page
 - Higher resolution benefits the screens (greyscale), not the text

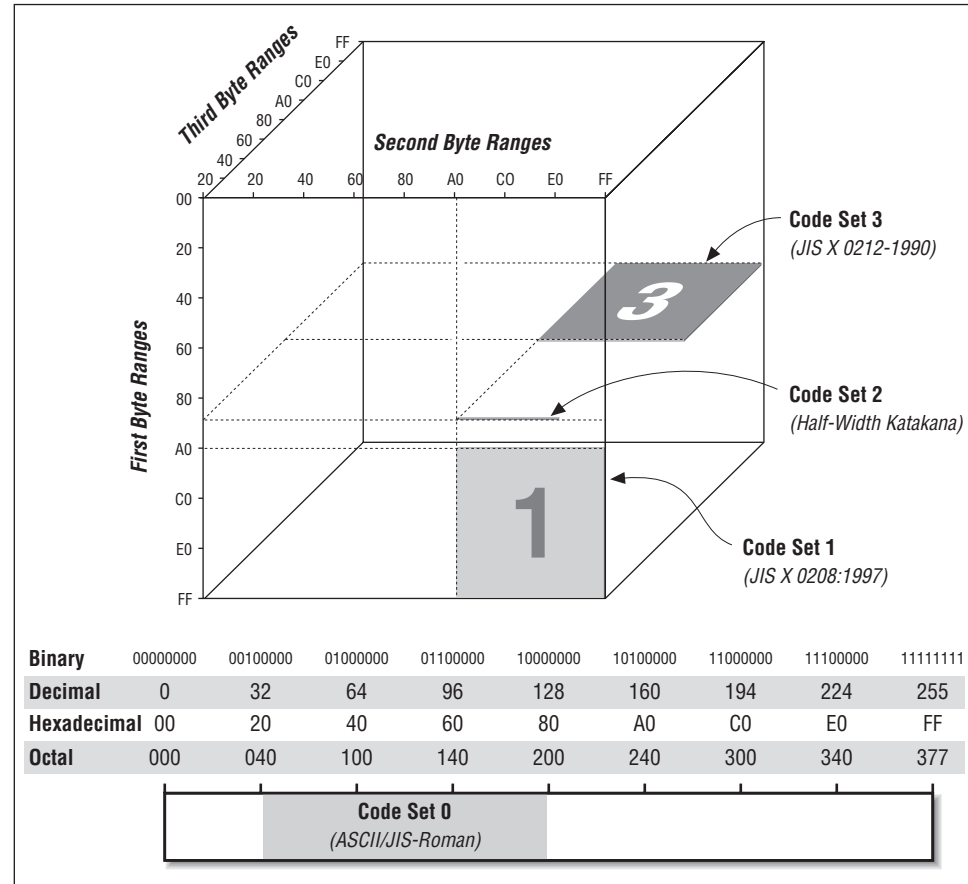
Looking Back...

- Adobe FrameMaker was my tool of choice
 - Excellent built-in footnote-handling capability
 - Excellent built-in table functionality
 - No support for vertical writing, but was not a requirement for this book
- Would have consolidated most custom Type 1 fonts into a single CIDFont for ease of use
- Would have put in many more “Easter Eggs” (aka, hidden or otherwise subtle messages)
- Would not have been possible (or at least would have been difficult) using Windows
 - Especially the font hacks (er, uh, the font edits)

Some Of The Figures...

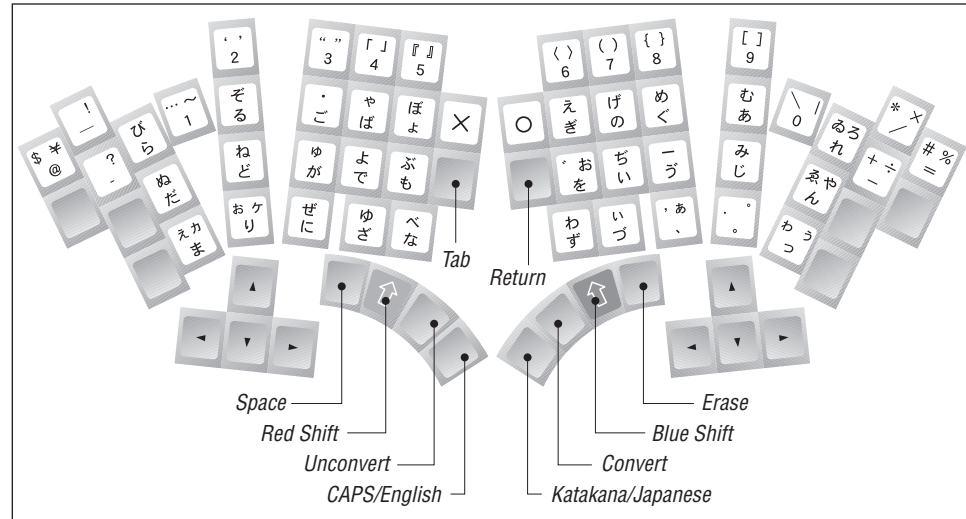


- Figure 4-10:



Some Of The Figures...

- Figure 5-14:



Some Of The Figures...



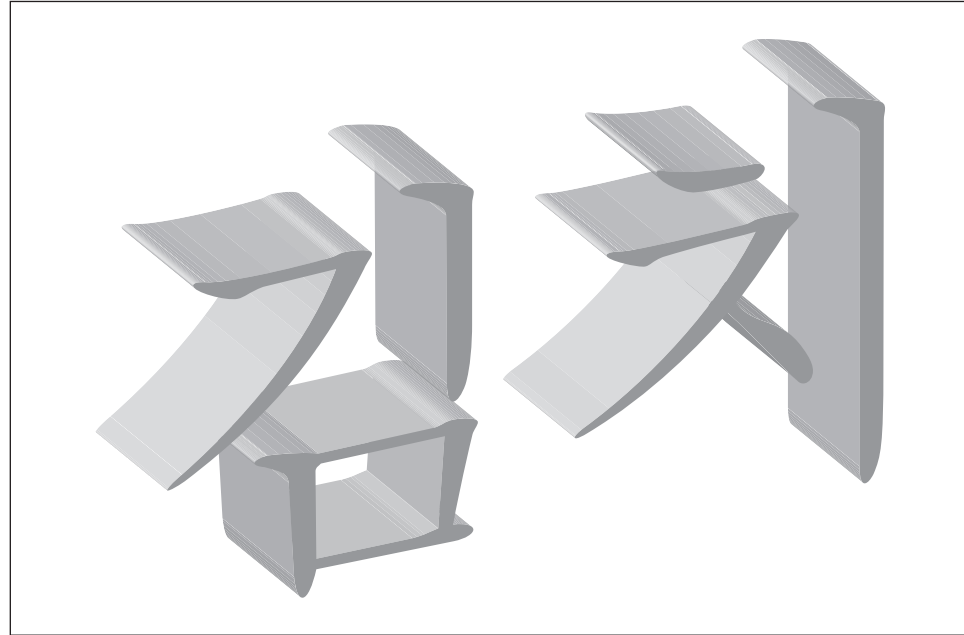
- Figure 6-1:



Some Of The Figures...



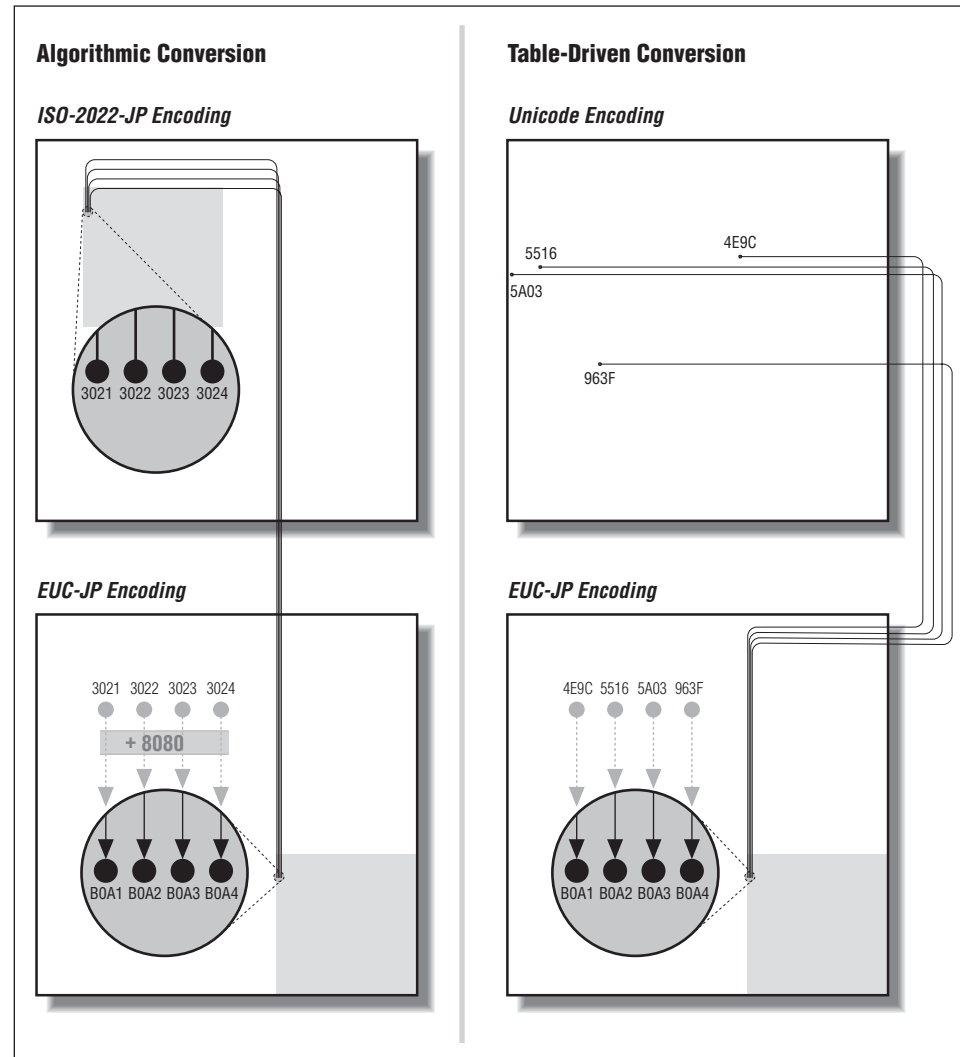
- Figure 7-2:



Some Of The Figures...



- Figure 9-1:





Adobe