Linguistic Tools

Basic Technical Japanese. EDWARD E. DAUB, R. BYRON BIRD, and NOBUE INOUE. University of Wisconsin Press, Madison, and University of Tokyo Press, Tokyo, 1990. Variously paged. $35.

Technical Japanese Supplements: Kanji for Understanding Technical Japanese. EDWARD E. DAUB. University of Wisconsin Press, Madison, and University of Tokyo Press, Tokyo, 1995. viii, 207 pp. Paper, $30.

Technical Japanese Supplements: Solid State Physics and Engineering. CRAIG T. VAN DEGRIFT. University of Wisconsin Press, Madison, and University of Tokyo Press, Tokyo, 1995. iv, 100 pp. Paper, $20.

Technical Japanese Supplements: Polymer Science and Engineering. R. BYRON BIRD and SIGMUND FLOYD. University of Wisconsin Press, Madison, and University of Tokyo Press, Tokyo, 1995. iv, 92 pp. Paper, $20.

Technical Japanese Supplements: Biotechnology. JAMES L. DAVIS. University of Wisconsin Press, Madison, and University of Tokyo Press, Tokyo, 1995. iv, 155 pp. Paper, $25.

Kanji-Flash/BTJ. A Computer Flashcard Companion for the Book *Basic Technical Japanese*. CRAIG T. VAN DEGRIFT. Kanji-Flash Softworks, Gaithersburg, MD, 1991 (distributor, University of Wisconsin Press, Madison). $79. Software for MS-DOS.

Japanese Text Processing. Walnut Creek CD-ROM, Walnut Creek, CA, 1996. $39.95. CD-ROM for UNIX, MS-DOS, and Windows.

Students of Japanese face a daunting task when tackling the written language. To be considered literate, one must master approximately 3000 kanji characters, the borrowed Chinese ideograms that make up the core of written Japanese. The full set of kanji in common use comprises over 6000 characters. Mastery is even harder for scientists and engineers, who must command additional specialized vocabulary and characters. Several recent books and disks may help ease the chore for the serious learner.

A prime textbook for such learners is *Basic Technical Japanese*, developed at the University of Wisconsin as part of its respected graduate course in Japanese for engineers. The book concentrates on the rudiments of Japanese grammar and the written language, focusing on the 500 most common kanji in technical use. Each chapter introduces a handful of kanji along with technical vocabulary followed by grammar lessons and translation exercises. The goal is to prepare the student for translating what he or she desires from the copious technical literature available only in Japanese.

Basic Technical Japanese offers lessons with a general set of kanji covering many fields from physics to biochemistry, but what about the more specialized student who needs a more complete set of technical kanji? The *Technical Japanese Supplements* series fills this need. These companion volumes provide drills in the extensive borrowed terminology written entirely in katakana as well as the kanji for many terms of art in each field. The first, "Kanji for Understanding Technical Japanese," was designed as a supplement to an earlier incarnation of *Basic Technical Japanese* and provides more information about the kanji therein. The other three concentrate on the language of solid state physics, polymer science, and biotechnology, all fields in which there is a substantial untranslated Japanese literature. Taken together, these volumes provide comforting aid to the beginning non-native student of technical Japanese.

One can always tell when someone is learning Japanese by the stacks of small flashcards he or she carries. To further ease the absorption of the kanji mentioned above, *Basic Technical Japanese* is complemented by a software package called Kanji-Flash. This MS-DOS program is tied to the chapters of the textbook and presents kanji exercises of various kinds. Kanji are presented on the screen, and the user must enter the pronunciation of the character as well as its meaning. It is a simple and compact way to reinforce learning and does not require special fonts or sophisticated enhancements to the operating system.

A large amount of surprisingly high-quality free software related to Japanese text processing has been available on the Internet for some years. The most important tools have now been bundled onto a CD-ROM by Walnut Creek, creators of an impressive line of low-cost disks. Their Japanese Text Processing CD-ROM includes software for MS-DOS, Windows, and Unix machines, along with many useful text files. The disk holds 593 megabytes in 4400 files, making it a cost-effective resource. As an example, the CD-ROM contains Stephen Chung's superlative Japanese word processor, JWP version 1.3, and James Breen's extensive electronic Japanese dictionary. Several games and learning aids are included, too. To fill out the collection, some 860 reports from David Kahaner, formerly of the Office of Naval Research, contain commentary and analysis on critical science and technology issues in Japan. And finally, when taking a break from memorizing kanji, one can always contemplate some of the 118 wonderful *ukiyo-e* woodblock prints to be found on the disk in JPEG format.

David Voss

Vignettes: Horology

Anyone seriously attempting to design a clock for accurate timekeeping must first ask himself what we really *mean* by accurate timekeeping. The horological intellectual recognizes that this actually means a clock which is more easily *predictable* in its behaviour. By definition, the time told by each and every working clock is a perfectly accurate response to the natural influences upon it. What we call "errors" in timekeeping are merely those influences upon a clock which we haven't compensated for in its design, or which we haven't accounted for in interpreting what the clock says.

—*Jonathan Betts*, in the foreword to Philip Woodward's *My Own Right Time: An Exploration of Clockwork Design* (Oxford University Press)

The measurement of time is something new, even for humans. Time never needed keeping until man invented time keepers.

—*Paul Quinnett*, in *Darwin's Bass: The Evolutionary Psychology of Fishing Man* (Keokee)

Books Received

The Artful Eye. Richard Gregory *et al.*, Eds. Oxford University Press, New York, 1995. xxii, 434 pp., illus. $45.

Beyond Positivism and Relativism. Theory, Method, and Evidence. Larry Laudan. Westview, Boulder, CO, 1996. x, 277 pp. $59.95; paper, $22.95.

Coloniality in the Cliff Swallow. The Effect of Group Size on Social Behavior. Charles R. Brown and Mary Bomberger Brown. University of Chicago Press, Chicago, 1996. xiv, 566 pp., illus. $95 or £75; paper, $34.95 or £27.95.