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The Computer and Japanese Word Processing

Prior to the fifth century A.D., Japan had no writing system, so they imported the Chinese characters (Kanji) and adapted them to Japanese. Kanji alone were not sufficient to express Japanese grammar, so two phonetic alphabets, consisting of 46 characters each were derived from the Kanji; Hiragana to express words of Japanese origin, and Katakana for non-Japanese words. The reading, or sound, of each Kanji character can be expressed in Hiragana, but the Kanji are necessary for correct Japanese writing. (Tohsaku 13-14)

In the sixth or seventh century, the Chinese art of calligraphy also found its way to Japan. Initially, writing with brush and black ink was an art reserved only for nobility, but later it was used by the common people. Brush writing is still a traditional part of Japanese culture, and children learn its basics in elementary school.

The need to keep pace with the West sparked the invention of the Japanese typesetting system in the late 1800s by Motoki Shozo. Sugimoto Kyota invented the first Japanese typewriter in 1915. Although it was capable of typing about 3000 Kanji characters, only a few highly skilled typists were trained in its use. This complex machine was responsible for all official documents until the emergence of the first Japanese word processor in 1978. (Abe)

Mori Kenichi, an engineer for Toshiba Corporation, is credited with invention of the first Japanese word processor. Mori's goal was to create an input system where a typist could generate Kanji by inputting the less complex Hiragana and Katakana characters. Mori and his team of engineers encountered enumerable difficulties due to the nature of the Japanese

language with its high frequency of homonyms, and thousands of Kanji characters. The first Japanese Word Processor of 1978 has evolved into the complex but relatively easy to use Japanese input methods of today.

Today the Japanese language can by typed using a standard computer keyboard that contains the usual Roman alphabet characters. There are many versions of the Japanese word processor available, including the Global IME system, downloadable free from the Microsoft website.

Today's Japanese Word processor uses a combination of two or three keys for every Japanese character. For example, the Japanese word for tourist is kankoukyaku. This sound can be spelled out in Hiragana characters by typing each syllable independently. By keying ka, the hiragana character か for that sound appears on the screen. Keying the letter n produces ん, ko こ, u う, kya きゃ, and ku く. But かんこうきゃく is only a representation of the sound or reading of the word. The Kanji characters are necessary to express the Japanese word correctly. If かんこうきゃく is on the screen, keying the Enter key will place it in the document as Hiragana. But if the Kanji characters are desired, the typist must first strike the space bar, then the Kanji combination 観客 will appear on the screen in place of the Hiragana かんこうきゃく. The Enter key will then input the 観客 into the document. Many Kanji characters are represented by the same combination of Hiragana characters. The sound ka for Hiragana か can represent 課, 科, 可, 家, 過, 下, and many other Kanji characters. In this case, the word processor offers the typist a list of Kanji to choose from. Once the desired character is selected, the Enter key will insert that character.

This fascinating system of typing has revolutionized the world of Japanese communication, giving all Japanese people the potential to type quickly and efficiently in their native language. (Hiroaki)

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