

# Japanese HWR

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# Chapter 1

## Japanese Script

The Japanese writing system has a long history. It goes back to around 800 A.D. The Japanese script is in fact a writing system, as Japanese is denoted in a combination of three different scripts: *Hiragana*, *Katakana* and *Kanji*. Kanji is a conceptual script, where each character bears the meaning of one or more semantic concepts and represents morphemes. Hiragana and Katakana are both syllabic scripts, and the individual characters do not bear reference to concepts or even words, but merely to phonological units, usually two phonemes.

In this chapter, the development of the script will be reviewed in section 1.1. In section 1.2 the current Japanese writing system will be exemplified, with a focus on the Kanji in section 1.2.2. Hiragana and Katakana will be reviewed in section 1.2.1, which centers around the Kana scripts. Machine processing of the different Japanese scripts and the difficulties that go along will be demonstrated in section 1.2.5. The difficulties of learning to use the Japanese script will be illustrated in section 1.3.

### 1.1 A Short History of the Japanese Script

The historical development of the Japanese script is tightly connected to the history of the Kanji characters. Kanji, in Japanese 漢字 (Jap. pron. カンジ / kanji; Eng. lit. *Han characters*) refers to the 'characters of the Han', meaning the Han Dynasty (206 B.C.-220 A.D.; simplified Chinese: 汉朝; traditional Chinese: 漢朝) (Foljanty 1984). In Mandarin the same characters are referred to as *Hànzì* (simplified Chinese: 汉字; trad. Chinese: 漢字). Note, that the first character 漢 (Chin. 'han', Jap. 'kan', Eng. 'Han') of both the words *Han dynasty* and *Kanji* is identical in Japanese and traditional Chinese, even though it has a different pronunciation in the Chinese and Japanese language. In traditional Chinese the character with the same meaning (汉) has a different shape. This apparent oddity will be explained in greater detail in section 1.1.1.

#### 1.1.1 Historical Development

xxx: see (Foljanty 1984) 2.1.1-2.1.3 xxx: see wikipedia article xxx: see (Grassmuck 1997) xxx: see (Chamberlain 1982) for the Kojiki

##### 1.1.1.1 History of the Kanji

The Kanji script as developed and coined by the Han is in principle still valid today. It is used alone or in combination with phonetic spelling in China, Japan, Taiwan, Hongkong. In Vietnam it was used before it was replaced with the Vietnamese alphabet (Viet.: 'quốc ngữ', Eng. lit. 'national language', Eng. 'national script'), a script based on the Latin alphabet. In South Korea the Han characters were in use until they were replaced with Hangul (Kor. with Han characters 韓國語; Eng. 'Korean') (Foljanty 1984).

The Kanji characters were brought to Japan by Koreans living in Japan around 300-400 A.D. Since the Kanji were used by the Koreans to write Hangul they also used it to write Japanese. There was no other Japanese script before that time. Reports about an original Japanese script called *Jindai Moji* (Jap.

神代文字; Eng. 'scripts of the age of the gods') could not be proven. They are now assumed to be a political and speculative invention by Japanese Nationalists in the early 19th. century (Foljanty 1984).

In the Christian year 712 an ancestral act of writing was performed at Japanese emperor Temmu's court. Hieda no Are, a member of the guild of the *kataribe* or reciters, basically a Japanese Griot, dictates the *Kojiki* (Jap. 古事記; Eng. 'Record of Ancient Matters') to Ō no Yasumaro. Ō no Yasumaro wrote the *Kojiki*, which is not the first written document found in Japan, however it is Japan's oldest attempt to write down spoken Japanese (Grassmuck 1997).

At the time the Han characters were used to write Japanese, they were already more than 1.000 years old, as they stabilised to their modern form within the Han period (Grassmuck 1997)<sup>1</sup>. The first Chinese characters were found on oracle bones from the Shang Dynasty (Chinese 商朝), which ruled some 500 to 600 years within the time period between 1600 B.C. and 1046 B.C. (Grassmuck 1997; Guo et al. 2000).

## 1.2 The Modern Japanese Writing System

xxx: see (Foljanty 1984) 3.1 xxx: see (Lange 1922) p.64 xxx: see (Tsujimura 2007) for morphology stuff  
xxx: see (Grassmuck 1997)

xxx: aufbau des schriftsystems generell xxx: Gemischtschreibung xxx: Kurze erwäherung der morphologie. Hiragana an verben zur konjugation. zusammenhang verben / nomen in kanji, xxx: uppercase / lowercase nicht vorhanden. etc. xxx: see <http://japanese.about.com/library/weekly/aa070101a.htm>  
xxx: see <http://www.csse.monash.edu.au/~jwb/cgi-bin/wwwjdic.cgi?1R>

### 1.2.1 Kana かな

xxx: see (Foljanty 1984) 2.2 xxx: see (Lange 1922) p.57ff

#### 1.2.1.1 Hiragana ひらがな

#### 1.2.1.2 Katakana カタカナ

### 1.2.2 Composition of the Kanji 漢字

xxx: see (Lange 1922) p.64

#### 1.2.2.1 Graphemic Elements

xxx: see (Foljanty 1984) 2.1.4.2

#### 1.2.2.2 Radicals

xxx: see (Foljanty 1984) 2.1.5 xxx: see (Lange 1922) p.85ff p.94ff

#### 1.2.2.3 Readings

### 1.2.3 Structure of the Japanese Writing System

Having demonstrated the Hiragana in 1.2.1.1, the Katakana in 1.2.1.2 and the Kanji in section 1.2.2, it is now possible to report about the structure of the writing system as such.

xxx: see (Foljanty 1984) 3.1-3.2

### 1.2.4 Romaji ロマジ

xxx: see (Foljanty 1984) 4

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<sup>1</sup>Also see timeline in section ??.

### 1.2.5 Machine Writing of Japanese

Machine processing of the Japanese scripts has been an issue, ever since humans started to automate their writing.

xxx: see (Lange 1922) p. XII Stichwort Drucklegung xxx: see (Foljanty 1984) 5 xxx: see MS IME description (technical report or something?!) xxx: see section ?? for a description of research efforts in order to provide technology for using handwriting as an input method for Japanese. xxx: see (Grassmuck 1997)

## 1.3 Difficulties of Writing Japanese for Learners

xxx: find places for citations of the following paper (if not already done) (Foljanty 1984) (Lange 1922) (Katsuki-Pestemer 2006a) (Katsuki-Pestemer 2006b) (Haschke and Thomas 2008) (Tsujimura 2007) (Grassmuck 1997)





# List of Figures



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