

# Sino-Japanese *Kana* Usage

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## I. INTRODUCTION

In Japanese-language dictionaries and Chinese-Japanese character dictionaries one will find indicated, in addition to 'contemporary *kana* usage' (*gendai kanazukai* 現代仮名遣い), so-called 'historical *kana* usage' (*rekishiteki kanazukai* 歴史的仮名遣い), based on the usage of *kana* in earlier times. 'Sino-Japanese *kana* usage' (*jion kanazukai* 字音仮名遣い) denotes historical *kana* usage as applied to the Sino-Japanese or *on* 音 readings of Chinese characters.

'Historical *kana* usage' represents an orthographic convention for the usage of *kana* in writing Japanese that has been inductively determined on the basis of the orthography found in texts of a particular period in the past. In the case of historical *kana* usage for native Japanese words (*kun* 訓), the orthography of around the late Heian 平安 period serves as the norm. Historical *kana* usage for Sino-Japanese, or Sino-Japanese *kana* usage, should be regarded as forming a counterpart to this, and it too should therefore be inductively determined on the basis of the actual orthography found in earlier texts.

As will be discussed in detail below, the basic elements of Sino-Japanese *kana* usage were formulated in the Edo 江戸 period by Motoori Norinaga 本居宣長 (1730-1801), and they have been observed down to the present day. With recent advances in the study of early Sino-Japanese readings based primarily on *kunten* 訓点 materials,<sup>1)</sup> however, it has become clear that there exist many discrepancies between this Sino-Japanese *kana* usage and the orthography actually used in early texts. In this paper I shall accordingly consider various questions relating to this 'Sino-Japanese *kana* usage' as well as presenting my own views on how it ought to be modified in the future.

1) The term '*kunten* materials' refers to the corpus of texts originally written in Chinese to which various signs and symbols (*kunten*) have been added to facilitate their reading in Japanese by means of the *kundoku* 訓読 ('reading in translation') method. There exists an extensive corpus of such texts dating from the early Heian period and later.

## II. 'SINO-JAPANESE KANA USAGE' AS PRESCRIBED BY MOTOORI NORINAGA

In An'ei 安永 5 (1776) Motoori Norinaga composed *Jion kanazukai* 字音假字用格 (Sino-Japanese Kana Usage) and presented his form of Sino-Japanese kana usage. His views were to exert a great influence, and current Sino-Japanese kana usage basically follows the rules laid down by Norinaga. I shall therefore first present in simplified form Sino-Japanese kana usage as prescribed by Norinaga in this work. (The differences between *go'on* 呉音 ['Wu pronunciation'] and *kan'on* 漢音 ['Han (viz. Chinese) pronunciation'] that he notes in detail have been omitted; voiced and unvoiced consonants are not differentiated; and, owing to limitations of space, I have in some cases selected only representative characters from among the examples that he gives, indicating omissions by 'etc.'.)

い: 伊以異怡易已移夷貽飴倚醫意衣依, etc.

ゐ: 爲韋位威謂涓偉委尉惟遭違圍畏胃, etc.

いう: 尤郵幽憂由油遊猶悠酉有又友右, etc.

いゆう・ゆう: 雄熊融彤用勇邕裕

いゆ・ゆ: 由油柚遊遊猶猷攸悠酉誘愈逾諭, etc.

いふ: 邑挹揖燿

いやう・やう: 陽楊揚揚瘍羊洋養樣影, etc.

いよう・よう: 用勇踊容庸擁邕癘膺孕, etc.

いむ: 因姻寅印引殷愆隱音飲陰蔭淫姪, etc.

ゐむ: 尹允勻筠韻殞隕員院

いく: 育昱郁或渙燠

ゐき: 域域闕洫

いつ: 乙一壹逸佚溢佾

ゐつ: 聿鷲

え: 哀埃愛衣依延要曳叡

ゑ: 惠隈穢回會繪准衛慧壞迴畫烏

えう: 遙搖謠姚要曜耀夭妖窈窕幼, etc.

えふ: 葉壓壓擘擘

えい: 翳曳裔銳英嬰盈影映榮永詠泳穎, etc.

ゑい: 衛

えむ: 煙咽宴堰鹽炎淹厭延演衍沿鉛緣, etc.

ゑむ: 袁遠猿園爰援猿宛苑怨鴛垣淵圓, etc.

えつ: 謁噎咽悅閱

ゑつ: 越粵日鉞噉

えき: 益亦奕易場液掖掖釋驛釋駁役疫

お: 於於飫意憶億隱礙乙應

を: 袁遠怨烏乎呼鳴鳩弘越日愧迴汗惡

- おう： 應謳謳鷗颯歐  
 をう： 翁瓊瓮雄泓謳  
 あう： 奧襖媪齋盎央殃鞅櫻鷺鷺鷺鷺  
 わう： 王往枉旺汪沅皇凰黃橫泓  
 あふ： 狎鴨押壓凹  
 おむ： 恩殷慇礙隱音陰飲  
 をむ： 溫蘊穩袁遠園怨苑苑  
 おく： 憶臆億  
 をく： 屋  
 おつ： 乙  
 をつ： 頰膺越  
 きう： 九鳩仇久灸咎枢臼舊求救究丘弓, etc.  
 きふ： 急及汲吸笈給泣翕歛  
 かう： 高豪告傲好考號岡藤仰向行江, etc.  
 こう： 公空孔工紅貢口后厚候恆弘興講, etc.  
 くわう： 光廣育皇惶惶遑黃橫礦宏闊轟, etc.  
 かふ： 合蛤閤洽恰恰夾峽盍闔甲匣狎  
 こふ： 業劫怯  
 きやう： 強仰香向響狂況行杏更莖京敬, etc.  
 きよう： 共供恭恐凶匈匈兇龔興矜競凝, etc.  
 けう： 肴膠爻交絞效効校孝教樂橋堯叫, etc.  
 けふ： 叶協夾俠頰莢狹愜篋挾業劫怯脅  
 しう： 周秋愁秀州洲囚魯收搜臭袖舟獸, etc.  
 しゆう： 衆終充嵩蠹戎從縱主趨戍  
 しふ： 十什汁拾入習褶執集輯緝澀濕襲, etc.  
 さう： 早草造曹糟操騷倉藏莊相鎗爭爪, etc.  
 そう： 恩總聰送崇宗宋走叟奏漱曾增雙, etc.  
 さふ： 雜颯市聿揮卅嬰  
 しやう： 章障彰昌賞裝相讓爭清生青星, etc.  
 しよう： 鍾種腫誦松頌縱悚稱昇證丞乘, etc.  
 せう： 梢抄鈔召照招詔沼小宵焦笑燒簫, etc.  
 せふ： 妾接攝捷捷涉浹焚葉屑  
 ちう： 宙抽紬青丑紐肘耐耐籌籌疇晝稠惆糅  
 ちゆう： 中仲沖仲忠蟲重柱拄注住株頭, etc.  
 ちふ： 蟄繫  
 たう： 稻蹈刀逃到道討盜唐堂湯橙棹幢, etc.  
 とう： 東棟同童動通痛冬統頭登藤等幢, etc.  
 たふ： 答塔沓踏納榻蹋  
 ちやう： 長張丈場暢嬢娘打貞丁町頂定, etc.  
 ちよう： 重冢寵濃穠穠徵懲澄

- てう： 朝潮兆召趙眺眺紹調蝸彫鳥條燒, etc.  
 てふ： 帖貼牒蝶疊捻軌聶  
 なう： 腦惱瑤囊囊  
 のう： 農濃膿能  
 なふ： 納衲  
 にやう： 嬢娘  
 によう： 女  
 ねう： 饒饒尿溺  
 ねふ： 捻  
 にう： 柔乳  
 にふ： 入  
 はう： 保寶報抱毛帽傍忙方望烹盲包邦, etc.  
 ほう： 蓬豐夢封峯奉部哀戊牟眸朋謀, etc.  
 はふ： 乏法 (*kan'on*)  
 ほふ： 乏法 (*go'on*)  
 ひやう： 平評丙病並并瓶屏兵  
 ひよう： 冰憑  
 へう： 豹表俵標漂飄飄森颯苗廟眇謬繆, etc.  
 まう： 毛耄冒帽忙莽亡妄忘望網盲孟猛, etc.  
 もう： 蒙朦朦  
 みやう： 明名命鳴冥猛  
 めう： 貌苗猫廟妙  
 りう： 留溜溜雷柳劉流流隆龍  
 りふ： 立笠粒  
 らう： 老牢勞潦醪郎廊朗浪琅琅娘糧  
 ろう： 籠瀧隴聾壘弄婁樓縷縷樓陋漏, etc.  
 らふ： 拉臘蠟  
 りやう： 良兩亮梁量糧涼涼令冷領靈, etc.  
 りよう： 龍麥陵凌綾楞稜  
 れう： 療繚療了聊料寮僚鏢鴉髻蓼廖  
 れふ： 獵獵  
 じ： 自示次視辭慈事字寺侍時侍似二耳, etc.  
 ぢ： 治持痔尼膩儻除柱  
 じや： 蛇地邪關謝麝若  
 ぢや： (no examples)  
 じゆ： 樹壽受授就頌驚聚娶豎需孺孺滯入  
 ぢゆ： (no examples)  
 じよ： 序敝徐舒助鋤恕絮如汝茹筍  
 ぢよ： 除杼絛絮女  
 じむ： 神深甚尋腎盡儘迅人仁刃忍任任, etc.



- ぢむ: 陣沈塵  
 じゆむ: 淳惇醇鶉准隼準盾循楯閏潤, etc.  
 ぢゆむ: (no examples)  
 じく: 孰肉  
 ぢく: 竺軸舳舻  
 じやく: 寂鷓雀若弱  
 ぢやく: 著  
 じゆく: 粥熟塾  
 ぢゆく: (no examples)  
 じよく: 辱蓐褥  
 ぢよく: 濁  
 じつ: 實日駟昝  
 ぢつ: 軼昝昵啞  
 じゆつ: 述術秫戍恤  
 ぢゆつ: 朮愾  
 じき: 食飾植  
 ぢき: 直  
 ず: (no examples)  
 づ: 豆頭圖途徒杜  
 ずゐ: 隋隨髓瑞蕞  
 づゐ: (no examples)

*Kana syllables ending in い and ゐ*

- い: あい, えい, かい, けい, さい, せい, たい, てい, ない, ねい, はい, へい, まい, めい, らい, れい, わい, ゑい, くわい.  
 ゐ: くる, する, つる, ゆる, るる, うる.

*Kana syllables with わ in a final or medial position*

- くわ, くわう, くわい, くわん, くわく, くわつ (not to be written with は).

*Kana for syllables ending in the syllabic nasal む*

- Both *-m む* and *-n ん* are to be written む.

The above rules for Sino-Japanese *kana* usage treat only of characters about which there was some confusion on account of the fact that they had become homophones by the time of Norinaga, and consequently characters about which there was no confusion, such as *a* 阿, *ka* 可, *kei* 計 and *ko* 固, are passed over completely.

This Sino-Japanese *kana* usage as proposed by Norinaga won high appraisal and was generally adopted throughout the Edo period. Shirai Hirokage 白井寛蔭 wrote as follows in his *On'in kanazukai* 音韻仮字用例 (Phonological *Kana* Usage; 1860):

In the early An'ei era Motoori Norinaga composed *Jion kanazukai*, the intent of which was quite superb, and since it was written on the basis of old works, it has become the binding standard when one wishes to write Sino-Japanese readings in *kana* today.

But Hirokage then goes on to make the following criticism of Norinaga's work:

However, among the various topics that he discusses, points which he failed to consider or about which he would appear to have been mistaken are nevertheless not few in number. Of these, a particularly glaring mistake is the fact that he failed to distinguish between the syllabic nasals *-n* and *-m* and prescribed the *kana* む (*mu*) in all cases. There are in addition also many other points in which he would seem to have erred, and it is now my intention to single these out from his *Jion kanazukai* and explain them in detail.

Shirai Hirokage's *On'in kanazukai* thus represents a revision of Sino-Japanese *kana* usage as laid down by Motoori Norinaga. In particular, Hirokage's advocacy of the need to differentiate *-m* む and *-n* ん in Sino-Japanese readings in accordance with the similar distinction made in Chinese,<sup>2)</sup> a distinction which Norinaga had not considered necessary, represented a noteworthy advance in the studies on Sino-Japanese readings since the time of Norinaga. In spite of this, however, current Sino-Japanese *kana* usage without exception fails to observe this distinction, and both *-m* and *-n* are indicated by *hiragana* ん (or *katakana* ン). It may thus be seen that although various modifications were made in post-Norinaga studies of Sino-Japanese *kana* usage, these have been for the most part disregarded, and the usage prescribed by Norinaga has basically continued to be observed from the Meiji 明治 era down to the present day.

### III. THE PRINCIPLES AND PROBLEMS OF NORINAGA'S SINO-JAPANESE *KANA* USAGE

In the "Explanatory Comments" to his *Jion kanazukai* Norinaga writes as follows:

2) All Chinese characters are pronounced as single syllables, and their syllabic structure is expressed as IMVE/T (I: initial; M: medial; V: vowel; E: ending; T: tone). The initial is called 'shēng(-mu)' 声(母), while the remainder of the syllable is referred to as 'yūn(-mu)' 韻(母), and the four tones (ssū-shēng 四声) are also known as 'shēng-tiao' 声調. In Japanese, syllables without a medial are called 'chokuon' 直音 or 'plain sounds', while syllables with an *-i-* medial glide are called 'kaiyōon' 開拗音 ('open contracted sound') and syllables with a *-w-* medial glide are called 'gōyōon' 合拗音 ('closed contracted sound').

The reason that in discussing Sino-Japanese readings I have not quoted Chinese rhyme dictionaries, but have invariably quoted as evidence only old works of Japan, is that this work is not a work for distinguishing the pronunciation of different characters, but is simply a work for clarifying *kana* usage, and *kana* usage can be determined only on the basis of the old works of Japan.

It is thus evident that Norinaga's aim was to determine the orthography of Sino-Japanese character readings on the basis of examples of actual usage culled from early texts. He sought, in other words, to establish inductively on the basis of early texts a form of historical *kana* usage for Sino-Japanese readings as a counterpart to the historical *kana* usage for native Japanese words.

In point of fact, however, there was inherent in the Sino-Japanese *kana* usage as laid down by Norinaga a major methodological problem, for while professing to follow an inductive method, in his actual determination of *kana* usage he adopted a deductive method based on the *Yün-ching* 韻鏡 (Mirror of Rhymes), a set of Chinese rhyme tables. The principle employed by Norinaga in his Sino-Japanese *kana* usage was, namely, not induction but deduction. Let me now explain this in a little more detail.

Norinaga's study of Sino-Japanese readings was considerably influenced by an earlier work entitled *Makō inkyō* 磨光韻鏡 (Burnishing the Mirror of Rhymes; 1744) by the phonologist Monnō 文雄 (1700-63).

In the year Jên-shou 仁寿 1 (601) of the Sui 隋 dynasty in China the *Ch'ieh-yün* 切韻 was compiled by Lu Fa-yen 陸法言 and others. Based on the phonological system of the standard pronunciation in contemporary northern China, this work classified Chinese characters on the basis of differences in finals and tones, and the phonological system of Chinese as reflected in the *Ch'ieh-yün* is referred to as 'Ancient Chinese' (also 'Middle Chinese'). A set of rhyme tables, illustrating the phonological system of Ancient Chinese by means of forty-three tables and known as the *Yün-ching*, subsequently evolved (no later than 1161) and was introduced shortly afterwards to Japan, where it began to be utilized.<sup>3)</sup> Then, using this *Yün-ching* as their basis, the phonological scholars of the Edo period derived by deductive means the Sino-Japanese *go'on* and *kan'on* character readings, and representative of their work was the publication of Monnō's *Makō inkyō*.

The *Yün-ching* consists of tables in which the initials of Ancient Chinese are arranged in horizontal rows and the finals in vertical columns, with a character representative of a particular sound appearing at the intersection of the cor-

3) For details see Mabuchi Kazuo 馬渕和夫, *Inkyō kōhon to Kōin sakuin* 韻鏡校本と広韻索引 (Text of the *Yün-ching* and index to the *Kuang-yün*; Gannandō 嚴南堂, 1954), Part 3 ("Study").

responding row and column, and all homophonous characters were understood by the phonologists of Japan as having the same *go'on* and *kan'on* readings respectively. In Monnō's *Makō inkyō* the *kan'on* reading is given in *katakana* on the right-hand side of the representative character and the *go'on* reading on the left-hand side, with the *tōin* 唐音 or 'T'ang pronunciation' (representing the Chinese pronunciation actually heard by Monnō in the Edo period) given at the lower left. There are in all forty-three tables, and as an example No. 37 has been reproduced on the following page. (This table is the section corresponding to the *hou* 候 [*p'ing-shêng* 平声: 'level tone'], *hou* 厚 [*shang-shêng* 上声: 'rising tone'] and *hou* 候 [*ch'ü-shêng* 去声: 'departing tone'] rhymes, the *yu* 尤 [*p'ing-shêng*], *yu* 有 [*shang-shêng*] and *yu* 宥 [*ch'ü-shêng*] rhymes, and the *yu* 幽 [*p'ing-shêng*], *yu* 黝 [*shang-shêng*] and *yu* 幼 [*ch'ü-shêng*] rhymes of the *Ch'ieh-yün*.)

This methodology of the *Makō inkyō* was an underlying factor in Norinaga's Sino-Japanese *kana* usage, which evolved through a partial revision of Monnō's methods. The determination of *go'on* and *kan'on* on the basis of the *Yün-ching* presupposes that their phonological systems were the same as that of Ancient Chinese. It has, however, gradually come to light that there were in fact major differences between the two, but the phonologists of the Edo period were still totally unaware of this.

It cannot be stated with any certainty even today in which Chinese dialect of which period the roots of Sino-Japanese *go'on* lie, and there are strong reasons for supposing that, rather than representing a single unified system, *go'on* is of a multistratified structure with several systems of old readings and newer readings having been superimposed upon one another.<sup>4)</sup> Nor can one completely dismiss the view that *go'on* was not based directly on Chinese itself, but represents a transposition of Sino-Korean readings.<sup>5)</sup> *Go'on* did not therefore originally correspond to the phonological system reflected in the *Yün-ching*, and there are many instances in which it is not possible to determine Sino-Japanese *kana* usage for *go'on* by means of a deductive method based on the *Yün-ching*.

It is also impossible to determine *kana* usage for Sino-Japanese *kan'on* on the basis of the *Yün-ching*, reflecting as it does Ancient Chinese. This is because, as will be further explained below, *kan'on* is based on the Ch'ang-an 長安 dialect of the mid-T'ang dynasty and it reflects various new phonological changes that had occurred since the time of Ancient Chinese.

As will now be evident, there was a major flaw in the basic methodology of

4) This question is discussed in some detail in Kōno Rokurō 河野六郎, "'Nihon go'on ni tsuite'" 「日本呉音」について (On 'Japanese go'on'), *Gengogaku Ronsō* 言語学論叢, No. 15 (1976).

5) This thesis is found already in Mitsuda Shinzō 満田新造, "Chōsen jion to Nihon go'on to no ruijiten ni tsuite—Chōsen ni okeru jion denrai no ōro—" 朝鮮字音と日本呉音との類似点について——朝鮮に於ける字音伝来の往路——(Similarities between Sino-Korean and Japanese *go'on*: The path whereby Chinese character readings entered Korea), *Tōyō Gakuhō* 東洋學報, Vol. 15, No. 3 (1926).





Norinaga's Sino-Japanese *kana* usage. In the "Explanatory Comments" to his *Jion kanazukai* Norinaga stated that he had based himself on actual examples taken from early works, but these examples served in fact as no more than a point of departure for producing fictitious analogical forms by deductive means on the basis of the *Yün-ching*. This fundamental error was one that all phonological researchers of the Edo period committed, and it has been repeated down to the present day. But in recent years it has finally come to be realized that as a result of this error orthodox *go'on* and *kan'on* forms are in fact preserved in what is called 'customary pronunciation' (*kan'yōon* 慣用音) or 'popular pronunciation' (*zokuon* 俗音), terms which distort the true situation.<sup>6)</sup>

#### IV. FEATURES OF NORINAGA'S SINO-JAPANESE *KANA* USAGE CHARACTERISTIC OF THE EDO PERIOD

When Norinaga's Sino-Japanese *kana* usage is considered as a form of historical *kana* usage, a further problem arises insofar that it was formulated under the background influence of the phonological system of the Edo period in which Norinaga himself lived. This may be plainly seen in the fact that his Sino-Japanese *kana* usage does not recognize labiovelars such as クキ (*k<sup>w</sup>i*) and クエ (*k<sup>w</sup>e*), nor does it recognize any distinction between the endings, *-n* and *-m*. (This distinction is not recognized in contemporary dictionaries either, thus demonstrating that Norinaga's Sino-Japanese *kana* usage has been carried over without any modifications.)

Among syllables with a *-w-* medial glide, Norinaga recognized labiovelars such as 火 (クワ *k<sup>w</sup>a*), 月 (グワツ *g<sup>w</sup>atsu*) and 元 (グワン *g<sup>w</sup>an*), but syllables such as 鬼 (クキ *k<sup>w</sup>i*), 橘 (クキツ *k<sup>w</sup>itsu*) and 均 (クキン *k<sup>w</sup>in*) are all given as キ (*ki*), キツ (*kitsu*) and キム (*kin*), while syllables such as 快 (クエ *k<sup>w</sup>e*), 月 (グエツ *g<sup>w</sup>etsu*) and 元 (グエン *g<sup>w</sup>en*) are all given as ケ (*ke*), ゲツ (*getsu*) and ゲム (*gen*). In addition, he did not differentiate between *-n* finals such as 間 (カン *kan*), 君 (クン *kun*) and 根 (コン *kon*) and *-m* finals such as 感 (カム *kam*), 金 (キム *kim*) and 紺 (コム *kom*), and they are all spelt with a final *-m* as カム, キム, クム and コム. (Contemporary Sino-Japanese *kana* usage differs in that *-m* has been modified to *-n*.)

On a theoretical level Norinaga recognized in his *Jion kanazukai* the following three types of syllables for writing Sino-Japanese character readings:

Plain syllables (*chokuon* 直音): ア, カ, サ, タ, ナ, ハ, マ, ラ, イ, キ, シ,

6) In regard to this question, reference may be made to the following succinct overview: Yuzawa Tadayuki 湯沢質幸, "Kanji no kan'yōon" 漢字の慣用音 (Customary pronunciation of Chinese characters), in *Kanji kōza 3: Kanji to Nihongo* 漢字講座3・漢字と日本語 (Lecture series on Chinese characters 3: Chinese characters and the Japanese language; Meiji Shoin 明治書院, 1987).



チ, ニ, ヒ, ミ, リ, ウ, ク, ス, ツ, ヌ, フ, ム, ル, エ, ケ, セ, テ, ネ, ヘ,  
メ, レ, オ, コ, ソ, ト, ノ, ホ, モ, ロ.

Syllables with an *-i-* medial glide (*kaiyōon* 開拗音): キヤ, シヤ, チヤ, ニ  
ヤ, ヒヤ, ミヤ, イヤ, リヤ, キユ, シユ, チユ, ニユ, ヒユ, ミユ, イユ, リ  
ユ, キヨ, シヨ, チヨ, ニヨ, ヒヨ, ミヨ, イヨ, リヨ.

Syllables with a *-w-* medial glide (*gōyōon* 合拗音): クワ, スワ, ツワ, ヌ  
ワ, フワ, ムワ, ルワ, ウワ, クキ, スキ, ツキ, ヌキ, フキ, ムキ, ルキ, ウ  
キ, クエ, スエ, ツエ, ヌエ, フェ, ムエ, ルエ, ウエ, クヲ, スヲ, ツヲ, ヌ  
ヲ, フヲ, ムヲ, ルヲ, ウヲ.

But in regard to syllables with a *-w-* medial glide he adds the following explanation:

Chinese had a variety of syllables with a *-w-* medial glide, but in Sino-Japanese they have all changed into plain syllables except for syllables beginning with くわ (*k<sup>w</sup>a*) and the syllables すゐ (*s<sup>w</sup>i*), つゐ (*t<sup>s</sup>wi*) and るゐ (*u<sup>w</sup>i*).

This means that for Sino-Japanese *kana* usage the only syllables with a *-w-* medial glide that Norinaga recognized were クワ, クワウ, クワイ, クワン, クワツ, クワク, スキ, ツキ, ルキ, etc. He then continues as follows:

Although one finds 法華經 written ほくゑきやう, 變化 written へんぐゑ, 源氏 written げんじ, 眷屬 written くゑんぞく, 花足 written くゑそく, etc., in *utamonogatari* 歌物語 [prose narratives centered on poems] and so forth, this does not mean that the syllables *ki* き and *ke* け are indiscriminately pronounced with a glide, . . . but that these happen to have been preserved in this form.

He thus points to earlier examples of the actual existence of the syllable くゑ (*k<sup>w</sup>e*), but nevertheless he did not recognize its use in Sino-Japanese *kana* usage.

The reason that Norinaga recognized syllables with a *-w-* medial glide of only the クワ (*k<sup>w</sup>a*) type may be assumed to have been that as a result of phonological changes the syllables クキ (*k<sup>w</sup>i*) and クエ (*k<sup>w</sup>e*) had by his time changed to キ (*ki*) and ケ (*ke*) respectively and that syllables with a *-w-* medial glide of the クキ and クエ type no longer existed as phonemes. In this sense it must be said that Sino-Japanese *kana* usage was established on the basis of the phonological system of the Japanese language in the Edo period.

One point that should be noted, however, is the fact that among syllables with a *-w-* medial glide of the スキ (*s<sup>w</sup>i*), ツキ (*t<sup>s</sup>wi*) and ルキ (*r<sup>w</sup>i*) type Norinaga also recognized クキ (*k<sup>w</sup>i*) (cf. "Kana syllables ending in い and ゐ," p. 69). His

reason for doing so is explained as follows:

There are examples of characters pronounced き (*ki*) having been written in *kana* as くゐ (*k<sup>w</sup>i*) in earlier times. These were all characters with a *-w-* medial glide and appear thus in the *Yün-ching*. They are limited to characters which in former times corresponded to the labiovelar *k<sup>w</sup>i* but have since changed to the plain *ki*. . . . The characters that may also be written くゐ are 規關窺, etc.

Therefore, in addition to き, Norinaga also recognized くゐ in his Sino-Japanese *kana* usage for characters such as 規 and 關, but in current Sino-Japanese *kana* usage these are not recognized. This is because since the Edo period only the labiovelars written クワ, クワウ, クワツ and クワン have remained in Japanese. (In contemporary Japanese there are a small number of dialects preserving the forms [k<sup>w</sup>aʃi] for *kashi* 菓子 and [k<sup>w</sup>aʒi] for *kaji* 火事, but it will not be long before they too disappear.)

Next, in regard to the endings *-m* and *-n*, it was noted earlier that Norinaga recognized no distinction between them and used the *kana* む for both. But subsequently, with advances in the study of the *Yün-ching* and the *man'yōgana* 万葉仮名 of early Japanese, it was shown that the distinction between *-m* and *-n* found in Ancient Chinese had also been present in early Sino-Japanese, and, as was seen in an earlier quotation, Shirai Hirokage put forward the view that they should be clearly differentiated, with *-m* being written む and *-n* being written ん. Hirokage was not the only person to hold this view, and through the publication of works such as *Namashina* 男信 (1842) by Tōjō Gimon 東条義門, *Kango onzu* 漢吳音図 (Phonological Tables of *Kan'on* and *Go'on*; 1815) by Ōta Zensai 太田全齋 and *Yōjirei* 傭字例 (Examples of Character Usage; 1841) by Seki Masamichi 関 政方 it had become evident by the latter half of the Edo period that *-m* and *-n* ought to be differentiated. Yet in current Sino-Japanese *kana* usage, as in the case of Norinaga's Sino-Japanese *kana* usage, *-m* and *-n* are not distinguished (with the difference that whereas Norinaga wrote む for both *-m* and *-n*, today they are both written ん). It may be assumed that the reason that they were not differentiated by Norinaga was that there no longer existed any phonemical distinction between *-m* and *-n* in the Edo period, and that they are not differentiated in current Sino-Japanese *kana* usage is probably because the views of the renowned scholar Norinaga led to the rejection of all other views, as a result of which his usage has been followed down to the present day.

As will now be evident from the above, there are portions of Sino-Japanese *kana* usage that were formulated under the influence of the phonological system of the Edo period.

## V. THE PRESENT STATE OF THE REVISION OF SINO-JAPANESE KANA USAGE

'Historical *kana* usage' for native Japanese words has its origins in the *Waji shōran shō* 和字正濫鈔 (Notes on the Rectification of Japanese Writing; 1695) by Keichū 契沖, while 'Sino-Japanese *kana* usage' has its origins in Norinaga's *Jion kanazukai*, and both were based on the scholarship of the Edo period. Both also shared the common objective of reconstructing the usage of *kana* in early works. But in comparison with native Japanese words, there were very few concrete examples on which to rely in the case of Sino-Japanese, since the majority of works taken up for consideration by the scholars of the Edo period were written in *hiragana* and contained almost no examples of *kana* usage for Sino-Japanese readings. Because it was therefore difficult in the case of Sino-Japanese *kana* usage to adopt the method of determining *kana* usage inductively on the basis of actual usage in earlier times, Edo scholars ended up producing a form of *kana* usage giving precedence to a deductive method based on the *Yün-ching*.

In the Meiji era, however, research material in the form of the so-called *kunten* materials began to attract attention in the field of textual language studies. Particularly since the Shōwa 昭和 era a wealth of *kunten* materials has come to be utilized in the historical study of the Japanese language, and it has become evident on the basis of many examples of Sino-Japanese *kana* readings that there is a need to revise by inductive means Sino-Japanese *kana* usage. As features requiring revision, it is the following two points that have won general acceptance today.

Firstly, in Norinaga's Sino-Japanese *kana* usage both the *go'on* and *kan'on* readings of the characters 水 (スキ), 追 (ツキ), 壘 (ルキ) and 唯 (ユキ) are written with キ, but in early texts these characters are without exception all written with イ, namely, 水 (スイ), 追 (ツイ), 壘 (レイ) and 唯 (ユイ). In these instances キ has therefore been emended to イ.<sup>7)</sup>

Secondly, characters rhyming with *hao* 豪 (Ancient Chinese -au), of which both the *go'on* and *kan'on* readings are given in Norinaga's Sino-Japanese *kana* usage as, for example, 寶 (ハウ), 高 (カウ), 草 (サウ), 刀 (タウ) and 勞 (ラウ), are in the case of labial initials written 寶 (ホウ), 報 (ホウ), 帽 (ボウ) and 毛 (モウ) in early texts. In such cases ハウ, パウ and マウ have accordingly been emended to ホウ, ボウ and モウ respectively.<sup>8)</sup>

7) This was first pointed out by Mitsuda Shinzō, " 'Suwi' 'tsuwi' 'yuwi' 'ruwi' no jion kanazukai wa tadashikarazu " 「スキ」「ツキ」「ユキ」「ルキ」の字音仮名遣は正しからず (Sino-Japanese *kana* usage for 's<sup>w</sup>i', 't<sup>s</sup>wi', 'y<sup>w</sup>i' and 'r<sup>w</sup>i' is incorrect), *Kokugakuin Zasshi* 國學院雜誌, Vol. 26, No. 7 (1920).

8) This was first pointed out by Arisaka Hideyo 有坂秀世, " 'Bōshi' nado no kanazukai ni tsuite " 「帽子」等の仮名遣について (On *kana* usage for 'bōshi', etc.), *Bungaku* 文學, Vol. 9, No. 7 (1941).

When considered in the context of discrepancies between current usage and early texts as a whole, however, the above two points represent but one small fraction of such discrepancies, and we may also note, for example, the following inconsistencies.

In Sino-Japanese *kana* usage both the *go'on* and *kan'on* readings of characters rhyming with *tung* 東 (Ancient Chinese *-iuy*), such as 弓, 終, 中, 隆 and 雄, are written キユウ, シユウ, チユウ, リユウ and ヌウ respectively, but in early texts both the *go'on* and *kan'on* forms appear in principle as キウ, シウ, チウ, リウ and イウ, and it is only the *go'on* form シユウ that tallies with Sino-Japanese *kana* usage.

In Sino-Japanese *kana* usage the *go'on* and *kan'on* readings of characters such as 江, 雙 and 邦, belonging to the *chiang* 江 rhyme (Ancient Chinese *-yŋ*), are differentiated, being written ゴウ, ソウ and ホウ in their *go'on* form and カウ, サウ and ハウ in their *kan'on* form, but in early texts both the *go'on* and *kan'on* forms appear in principle as カウ, サウ and ハウ, and the only exception is the *go'on* form ソウ for the characters 窓, and ドウ for the characters 幢 and 懂.

In Sino-Japanese *kana* usage both the *go'on* and *kan'on* readings of characters rhyming with *wu* 屋 (Ancient Chinese *-iuk*), such as 宿, 粥 and 塾, are written シユク and ジユク, but in early texts the *kan'on* forms appear only as シク and ジク, while in the case of *go'on* the two forms シク/シユク and ジク/ジユク are found to coexist.

In Sino-Japanese *kana* usage both the *go'on* and *kan'on* readings of characters rhyming with *yü* 虞 (Ancient Chinese *-iü*), such as 柱, 注, 註 and 住, are written チユウ and チユウ, but in early texts both the *go'on* and *kan'on* forms appear as チウ (チュ) and チウ (チュ) respectively.

In Sino-Japanese *kana* usage the *kan'on* reading of characters rhyming with *hou* 侯 (Ancient Chinese *-ǎu*), such as 戊, 茂, 某 and 質, is written ボウ, but in early texts they all appear as ボ.

If one examines each individual character, one will find in addition to the above examples that there are an extremely large number of instances, especially in regard to *go'on* forms, in which early texts do not agree with conventional Sino-Japanese *kana* usage, but space does not permit me to go into more detail here. Insofar that one adheres to the inductive standpoint, Sino-Japanese *kana* usage for examples such as those listed above must be emended to the forms found in early texts, but there are at present almost no dictionaries that have adopted these emendations.<sup>9)</sup>

9) In Japanese-language dictionaries compiled in recent years there has been a move to adopt these emendations. In the *Shinchō gendai kokugo jiten* 新潮現代国語辞典 (Shinchō dictionary of contemporary Japanese; Shinchōsha 新潮社, 1st ed. 1985), for example, the emendations for characters of the above *tung* 東, *chiang* 江, *wu* 屋, *yü* 虞 and *hou* 侯 rhymes have been adopted.



## VI. REMAINING PROBLEMS IN THE REVISION OF SINO-JAPANESE KANA USAGE

Supposing that one wished to revise Sino-Japanese *kana* usage on the basis of actual examples appearing in early texts, how would one then deal with the questions raised earlier concerning differentiation between the endings *-n* and *-m*, and differentiation of labiovelars of the *クキ* and *クエ* types? It is today a matter of common knowledge in the historical study of the Japanese language that in Japanese phonology prior to the Kamakura 鎌倉 period *-n* and *-m* were differentiated and *k<sup>w</sup>i* and *k<sup>w</sup>e* were distinguished from *ki* and *ke*. Therefore, if one wishes to determine Sino-Japanese *kana* usage in accordance with the logic of an inductive method based on earlier texts, it may be assumed that for the sake of logical consistency these two points must be immediately emended. In the case of characters in which the contrast between the vowels *-a* and *-e* following a labiovelar serves as the characteristic feature of the distinction between *go'on* and *kan'on* readings, as in the case of 元 (グワン [*go'on*]: グエン [*kan'on*]) and 月 (グワツ [*go'on*]: グエツ [*kan'on*]), current Sino-Japanese *kana* usage, which has been formulated on the basis of the phonology of the Edo period and gives for the above two examples 元 (グワン [*go'on*]: ゲン [*kan'on*]) and 月 (グワツ [*go'on*]: ゲツ [*kan'on*]), is today without any meaning whatsoever.

Next there is the question of which period one should go back to in seeking textual authority for determining Sino-Japanese *kana* usage by inductive means. It was noted earlier that historical *kana* usage for native Japanese words, which complements Sino-Japanese *kana* usage, is generally based on examples taken from about the second half of the Heian period. But in the case of Sino-Japanese *kana* usage it is in fact not necessarily possible to base oneself on examples from this period. This is because, being originally loanwords, the readings of Chinese characters contained elements that were initially absent from the Japanese phonological system and could therefore not be written in *kana*. For example, from the early to late Heian period (800–1100) the labiovelars *k<sup>w</sup>a*, *k<sup>w</sup>i* and *k<sup>w</sup>e* were generally written by means of homophonic characters consisting of only a few strokes, such as 火 (クワ), 鬼 (クキ) and 化 (クエ) (e.g., 還火ン, 均鬼ン and 倦化ン). It may be said that it was only from about the latter half of the Insei 院政 period (1100) onwards that such syllables with a medial *-w-* began to be written in *kana*. Thus, in the case of Sino-Japanese *kana* usage, the orthography found in actual texts is by no means uniform from one period to the next, and this raises the question of which period's usage is to be considered as authoritative. In the case of the labiovelars it is probably permissible to adopt the forms of the late Insei period, when 火, 鬼 and 化 came to be written in *kana* as クワ, クキ and クエ respectively. But how is one to deal with a case such as the following? In Sino-Japanese *kana* usage the spelling for characters such as 春 and 純 belonging to the *chun* 諄 rhyme (Ancient Chinese *-i<sup>w</sup>en*) is given as

シユン and ジユン respectively for both the *go'on* and *kan'on* forms. But in actual texts they appear as スン and ズン in the early and mid-Heian period and as シユン and ジユン for *go'on* and シキン or スキン and ジキン or ズキン for *kan'on* from the late Heian period through to the Kamakura period, and it was only during the Nanbokuchō 南北朝 period that both the *go'on* and *kan'on* forms became fixed as シユン and ジユン.<sup>10)</sup> In a case such as this it is not appropriate to prescribe Sino-Japanese *kana* usage on the basis of the evidence of one particular period, and it becomes necessary to note period differences. This too remains a problematical issue in the revision of Sino-Japanese *kana* usage.

The greatest problem arises, however, in regard to characters for which there are no instances of *kana* usage in early texts from which to derive Sino-Japanese *kana* usage by inductive means. Since in the case of native Japanese words too there are by no means reliable examples of *kana* usage for all words in texts from the Heian period, this is a problem common to both types of *kana* usage when attempting to adhere to the inductive method, but it poses a more serious problem in the case of Sino-Japanese *kana* usage in that it is not possible to find examples of *kana* usage in Japanese texts for all Chinese characters, being as they are of foreign provenance. If one wishes to adhere strictly to the principles of the inductive method, one has no choice but to leave as 'unknown' those characters for which no early examples of *kana* usage can be found and to fill these gaps when early examples do come to light. But the functions of a dictionary demand that Sino-Japanese readings be specified by some method or another for all character entries. The method adopted by contemporary Chinese-Japanese character dictionaries is accordingly the deductive method of determining Sino-Japanese *kana* usage on the basis of the *Yün-ching* and the sound glosses called *fan-ch'ieh* 反切 that are employed in rhyme dictionaries,<sup>11)</sup> a method deriving from the methods used by Norinaga and other researchers of the Edo period.

When considered in the light of these facts, one is forced to admit that the adoption of a deductive method must in itself be endorsed. Why, then, are there to be found among Sino-Japanese readings determined in this manner some that differ from the actual *kana* usage of early texts? Needless to say, this

10) An outline of the manner in which the orthography of Sino-Japanese character readings varies from one period to another may be found in Numoto, *Nihon kanjion no rekishi* 日本漢字音の歴史 (The history of Sino-Japanese; Tōkyōdō Shuppan 東京堂出版, 1986).

11) For example, in the "Explanatory Notes" to Morohashi Tetsuji 諸橋徹次 (ed.), *Dai kanwa jiten* 大漢和辭典 (Comprehensive Chinese-Japanese character dictionary; 12 vols.; Taishūkan Shoten 大修館書店, 1955-59) it is stated that its "*kan'on* and *go'on* readings are based on *fan-ch'ieh* sound glosses, and actual usage was taken into consideration in determining them" and that "the sound glosses are taken primarily from the *Chi-yün* 集韻 and *Kuang-yün* 廣韻, but reference was also made to a wide range of rhyme dictionaries and character dictionaries," thus indicating that its *go'on* and *kan'on* readings were deductively determined mainly on the basis of the sound glosses of the *Chi-yün* and *Kuang-yün*.



is because of major divergencies existing between the phonological system reflected in the *Yün-ching* and the sound glosses of rhyme dictionaries and the phonological system of the sounds forming the basis of Japanese *go'on* and *kan'on* readings, and when applying a deductive method to determine the *go'on* and *kan'on* of Sino-Japanese readings, these divergencies must be taken into account before any such method can be applied. In the following final section I shall accordingly present my own views on practical aspects of the application of such a deductive method.

#### VII. METHODS OF DETERMINING KANA USAGE FOR KAN'ON READINGS

'*Kan'on*' does not correspond to Ancient Chinese as reflected in the *Ch'ieh-yün* and *Yün-ching*, but represents a form of Japanese character readings that evolved on the basis of *ch'in-yin* 秦音 or 'Ch'in pronunciation.' '*Ch'in-yin*' corresponds to the sounds reconstructed on the basis of the sound glosses employed in the *I-ch'ieh-ching yin-i* 一切經音義 (Pronunciation guide to the Buddhist Canon) compiled by the Chinese monk Hui-lin 慧琳 (736-820), and it reflects the phonological system of the Ch'ang-an dialect, which represented the standard northern dialect of Chinese during the mid-T'ang dynasty.<sup>12)</sup> That Japanese *kan'on* evolved from this *ch'in-yin* may be inferred from the following facts.

1. When *ch'in-yin* is compared with Ancient Chinese, it is found that some rhymes that were differentiated in Ancient Chinese have become simplified and have merged together in *ch'in-yin*, and *kan'on* readings tally closely with this simplified *ch'in-yin* pronunciation.

For example, in Ancient Chinese the rhymes *t'an* 覃 (-əm) and *t'an* 談 (-am) are differentiated (that is to say, they are treated as separate rhymes in the sound glosses of the *Ch'ieh-yün* and in the *Yün-ching*). As has already been pointed out, in terms of time *go'on* stands in a close relationship to Ancient Chinese, and in their *go'on* form characters rhyming with *t'an* 覃 are written in the form -om, as in 貪 (トム), 紺 (コム) and 含 (ゴム), while characters rhyming with *t'an* 談 are all written in the form -am, as in 甘 (カム), 三 (サム) and 覽 (ラム), and there are none with the form -om. This indicates that *go'on* evolved from a phonological system in which the rhymes *t'an* 覃 and *t'an* 談 were differentiated. By way of contrast, in the case of *kan'on*, characters belonging to the *t'an* 覃 rhyme of Ancient Chinese are also all written in the form -am, as in 貪 (タム),

12) The reconstruction of *ch'in-yin*, on which the forms given below are based, may be found in Kōno Rokurō, "Chōsen kanjion no kenkyū" 朝鮮漢字音の研究 (Studies in Sino-Korean), *Chōsen Gakuhō* 朝鮮學報, Nos. 31 (1964), 32 (1964), 33 (1964), 35 (1965), 41 (1966), 42 (1967), 43 (1967) and 44 (1967) (later included in *Kōno Rokurō chosakushū* 河野六郎著作集 [Collected works of Kōno Rokurō; Heibonsha 平凡社], Vol. 2 [1979]).

紺 (カム), 含 (ガム), 堪 (カム) and 譚 (タム), and characters rhyming with *t'an* 談 are similarly all written in the form *-am*, as in 甘 (カム), 三 (サム) and 覽 (ラム); there is thus no distinction whatsoever between these two rhymes. This indicates that the *kan'on* readings are based on *ch'in-yin*, in which the two rhymes *t'an* 覃 and *t'an* 談 had merged into a single rhyme.

Let us consider a further example. In Ancient Chinese the rhymes *yu* 幽 (*-iəu*) and *yu* 尤 (*-iəu*) were differentiated, and Japanese *go'on* clearly reflects this differentiation, with characters rhyming with *yu* 幽 being written in the form *-eu*, as in 繆 (メウ), 謬 (メウ), 幽 (エウ) and 幼 (エウ), and characters rhyming with *yu* 尤 being written in the form *-iu* or *-ju*, as in 惆 (チウ), 柎 (チウ), 晝 (チウ), 周 (シユ) and 由 (ユ). In the *kan'on* readings, on the other hand, there is no distinction whatsoever between the two groups, with characters rhyming with *yu* 幽 all being written in the form *-iu*, as in 繆 (ビウ), 謬 (ビウ), 蚪 (キウ), 幽 (イウ) and 幼 (イウ), and characters rhyming with *yu* 尤 also being written in the form *-iu*, as in 惆 (チウ), 綢 (チウ), 周 (シウ), 尤 (イウ) and 由 (イウ). This example too illustrates that *kan'on* readings are based on *ch'in-yin*, in which the two rhymes *yu* 幽 and *yu* 尤 had merged into a single rhyme.

In addition, among the characters belonging to the *hou* 侯 (*-əu*) rhyme of Ancient Chinese, those with an initial *m-*, such as 母, 某, 質, 茂 and 歃, merged in *ch'in-yin* with the *mo* 模 (*-o*) rhyme and their initial consonant was also denasalized, becoming [bo]. This change was also reflected in *kan'on*, with examples from early texts giving the reading ボ and not ボウ, as in 母 (ボ), 某 (ボ), 質 (ボ), 茂 (ボ) and 歃 (ボ). This phenomenon again indicates that *kan'on* readings evolved from *ch'in-yin*.

2. In *ch'in-yin* the voiced initials of Ancient Chinese, such *b-*, *d-*, *g-* and *z-*, were devoiced, changing to *p-*, *t-*, *k-* and *s-*, and *kan'on* readings too tally closely with this devocalization evident in *ch'in-yin*.

- b-* → *p-*: 僕 (ホク), 被 (ヒ), 毗 (ヒ), 歩 (ホ), etc.
- d-* → *t-*: 銅 (トウ), 獨 (トク), 地 (チ), 台 (タイ), etc.
- g-* → *k-*: 歧 (キ), 窮 (キウ), 共 (クウ), 其 (キ), etc.
- z-* → *s-*: 續 (シヨク), 詞 (シ), 辭 (シ), 誦 (シヨウ), etc.

3. In *ch'in-yin* the nasal initials of Ancient Chinese, such as *m-*, *ɱ-*, *n-*, *ɲ-* and *ŋ-*, were denasalized, becoming *b-*, *v-*, *d-*, *d-* and *r-*, and *kan'on* readings too tally closely with this denasalization evident in *ch'in-yin*.

- m-* → *b-*: 木 (ボク), 美 (ビ), 眉 (ビ), 妙 (ベウ), etc.
- ɱ-* → *v-*: 目 (ボク), 無 (ブ), 武 (ブ), 霧 (ブ), etc.
- n-* → *d-*: 怒 (ド), 諾 (ダク), 溺 (デキ), 難 (ダン), etc.



and have been excluded from the *kan'on* system. But such an expedient is not in keeping with the historical facts of Sino-Japanese. In the case of *kan'on* readings for which *kana* usage cannot be determined inductively, a deductive method based on *ch'in-yin* should be adopted, for there is a far greater probability that this will accord with the historical facts of Sino-Japanese.

Finally, it should be noted that in the case of *go'on* it is not possible to posit the existence of a corresponding phonological system in Chinese, such as the *ch'in-yin* on which *kan'on* readings are based, that may be utilized for determining *go'on* readings deductively. This is doubtless closely linked to the question of the hybrid and multistratified nature of *go'on*. In my view, only those *go'on* readings of which there are actual examples in early texts should be recognized, and deductive measures should not be adopted in determining the *go'on* readings of characters for which there are no examples of early usage.