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,1) 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 読読 ('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* 吴音 [‘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：伊以異易易已移夷不留侖意衣依，etc.
ゐ：為衛位威問衛委興惟達達圂異胃，etc.
いう：尤郵幽暖由遊遊猶去有又友右，etc.
いゆ・ゆう：雄熊競形用形散満
いゆ・ゆ：由油柚遊遊篇饒依悠西誇純悠喻，etc.
いふ：邑揚揮揚
いやう・やう：陽楊揚癲癲羊洋養樣影，etc.
いよう・よう：用形容庸稱畏咎脾専，etc.
いむ：因姻寅引引宮舉心音飲陰陰榴，etc.
ゐむ：守允均範範院院院
いく：寛豊郁或満燁
ゐき：城極閣閣
いつ：乙一壹依佚溢徳
みて：聿鱗
ゑ：哀歎愛衣依換要曳 לקוחות
ゑゐ：恵隠極回會繪淮衛慧遠遐畫鳥
えう：遙揍謐要曜耀天疾妖窮沿途，etc.
えふ：樂誦閟篤
えい：駕曳鉢銳英盈影映栄永詠泳衝，etc.
えゐ：衛
えむ：喫咽宴塩燕淹爾延演衍沿鉛緣，etc.
ゑむ：鞍達 cerco受援鞍苑苑怨駕垣蒲園，etc.
えつ：謁咄嚼悦聞
ゑつ：越讠日鋭曦
えき：益亦突易場波波被釋驅戡戡役役
お：於徵內意億億隱隱乙應
お：哀遠怨鳥乎呼鴨嗚嘶越日惋矯汗惡
おう： 懺謨嘆顔歌
とう： 翁垂炎雄泓
ある： 奥修呂齋苗野映映樋野鶴
わう： 王往枉汪汪皇風黃黄泓
あふ： 鳳鳴押壓凹
おむ： 恩庭 CASCADE 音欣
なむ： 蚊蠅騒遠園怨苑苑
おぐ： 嘲歎億
たく： 屋
おつ： 乙
をつ： 顛顚越
きう： 九壇仇久炎答枢臼嘉求救究丘弓，etc.
きふ： 急及汲吸筸給泣蠢歎
から： 高豪告做好考晷隠隠仰向行江，etc.
こう： 公空孔工紅責口后厚既恆弘興講，etc.
くわう： 光廣育幸箇速蓮黃菊礦宏聞轟，etc.
かふ： 合蛤関治恰補夏映蓋闇甲匣狎
こふ： 業劫怯
きよう： 強仰香向響況行杏更塞京敬，etc.
きょう： 共供恭忍凶啞目興興赫競凝，etc.
けう： 肝腎及交護敟校孝孝業駅宮叫，etc.
けふ： 叶協狭狭狭詔詔細細狭狭狭
しら： 周秋秀州洲囚曾牧武親舟舟，etc.
しゅう： 衆終充僕患從縱主趨戊
しふ： 十什汁拾入習習執集総緒差諸篝，etc.
さう： 早草造曹操操賊藏莊郎籠爭爪，etc.
そう： 恩穏贈送崇宗宗走叟奏斬曾曾双，etc.
さふ： 雜風市垂揮甲葉
しゃう： 喜接昌盛終終終問問昌生青星，etc.
しよう： 鍾種聲種松頭綫称昇降丞乗，etc.
せう： 捨抄鈖召照招詔沼小覺笑細篤，etc.
せふ： 増接除細細細細細細細細
ちう： 笳抽軸骨丑羽肘肘符嫂嫂細細細
ちゅう： 中仲沖仲患患患拄拄柱柱株株
ちふ： 朧勢
たう： 稲蹈刀逃到道討盗唐堂塩崩絡柵，etc.
とう： 東鳴同童動通甫冬統頭登藤等幟，etc.
たふ： 答答蚧絡納楊
ちやう： 長張丈場暢嫁娘打貞丁町頂定，etc.
ちよう： 重夜龍剣縛繭微懸澄
てう： 朝潮兆召趨眺眺貂調蝛彩鳥條旖，etc.
てふ： 帖貼欄繡疊捲軸
なう： 鳳凰璃裳裳
のう： 農濃膽能
なふ： 納柿
にやう： 羅娘
によう： 女
ねう： 鳴鶴屎溺
ねふ： 拂
にう： 柔乳
にふ： 入
はう： 保寶報抱毛箔 Educación方望烹盲包邦，etc.
ほう： 乘豐夢封騏騏部衰戊茂卯畔朋謀，etc.
はふ： 禾法（kan'on）
はふ： 禾法（go'on）
ひやう： 平評丙病並併ぜ興兵
ひよう： 冰懐
ヘう： 豹表伎襟薄派遣繡苗廃紡霧謬，etc.
まう： 毛転冒命忙莽亡忘忘網盲盲猛，etc.
もう： 蒜蠟軸
みやう： 明名命鳴冥猛
めう： 恥苗锯廓妙
りう： 留溜覌薑鈴流策隆龍
りふ： 立笠粒
らう： 老卒洛響膠郎廃朗狼琅 acompaña
らう： 龍窪聰聰亜弄雲樓鐺鐧霧消漏，etc.
らふ： 拉蠟蠟
りよう： 良兩業梁量糧涼諧郷冷領霊，etc.
りよう： 龍安鍛網綱楞
れよう： 燃錬確了夢料冑識鰐鳴髯夢麴
れふ： 聞鼠
じ： 自示次視書慈悲事字寺侍時侍似二耳，etc.
ぢ： 治持溝尼序除柱
じや： 蛇蠔邪説謝齋若
ぢや： （no examples）
じゅ： 樹壽受授就頴鴻政芸豊需儒儒潛入
ぢゅ： （no examples）
じょ： 序敬徐舒助勳忽掬如汝茹箋
ぢよ： 除杼除紫女
じむ： 神深甚尋腎盡燼迅人仁刃忍壬任，etc.
SINO-JAPANESE KANA USAGE

ちむ：陣沈陸
じゅむ：渾慟諒鶴鶴重雑等循循閑調，etc.
ぢゆむ：（no examples）
じく：熟肉
ろく：竺軸 tànr
じやく：遅鶴雀若弱
ちやく：著
じゆく：粥熟塾
ぢゆく：（no examples）
しぐく：辱尊蝶
ちよく：燁
じつ：賞日駒栃
びつ：鉄極呪懸
じゆつ：速術徳皮匣
ちゆつ：兆忧
じき：食鱗椈
ちぎ：直
ず：（no examples）
づ：豆頭圖途徒社
ずゐ：随隨隨深薬
づゐ：（no examples）

Kana syllables ending in い and ゐ

い：あい，えい，かい，けい，きい，せい，たい，てい，ない，ねい，はい，へ
い，まい，めい，らい，れい，わい，よい，くい，ゐ。
ゐ：くゐ，すゐ，つゐ，ゆゐ，るゐ，うゐ。

Kana syllables with わ in a final or medial position

くゎ，くゎう，くゎい，くゎん，くゎく，くゎつ（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 あ 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 朧井 幌薫 wrote as follows in his On’in kanazu kai 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* つ (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* つ and *-n* ね in Sino-Japanese readings in accordance with the similar distinction made in Chinese, 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* ㇰ). 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:

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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 'shêng(-mu)' 声(母), while the remainder of the syllable is referred to as 'yün(-mu)' 韻(母), and the four tones (sù-shêng 四声) are also known as 'shêng-tiao' 声調. In Japanese, syllables without a medial are called 'chôkun' 直音 or 'plain sounds', while syllables with an *-i-* medial glide are called 'kaiyôn' 開揚音 ('open contracted sound') and syllables with a *-u-* medial glide are called 'gôyôn' 合揚音 ('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-ch’ing 録鏡 (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 魯法言 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-ch’ing, subsequently evolved (no later than 1161) and was introduced shortly afterwards to Japan, where it began to be utilized. 3) Then, using this Yün-ch’ing 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-ch’ing 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 sakui 録鏡校本と広韻索引 (Text of the Yün-ch’ing and index to the Kuang-yün; Gannandō 廣南堂, 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 Monno'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 Monno 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-shēng 平声: 'level tone'], hou 厚 [shang-shēng 上声: 'rising tone'] and hou 候 [ch'ü-shēng 去声: 'departing tone'] rhymes, the yu 尤 [p'ing-shēng], yu 有 [shang-shēng] and yu 有 [ch'ü-shēng] rhymes, and the yu 幽 [p'ing-shēng], yu 圳 [shang-shēng] and yu 幼 [ch'ü-shēng] rhymes of the Ch'ieh-yūn.)

This methodology of the Makō inkyō was an underlying factor in Norinaga's Sino-Japanese kana usage, which evolved through a partial revision of Monno's methods. The determination of go' on and kan' on on the basis of the Yün-ch'ing 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. 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. Go' on did not therefore originally correspond to the phonological system reflected in the Yün-ch'ing, 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-ch'ing.

It is also impossible to determine kana usage for Sino-Japanese kan' on on the basis of the Yün-ch'ing, 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' '日本呪音' について (On 'Japanese go' on'), Gengogaku Ronsō 音語学論叢, No. 15 (1976).

5) This thesis is found already in Mitsuda Shinzō 溝田新造, "Chōsen jion to Nihon go' on to no ruijiten ni tsuite—Chōsen ni okeru jion denrai no ōro—" 朝鮮字音と日本呪音との類似点について——朝鮮に於ける字音伝来の在路—— (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).
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SINO-JAPANESE KANA USAGE
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'ón and kan'on forms are in fact preserved in what is called 'customary pronunciation' (kan'yōon 慣用音) or 'popular pronunciation' (zokuwón 俗音), terms which distort the true situation.6)

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 クヰ (k̄ui) and クヱ (k̄ue), 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 k̄wa), 月 (グワツ gu̲atsu) and 元 (グワん gu̲an), but syllables such as 鬼 (クヰ k̄ui), 極 (クヰク k̄u̲itsu) and 均 (クヰン k̄uin) are all given as キ (ki), キツ (kitsu) and キム (kin), while syllables such as 欲 (クヱ k̄ue), 月 (グヱツ gu̲etsu) and 元 (グヱン gu̲en) 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 蛤 (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 (chokwón 直音): ア, カ, サ, ダ, ナ, ハ, マ, ラ, イ, キ, シ,
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チ，ニ，ヒ，ミ，リ，ウ，ク，ス，ツ，ヌ，フ，ム，ル，エ，ケ，セ，テ，ネ，ヘ，マ，レ，オ，コ，ソ，ト，ノ，ホ，モ，ロ。

Syllables with an -i- medial glide (kaiyōon 開拗音): キャ，シャ，チャ，ニャ，ヒャ，ミャ，リャ，リャ，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 -u- medial glide (gōyōon 合拗音): クヮ，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，フエ，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 -u- medial glide he adds the following explanation:

Chinese had a variety of syllables with a -u- medial glide, but in Sino-Japanese they have all changed into plain syllables except for syllables beginning with くゎ (kʷa) and the syllables すゎ (sʷi), つゎ (tˢʷi) and るゎ (uʷi).

This means that for Sino-Japanese kana usage the only syllables with a -u- 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，ルヰ，etc. He then continues as follows:

Although one finds 法華経 written ほくゑきやう，変化 written へんぐふ，源氏 written ぐゑんじ，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 (kʷe), but nevertheless he did not recognize its use in Sino-Japanese kana usage.

The reason that Norinaga recognized syllables with a -u- medial glide of only the クワ (kʷa) type may be assumed to have been that as a result of phonological changes the syllables クヰ (kʷi) and クヱ (kʷe) had by his time changed to キ (ki) and ケ (ke) respectively and that syllables with a -u- medial glide of the クヰ and クヱ 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 -u- medial glide of the スヰ (sʷi), ツヰ (tˢʷi) and ルヰ (rʷi) type Norinaga also recognized クヰ (kʷi) (cf. “Kana syllables ending in い and わ,” 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 くも (kumo) 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 kwi
but have since changed to the plain ki. . . . The characters that may
also be written くも are 規関隕, etc.

Therefore, in addition to き, Norinaga also recognized くも in his Sino-Japanese
kana usage for characters such as 规 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, クワ and クワン have remained in Japanese.
(In contemporary Japanese there are a small number of dialects preserving the
forms [k'wa'ji] for kashi 黑子 and [k'wa'ji] for kaji 火事, but it will not be long be-
fore 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 え 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 え and -n being
written ね. 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 漢呂音図 (Phonological Tables of Kan’on and Go’on; 1815) by Ōta
Zensai 太田全斎 and Yōjirei 儒字例 (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 え for both -m
and -n, today they are both written え). 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 sho* (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), 壟 (ルキ) and 唔 (ユキ) are written with ニ, but in early texts these characters are without exception all written with ニ, namely, 水 (スキ), 追 (ツイ), 壟 (ルイ) and 唔 (ユイ). In these instances ニ has therefore been emended to ニ. 7)

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), 鬼 (サウ), 刀 (タウ) and 労 (ラウ), are in the case of labial initials written 賢 (ホウ), 報 (ホウ), 帽 (ポウ) and 毛 (モウ) in early texts. In such cases ハウ, パウ and マウ have accordingly been emended to ホウ, ポウ and モウ respectively. 8)

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7) This was first pointed out by Mitsuda Shinzō, “‘Suwi’ tsuwi’ ‘yuwi’ ‘ruwi’ no jion kanazukai wa tadashikarazu” (Sino-Japanese kana usage for *'sui*i’, *'tu*i’, *'yu*i’ and *'ru*i’ is incorrect), *Kokugakuin Zasshi* 国学院雑誌, Vol. 26, No. 7 (1920).

8) This was first pointed out by Arisaka Hideyo 有坂秀世, “‘Bōshi’ nado no kanazukai ni tsuite” (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 -iun), such as 弓, 終, 中, 隆 and 雄, are written キュウ, シュウ, チュウ, リュウ and エウ 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 シュウ 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 郡, belonging to the chiang 江 rhyme (Ancient Chinese -iun), 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 江, and ドウ for the characters 雙 and 郡.

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, 島 and 塾, are written シュウ and ジュウ, but in early texts the kan’on forms appear only as シュ and ジュ, while in the case of go’on the two forms シュ/シュウ and ジュ/ジュウ are found to coexist.

In Sino-Japanese kana usage both the go’on and kan’on readings of characters rhyming with yu 延 (Ancient Chinese -iuição), such as 柱, 注, 註 and 住, are written チュウ and チュウ, but in early texts both the go’on and kan’on forms appear as チュ (チュ) and チュ (チュ) respectively.

In Sino-Japanese kana usage the kan’on reading of characters rhyming with hou 候 (Ancient Chinese -iuição), such as 戊, 茂, 某 and 賢, 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.9)

9) In Japanese-language dictionaries compiled in recent years there has been a move to adopt these emendations. In the Shinshō gendai kokugo jiten 新潮現代国語辞典 (Shinshō dictionary of contemporary Japanese; Shinshōsha 新潮社, 1st ed. 1985), for example, the emendations for characters of the above tung 東, chiang 江, wu 屋, yu 延 and hou 候 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 クヰ and クヱ 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 period -n and -m were differentiated and k威 and kヱ 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 (ダウン [go'on]: グエン [kan'on]) and 月 (ダウン [go'on]: グエン [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 (ダウン [go'on]: ゲン [kan'on]) and 月 (ダウン [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威 and kヱ were generally written by means of homophonic characters consisting of only a few strokes, such as 火 (クワ), 鬼 (クヰ) and 化 (クヱ) (e.g., 返火, 均鬼 and 僖化). 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 -०- 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, クヰ and クヱ 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 詰 rhyme (Ancient Chinese -iœn) is given as
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シユン and ジュン respectively for both the go'on and kan'on forms. But in actual texts they appear as シュ and ジュ in the early and mid-Heian period and as シュン and ジュン for go'on and シュキン or シュキン and ジュン or ジュキン 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 シュン and ジュン.10 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 Yin-ching and the sound glosses called fan-ch'ieh 反切 that are employed in rhyme dictionaries,11 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 諸橋郁次 (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 広韻, 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-ch'ing 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-ch'ing, but represents a form of Japanese character readings that evolved on the basis of ch'în-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-ch'ing 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. That Japanese kan’on evolved from this ch’în-yin may be inferred from the following facts.

1. When ch’în-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’în-yin, and kan’on readings tally closely with this simplified ch’în-yin pronunciation.

For example, in Ancient Chinese the rhymes t’an 談 (-am) 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-ch’ing). 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 談 are written in the form -om, as in 貧 (トム), 親 (キム) 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 覧 (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 談 and t’an 談 were differentiated. By way of contrast, in the case of kan’on, characters belonging to the t’an 談 rhyme of Ancient Chinese are also all written in the form -am, as in 貧 (トム),

12) The reconstruction of ch’în-yin, on which the forms given below are based, may be found in Kôno Rokurô, “Chôsen kanjon no kenkyû” 朝鮮漢字音の研究 (Studies in Sino-Korean), Chôsen Gakuhô 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 Kôno Rokurô chosakushû 河野六郎著作集 [Collected works of Kôno Rokurô; Heibonsha 平凡社], Vol. 2 [1979]).
紃 (カム), 含 (ガム), 堤 (カム) and 訥 (タム), and characters rhyming with t’an 諫 are similarly all written in the form -am, as in 甘 (カム), 三 (サム) and 覚 (ラム); there is thus no distinction whatsoever between these two rhymes. This indicates that the kan’on readings are based on ch’i-n-yin, in which the two rhymes t’an 諫 and t’an 諫 had merged into a single rhyme.

Let us consider a further example. In Ancient Chinese the rhymes yu 窪 (-iêu) and yu 尤 (-iêu) were differentiated, and Japanese go’on clearly reflects this differentiation, with characters rhyming with yu 窪 being written in the form -eu, as in 纡 (メウ), 諧 (メウ), 謂 (エウ) and 幼 (エウ), and characters rhyming with yu 尤 being written in the form -iêu or -ju, as in 僞 (チウ), 桀 (チウ), 漏 (チウ), 督 (ショウ) 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 窪 all being written in the form -iêu, as in 纡 (ピウ), 諧 (ピウ), 謂 (キウ), 窬 (イウ) and 幼 (イウ), and characters rhyming with yu 尤 also being written in the form -iêu, as in 僞 (チウ), 桀 (チウ), 督 (ショウ), 尤 (イウ) and 由 (イウ). This example too illustrates that kan’on readings are based on ch’i-n-yin, in which the two rhymes yu 窪 and yu 尤 had merged into a single rhyme.

In addition, among the characters belonging to the hou 候 (-iêu) rhyme of Ancient Chinese, those with an initial m-, such as 母, 某, 賀, 茂 and 賊, merged in ch’i-n-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), 賀 (ボ), 茂 (ボ) and 賊 (ボ). This phenomenon again indicates that kan’on readings evolved from ch’i-n-yin.

2. In ch’i-n-yin the voiced initials of Ancient Chinese, such b-, d-, g- and z-, were devoiced, changing to p-, l-, k- and s-, and kan’on readings too tally closely with this devocalization evident in ch’i-n-yin.

b- → p-: 僕 (ホク), 被 (ヒ), 毗 (ヒ), 歩 (ホ), etc.
d- → l-: 鋼 (トウ), 独 (トク), 地 (チ), 合 (タイ), etc.
g- → k-: 歳 (キ), 窬 (キウ), 共 (クウ), 共 (キ), etc.
z- → s-: 續 (ショク), 釧 (シ), 訓 (シ), 訓 (ショウ), etc.

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

m- → b-: 木 (ボク), 美 (ピ), 眉 (ピ), 妙 (ペウ), etc.
n- → d-: 怒 (ド), 訃 (ダク), 潦 (デキ), 難 (ダン), etc.
n- → d-: 女 (デヨ), 尼 (チャン), 資 (デウ), 鳥 (デウ), etc.

n- → r-: 戦 (ジウ), 水 (ジ), 二 (ジ), 日 (ジツ), etc.

4. Among the shang-shêng characters of Ancient Chinese, those with a voiced initial such as b-, d-, g- and z- were not only devoiced in ch’iin-yin, but their tone also changed to ch’ü-shêng, and there is evidence of the same phenomenon in early examples of kan’on. It may, in other words, be clearly stated in regard to accent too that kan’on readings derived from ch’iin-yin.

Owing to limitations of space, I cannot go into this subject in further detail here, but as is evident from the above four points, kan’on represents a form of Sino-Japanese readings that evolved on the basis of ch’iin-yin, and it is therefore obvious that a deductive method totally dependent upon the sound glosses of the Ch’iieh-yin and Kuang-yin 庚韻 and the Yün-ching, reflecting as they do Ancient Chinese, is not tenable. Hence it is hardly surprising that Sino-Japanese kana usage for kan’on readings current since the Edo period should include many elements that do not accord with actual examples of usage found in early texts.

It will now be understood that one may assume that in the case of characters the kan’on reading of which must be determined deductively (that is, characters for which there are no examples of usage in early texts) the kan’on reading must be determined on the basis of the phonological system of ch’iin-yin. This may be demonstrated by means of the following example.

The Kuang-yin gives a total of 444 characters belonging to the hou 候 (-ђу) rhyme of Ancient Chinese, consisting of 157 p’ing-shêng characters (e.g., 候, 賢, 羅, 樓 and 滬), 138 shang-shêng characters (e.g., 厚, 部, 斗 and 斃), and 149 ch’ü-shêng characters (e.g., 候, 寇, 茂, 仆 and 豆). Hitherto the kan’on readings for all these characters have been of the same -ou form (i.e., オウ, コウ, ゴウ, ソウ, ゾウ, トウ, ドウ, ホウ, ポウ, etc.). But in ch’iin-yin characters of the hou 候 rhyme with an initial m- merged with the mo 模 (-o) rhyme (and simultaneously changed from m- to b-). Therefore, among the above 444 characters, the kan’on reading of the following characters should be emended to ボ:

母, 牡, 某, 接, 腿, 欅, 悅, 芊, 猟, 綺, 綺, 茂, 贅, 鄰, 戎, 愉, 愉, 慈, 慈, 慈, 慈, 慈, 慈, 慈.

Through the application of a deductive method based on Ancient Chinese, current dictionaries recognize fictitious kan’on readings such as 母 (ポウ) and 牡 (ポウ), and as a result the readings 母 (ポ) and 牝 (ポ) found in early texts have been designated ‘customary pronunciation’ or ‘popular pronunciation’.

13) Further details may be found in Numoto, op. cit, (n. 10).
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'ın-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'ın-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.