

EARLY ADAPTATIONS OF THE KOREAN SCRIPT TO RENDER FOREIGN LANGUAGES

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Usage of the Korean alphabet, *han'gŭl* 한글, is for the most part restricted to write Korean itself and so far there has not been any other language it is commonly associated with as its default script. How deeply rooted this one-to-one correspondence is can neatly be illustrated by the appellation *hanguru-go* or even simply *hanguru* (ハングル[語], i.e. 'han'gŭl [language]') currently in use in Japan besides various others to refer to the modern Korean language.

Little time had passed however since its creation in the 1440s before *han'gŭl* was used to render a variety of foreign languages, often in order to serve didactic purposes. Especially at the so-called Sayŏgwŏn 司譯院, or Bureau of Interpreters, it was widely employed to gloss the pronunciation of neighboring languages such as the following. The earliest date each language can be demonstrated to have been rendered in *han'gŭl* is provided in brackets, dates of non-extant texts are starred:

– Chinese (*1450s: *Sasŏng t'onggo* 四聲通攷)

The *Sasŏng t'onggo* is one in a series of early rime dictionaries to which also belong the contemporary *Hongmu chŏngun yŏkhun* 洪武正韻譯訓 (1455), a Korean adaptation of the Míng period rime dictionary *Hóngwǔ zhèngyùn* 洪武正韻 (1375), and the *Sasŏng t'onghae* 四聲通解 (1517). Besides we find for instance a Chinese–Korean dictionary *Yŏgŏ yuhae* 譯語類解 (1690, addendum 1775) and fully glossed textbooks like *Pŏnyŏk Nogŏltae* 翻譯老乞大 and *Pŏnyŏk Pak t'ongsa* 翻譯朴通事, both of which were first published no later than 1517 and enjoyed several revisions in the 17th and 18th centuries.

– Japanese (1492: *Irop'a* 伊路波)

Most important here apart from the brief primer *Irop'a* is the *Ch'ŏphae sinŏ* 捷解新語 series of bilingual textbooks with three major installments featuring transcriptions in *han'gŭl* (1676, 1748 and 1781). The only dictionary published in print is the late 18th century *Waeŏ yuhae* 倭語類解.

- Ryūkyūan (1501: “Öüm pönyök” 語音翻譯)
Among the languages taught at the Bureau Ryūkyūan was clearly secondary. In 1437, for instance, students of Japanese were made to take up the study of Ryūkyūan as well, but sources are silent on the teaching materials used. While not compiled at the Bureau, *han'gŭl* transcriptions of interest are also found in the early 19th century *P'yohaerok* 漂海錄 besides the above-mentioned “Öüm pönyök”, an appendix to *Haedong chegukki* 海東諸國紀 (1471).
- Manchu (*1704: *Ch'öngö nogöltae* 清語老乞大)
The extant works on Manchu mostly date from the second half of the 18th century. Among the textbooks we find revisions of *Ch'öngö nogöltae* (1765), *Samyök ch'onghae* 三譯總解 (1774), *P'alsea* 八歲兒 and *Soaron* 小兒論 (both 1777; all four previously published in *1704); to these we can add two dictionaries, namely *Tongmun yuhae* 同文類解 (1748) and *Han Ch'öngmun'gam* 漢清文鑑 (1779?).
- Mongolian (*1737: *Ch'öphae mongö* 捷解蒙語)
All extant works on Mongolian date from the year 1790: Revised editions of the textbooks *Ch'öphae mongö* and *Mongö nogöltae* 蒙語老乞大 (previously published in *1741, *1766) as well as a new edition of the dictionary *Mongö yuhae* 蒙語類解 (first edition *1768).

To a greater or lesser extent all of these languages differ from Korean in respect to their inventory of sounds as well as their phonotactical rules to combine these sounds. Apart from a certain conservativeness in writing—namely in that letters that dropped out along with the corresponding phonemes in Korean over the course of its history were retained (e.g. <z> △)¹—this led to a range of innovations, or to put it differently, to a number of deviations from the prototypical usage of the script as used to write Korean.

¹ While McCune-Reischauer romanization is used here for Korean names and titles, it is insufficient for the transcription of the entire repertoire of *han'gŭl* letters, i.e. including those discussed in the following. Therefore, an expanded and somewhat modified version of Yale romanization has been adopted instead for these purposes, in which the basic consonants are transcribed the same, but which also provide transcriptions for all the special letters used for Chinese and other languages (on which see tables 1, 2 and 5). Concerning vowels (cf. table 8), <ɛ, o> and likewise <i, u> is written instead of Yale <o, wo> and <u, wu> respectively, which is arguably a more intuitive choice of symbols, but also helps avoiding ambiguities involving <w> 뽕. Finally, <ə> is used instead of <e>, but <e, ɛ> is written for the *modern* monophthongs deriving *historically* from the diphthongs written <əy, ay> here; Yale has <ey, ay> for these instead, regardless of their actual phonetic realization at the relevant time.

In the following some of the more important deviations from common usage will be outlined, largely drawing upon works for the instruction in Chinese, Japanese and Manchu at the Bureau of Interpreters, with some additional materials of later times unrelated to the Bureau.

Additional Letters

The dividing line between (compositionally complex) letters and cases involving diacritical marks is hard to draw at times. For practical purposes we will consider a circle placed *outside* the syllable block as a diacritical mark, whereas one placed below or next to a consonant letter and integrated into the syllable block proper as part of a complex letter.

Type A: Doubled base letter

Since the days of its creation *han'gŭl* included several letters unnecessary to write Korean proper, but indispensable when it came to reducing early Sino-Korean and especially Chinese to writing. As early as 1448 a rime dictionary for a prescriptive system of Sino-Korean character readings was published in form of the *Tongguk chöngun* 東國正韻. The system was relatively short-lived and replaced before the end of the century, in all likelihood mainly due to fact that it contained distinctions not to be found in Korean (and thus likewise not in Sino-Korean as it was in actual use either). It is exactly these distinctions which gave rise to the first type of additional letters: those formed by means of doubling a given base letter.

In order to imitate the tripartite distinction between voiceless unaspirated (*quánqīng* 全清), voiceless aspirated (*cīqīng* 次清) and voiced unaspirated obstruent initials (*quánzhuó* 全濁) found in Chinese, distinct letters for voiced obstruents had to be added. This was done by doubling the letters used for initially voiceless unaspirated obstruents as shown in table 1 together with the regular letters for aspirates (only the pronunciation in word-initial position if used for Korean proper is indicated for the base letters).²

² It is commonly believed that the letter <h> already stood for [h] at the time of the alphabet's creation—that is, just as it does today—, but for various reasons an original [x] seems likely, which underwent lenition only later on.

Table 1. Base and derived letters

	ㄱ	ㄷ	ㅂ	ㅈ	ㅅ	ㅎ
base letters (voiceless)	k [k]	t [t]	p [p]	c [tʃ]	s [s]	h [h] ([x])
derived letters (voiced / glottalized)	g [g]	d [d]	b [b]	j [dʒ]	z [z]	x [χ]
	kk [kʰ]	tt [tʰ]	pp [pʰ]	cc [tʃʰ]	ss [sʰ]	hh [hʰ] ([xʰ])
derived letters (aspirated)	ㅋ [kʰ]	ㅌ [tʰ]	ㅍ [pʰ]	ㅊ [tʃʰ]		

Another set of such doubled letters to indicate voiced consonants in Chinese will be dealt with below under type C. Outside Sino-Korean or renderings of Chinese the derived letters given above are commonly considered to render geminate or glottalized obstruents just as in current usage. As overt borrowings from Chinese were accompanied by their respective characters in early printed text, their presence would then have triggered the derived letters' voiced reading as opposed to an interpretation as geminates.

In passing a further letter created in the same way deserves mentioning, namely <nn> ㄴㄴ, which is found both in Korean texts and in foreign language materials. As <n> ㄴ already renders a voiced /n/, it is obvious at first sight that here the doubling of the base letter can only be understood as standing for gemination or long articulation. The attestations of <nn> provided by Nam (1997: 354)—in all of which it renders /nn/ as the result of assimilation of stem-final /h/ to the initial /n/ of an attached suffix—confirm this.

At least in the materials on Japanese there are then also cases of <nn> clearly rendering a long nasal. In the 1676 print of the *Ch'ŏphae sinŏ* for instance we find Japanese *nan=no* 'what? + attributive' written as <nanno> ㄴㄴ노 (X/32b). The exact motivation here and elsewhere is somewhat unclear, it is safe to say however that in the works on Japanese it is always the geminate reading of the doubled letters that is intended, never the voiced one as with Chinese.

Table 2. Letters with circle beneath

	ㅍ	ㅑ	ㅓ	ㅕ
base letters (bilabial)	p [p]	ph [pʰ]	b [b]	m [m]
derived letters (labiodental)	f [f]	fh [fʰ]	v [v]	w [w] ([w])

Type B: Base letter plus circle

Unlike bilabials, labiodentals are lacking altogether in Korean,³ while the variety of Chinese recorded in the above-mentioned materials had a stable phonemic opposition of bilabials versus labiodentals (*zhòng chún yīn* 重唇音 'heavy lip sounds' versus *qīng chún yīn* 輕唇音 'light lip sounds' in traditional terminology). A truthful transcription thus required means to differentiate the two types of labials. In view of the fact that the Chinese labiodentals developed out of earlier bilabials it is unsurprising to find the letters for labiodentals being similarly derived in a regular fashion from the already existing set of letters for bilabials: simply by adding a circle beneath the base letter (see table 2).

The distinction between <f> ㅑ and <fh> ㅓ appears to be a theoretical one and is, in all likelihood, merely etymologically motivated: /f/ from /p/ could be written as <f> ㅑ, while /f/ from /ph/ would then give <fh> ㅓ. In fact however, <fh> was not even used in the earliest works like *Hongmu chŏngun yŏkhun* or *Sasŏng t'onggo*. In the explanatory notes to the latter (item 4), which are quoted and thus preserved in the later *Sasŏng t'onghae*, its author Sin Sukchu 申叔舟 (1417–1475) explicitly mentions the non-existence of such a distinction in contemporary Chinese and his decision to use <f> throughout. Some examples of how the base letters as well as the derived ones were used to render Chinese are provided in table 3 (taken from *Hongmu chŏngun yŏkhun* XI, rime 5; the initials in the modern standard pronunciation given here in Pīnyīn for the sake of comparison are straightforward, but note: b [p], p [pʰ]).

³ Maybe apart from a short-lived phoneme—the pronunciation of which in intervocalic position is usually considered to have been bilabial [β] but which might perhaps have been labiodental [v]—as the result of lenition of original /p/, intervocalically [b].

Table 3. Examples for the two labial series

character	bù 布	pù 鋪	bù 步	mù 暮
bilabial initials	pu ㅍ	phu ㅍ	bu ㅍ	mu ㅍ
character	fù 付		fù 父	wù 務
labiodental initials	fu ㅍ	(fhu ㅍ)	vu ㅍ	wu ㅍ

In the *Irop'a* of 1492 both <f> and even <fh> are used to render the bilabial fricative of Japanese, but in a rather unsystematic fashion and in fact only in one portion of the work. In another portion <ph> and also <h> are found instead. Syllabic /u/ is further rendered here as <wu> ㅍ once, which is reminiscent of several early European transcriptions of the Japanese syllabary: To name but a few cases, Meister (1692: plate “Das Japansche A.B.C.”) writes “wu”, Müller (1694: “Syllabarium Japonicum geminum”) similarly “wou” and Overmeer Fisscher (1833: plate “Het Japansch Alphabet met zogenaamde Katakane letters”) has “woe”. However the main bulk of works on Japanese used at the Bureau, all published during the course of the 17th and 18th centuries, makes no use of the set of letters <f, fh, v, w>. The only early source on Ryūkyūan on the other hand, the “Öüm pōnyōk” of 1501, uses <w> for word-initial *w-* on several occasions (all for the first person pronoun *wan*), but none of the other letters.⁴

Out of the four derived letters only <f> ㅍ occurs regularly in works on languages other than Chinese. Labiodental /f/ in Manchu is exclusively rendered as <f> in works using what might be termed a narrow transcription (i.e. making use of special letters and diacritical marks, on the latter of which see below), while those using a broad one resort to the best match available in Korean proper, namely <ph> ㅍ. The latter is also the default way to incorporate foreign labial fricatives in borrowings to the present day.

In times postdating the Bureau's activities we find further cases of employing circles to indicate articulations that are different from, yet still similar to some extent to that of the base letters they are attached to. Unlike the early cases with superscript circles, the transcriptions of English found in the quatorlingual vocabulary *Ahakp'yōn* 兒學編 of 1908

⁴ The variety of Ryūkyūan reflected in this source is usually considered to have retained /p/ as a stop, either entirely so that labial fricatives did not yet exist at all (thus e.g. Hattori 1979: 89), or at least partially, so that the newer fricative articulation co-existed with the older plosive one (e.g. Tawata 1979: 27).

Table 4. Transcriptions of English words in *Ahakp'yōn*

derived letter	sound value	English	transcription	page
<f> ㅍ	[f]	knife	na-i-ft 나이 ㅍ	27a
<v> ㅍ	[v]	have	he-vi 헤 ㅍ	51a
		thin	pin ㅍ	50b
<p'> ㅍ	[θ] ~ [ð]	mother	mo-pə 모 ㅍ	1a
<p²> ㅍ		throat	pi-lo-thi ㅍ 로트	5a

use a set of letters derived by placing a circle to the left of the base letter. Labiodental /f/ and /v/ are regularly rendered by <f> (or <°ph>) ㅍ and <v> (<°p>) ㅍ respectively, while the interdentalals are transcribed as either <p'> (<°c>) ㅍ or less commonly <p²> (<°t>) ㅍ without a clear-cut voicing distinction. The derived letters and some sample transcriptions found in this work are presented in table 4.⁵

Type C: Mirrored letters

Sibilants in Middle Korean are generally deemed to have been alveolar ([s, ts] &c.), possibly with alveopalatal allophones ([ç, tç] &c.) before front vowels or palatal glides. Retroflex articulation seems not to have been known in Korean at any time.

Just as today's standard language the variety of Chinese taught at the Bureau further distinguished a series of retroflex sibilants ([ʃ, tʃ] &c.) however, which stood in opposition to the alveolar—or possibly dental, if one follows Sin Sukchu's explanatory notes to his *Sasōng t'onggo*—and alveopalatal ones.

In an attempt to cope with this situation a way of distinguishing between retroflexes and the rest was devised based on the symmetric nature of the sibilant base letters: prolonging the stroke pointing to the lower right indicated retroflex articulation, while doing the same with the one pointing to the lower left indicated absence of such articulation. See table 5 for the letters in question together with their sound values, and

⁵ Both ㅍ and ㅍ are already found in *Waeō yuhae*, needless to say however not to render interdentalals, but rather as clusters of nasal plus obstruent, i.e. <ngt> and <ngc>. Occurring each only once (I/45a, I/12a), they are undoubtedly mere misprints for <nt> and <nc> respectively.

Table 5. Mirrored sibilant letters

base letters	ㄷ	ㄸ	ㄹ	ㄺ	ㄻ
modified base letters ([post-]alveolar)	ㅅ [s, ɕ]	ㅆ [z, ʑ]	ㅈ [tʃ, tɕ]	ㅊ [tʃʰ, tɕʰ]	ㅉ [dʒ, dʒ]
mirrored letters (retroflex)	ㅅʀ [ʂ]	ㅆʀ [ʑ]	ㅈʀ [ʈʂ]	ㅊʀ [ʈʂʰ]	ㅉʀ [ɖʒ]

table 6 for illustrations as to how these ten letters were used to transcribe minimal pairs in Chinese (taken from *Hongmu chǒngun yǒkhun* IV, first tone, rime 11; the initials in Pīnyīn are as follows: *x* [ɕ], *j* [tɕ], *q* [tɕʰ]; *sh* [ʂ], *zh* [ʈʂ], *ch* [tʃʰ]).

As far as the basic letter shapes are concerned, parallels or similarities between the Korean and Tibetan scripts have been noticed since the early 19th century, thus for instance by Abel-Rémusat (1820: 83f.), Siebold (1832ff.: VII, 14), Wall (1840: 254ff.) and others. It is also possible however to find parallels between the two scripts on another level, namely in at least one of their approaches of deriving new letters from already existing ones. In Tibetan we thus find a set of letters devised to render retroflex consonants occurring in Sanskrit, all of which are formed by mirroring their non-retroflex counterparts (see table 7; the inherent vowel is ignored in giving the letters' respective sound values). The corresponding 'Phagspa letters are also provided for reference.⁶

In view of the influence the 'Phagspa script as a descendant of the Tibetan script is deemed to have had on *han'gŭl* (cf. especially Ledyard 1966 [1998]) it is suggestive to see the same principles applied here as well. At least the letters for /t, ʈ, d, ɖ/ used to write the corresponding sounds in Sanskrit words, as attested in the hexaglot Jūyōng guān 居庸關 inscription of 1345, were created by mirroring the base letters for /t, th, d, n/. One can only surmise that 'Phagspa served as a model for *han'gŭl* here—the analogy at least is perfect.⁷

⁶ 'Phagspa *sh(a)* ㅅ was used to transcribe both Sanskrit ś [ɕ] and ʂ [ʂ] (Higuchi 2001: 731), while what appears to be its mirrored version at first glance is actually the unrelated letter ㅆ, variously claimed to represent either a glottal stop [ʔ] or a phonetic zero.

⁷ Incidentally Ledyard (1966: 341 [1998: 411]) even reproduces the mirrored <n> for /ɖ/ in a table taken from Hope (1957: 151), but the following comment leaves no doubt that at

Extension of Possible Syllable Block Structures

Middle Korean had seven vowels /a, ə, o, u, ʌ, i, i/, most of which could be followed by an additional palatal glide, the first four also preceded by one. Alternatively /a, ə/ could also be preceded by a labial semivowel. While the letters <i, a, ə> now have a vertical baseline, <i, o, u> have a horizontal one. <ʌ> (nowadays obsolete) consists merely of a single dot, in terms of shaping behavior of syllable blocks however it equals the vowels with horizontal baseline. When two vowel signs with vertical baseline occur together, the second is always <i> to render the off-glide /y/ (phonetically [j]) in a falling diphthong of the type /Vy/. Vowel signs with horizontal baseline on the other hand do not normally co-occur within a single syllable block. In combinations of vowel signs with horizontal and vertical baselines they only occur in exactly that order. All structures described so far are summarized in table 8.⁸

least at the time of writing he was not aware of the existence of mirrored letters in 'Phagspa: "As for the PP [= 'Phagspa; S.O.] letter that Hope labels "(N)," I may be making a bad blunder, but I have never seen this letter in other PP lists. It is not even in Hope's list in his other publication (1953). Where did this come from?" (Ledyard 1966: 343 [1998: 413]). It is certainly true that the letters for the retroflexes are indeed somewhat underrepresented in the literature on the script—arguably as most studies focus on either Mongolian or Chinese texts in 'Phagspa script, in neither of which the letters in question ever occur—and they were likewise not included in the early lists of 'Phagspa letters, such as those found in *Měnggǔ zìyùn* 蒙古字韻 (1308), *Fǎshū kǎo* 法書考 (1334), *Shūshǐ huìyào* 書史會要 (1376) or *Yuánshǐ lèibīān* 元史類編 (1706; based on the preceding work). Now, to answer Ledyard's question: Hope's "N" ultimately goes back to its occurrence in the Jūyōng guān inscription, part of which he quoted in 1953 in "Schedule IV. A hPhags-pa Sanskrit Text" noting explicitly in the beginning "that reversed N is used for N, as in Tibetan." One is left to wonder, however, why Hope (and a number of earlier and later scholars with him) did not notice the other mirrored letters as well, as in fact even the partial quote in "Schedule IV" alone also features mirrored <t> for /t/ for instance – not to speak of the longer collated version in all six scripts provided already by Wylie (1870) or the facsimile of the relevant portion found shortly after in Yule (1871, I: plate following page 28). Finally, owing to Bonaparte's magnificent *Documents de l'époque mongole* (1895) a reproduction of the original inscription had also long been readily available. Clauson (1959: 304), one of Ledyard's other sources on the 'Phagspa script, in fact even touches upon transcriptions of Sanskrit and specifically the Jūyōng guān inscription as well, stating clearly: "The other problem, that of representing the cerebral sounds, was solved, as it had been in Tibetan, by reversing the corresponding dental letters."

For more recent inventories of 'Phagspa letters, no longer excluding the mirrored ones, see for instance Junast/Yáng (1984: 381) or Higuchi (2001: 729).

⁸ The explanation of the script in *Hunmin chōngŭm* 訓民正音 (*haerye-bon* 解例本 of 1446; 23a) also provides for syllables such as /kʏʌ/ ㄱᄡ and /kyi/ ㄱᄡᄡ (not to be confused with /kʏy/ ㄱᄡᄡ and /kiy/ ㄱᄡᄡ), which however did not occur in Middle Korean. Note the unusual arrangement here of vowel signs with vertical and horizontal baseline in that order.

Table 6. Examples for the two sibilant series

character	<i>xiān</i> 先	<i>xián</i> 涎	<i>jiān</i> 煎	<i>qiān</i> 千	<i>qián</i> 前
non-retroflex initials	<i>syen</i> 선	<i>zyen</i> 션	<i>cyen</i> 견	<i>chyen</i> 천	<i>jyen</i> 전
character	<i>shān</i> 糶	<i>chán</i> 筵	<i>zhān</i> 氈	<i>chǎn</i> 燁	<i>chán</i> 蟬
retroflex initials	<i>sryen</i> 션	<i>zryen</i> 써	<i>cryen</i> 견	<i>crhyen</i> 천	<i>jryen</i> 션

Table 7. Mirrored letters for retroflexes in Tibetan and 'Phags-pa

	ཏ	ཐ	ད	ན	འ
base letters (non-retroflex)	ཏ	ཐ	ད	ན	འ
	t(a) [t]	th(a) [tʰ]	d(a) [d]	n(a) [n]	sh(a) [ɕ]
	ཏ	ཐ	ད	ན	འ
mirrored letters (retroflex)	ཏ	ཐ	ད	ན	འ
	ṭ(a) [ṭ]	tḥ(a) [ṭʰ]	ḍ(a) [ḍ]	ṇ(a) [ṇ]	ʃ̣(a) [ɕ̣]

Table 8. Possible vowel combinations in Middle Korean

S-	V	-S	V	Vy	yV	yVy	wV	wVy
	a		a ㅏ	ay ㅑ	ya ㅓ	yay ㅕ	wa ㅗ	way ㅛ
(y) / (w)	ə		ə ㅓ	əy ㅑ	yə ㅓ	yəy ㅕ	wə ㅓ	wəy ㅑ
	o		o ㅗ	oy ㅛ	yo ㅜ	yoy ㅠ		
(y)	u	(y)	u ㅜ	uy ㅠ	yu ㅠ	yuy ㅠ		
	ʌ		ʌ ㅓ	ʌy ㅑ				
	i		i ㅓ	iy ㅑ				
	i		i ㅓ					

Table 9. Examples for extended syllable block structures

character	Manchu transcr.	Korean transcr.	page
<i>liáng</i> 涼	<i>liyang</i> 𐮎𐮚	<i>liyang</i> 량	I/2b
<i>piāo</i> 颯	<i>piyao</i> 𐮎𐮚𐮛	<i>phiyao</i> 환	I/16b
<i>liǔ</i> 柳	<i>lio</i> 𐮎𐮚	<i>liu</i> 루	I/7a
<i>nǚ</i> 女	<i>nioi</i> 𐮎𐮚𐮛	<i>nyuy</i> 뉴	I/6a
<i>yuè</i> 月	<i>yuwei</i> 𐮎𐮚𐮛	<i>yuəy</i> 웨	I/3b
<i>dǒu</i> 斗	<i>deo</i> 𐮎𐮚	<i>tiu</i> 투	I/4b

This framework is now considerably expanded when it comes to transcriptions of Chinese and, to a lesser extent, also Manchu, Mongolian and Japanese. We therefore find examples like those found in table 9 taken from the late 18th century *Han Ch'ongmun'gam* with syllable blocks arranging vowels with vertical and horizontal baselines in that order (<ya-o>, <i-u>), containing two vowels with vertical baseline of which not the second but the first is <i> (<i-ya>), combining the first two structures (<i-ya-o>) or arranging two vowels with horizontal baseline (<i-u>) from top to bottom. Also there are cases which are not special as far as they arrangement is concerned, but which still feature constellations that do not normally occur in Korean, such as tautosyllabic <yuəy>. As these are not direct transcriptions of Chinese but rather re-renderings of the Manchu transcriptions found in the *Qīngwénjiàn* 清文鑑 as the model of the *Han Ch'ongmun'gam* we provide these original transcriptions as well.

As far as vocalism and thus the structure of syllable blocks in this respect is concerned the materials on Japanese yield not exactly much apart from the frequent appearance of <mou> ㅞ to render part of the stem of the

The prescriptive Sino-Korean readings in *Tongguk ch'ongun* furthermore allowed /yuyə/ in closed and /yuyəy/ in open syllables. Later Sino-Korean at least also features the latter in the reading of some characters.

verb *mōsu* ‘(humble for:) to say’. Issues become more interesting when it comes to initial consonant clusters. While Middle Korean had its share of possible clusters, such as <pt> ㅃ, <pst> ㅃㅅ and so on, combinations of nasal plus obstruent for instance were not valid in syllable onsets. It is exactly in this way however that the formerly pre-nasalized obstruents of Japanese were perceived, and likely also actually pronounced. Thus, to render these obstruents in an adequate fashion, initial clusters consisting of a nasal followed by a homorganic obstruent were frequently used in the teaching materials for Japanese, such as <nt> ㄴㅌ for /d/ [ʰd], <mp> ㅃㅍ for /b/ [ʰb] and so on.

Diacritical and Punctuation Marks

Diacritical marks can be subdivided into two classes: those whose foreign origin is evident at first sight (type B below) and those for which this does not necessarily hold (type A). The latter category comprises only such diacritics which are so simple in shape—mere dots or short strokes, circles at best—that any claim to a foreign origin suffers from the possibility of independent invention.

Type A: Dots or short strokes and circles

Circles serve as a kind of all-purpose diacritic in *han'gŭl* to indicate a reading different from the default norm. In materials on Manchu and Mongolian it is used to indicate syllable-final /l/ (as opposed to /r/; see below), to keep apart Manchu *u* and *ū* and in various other ways. (Compare also the above-mentioned derived letters consisting of a base letter plus a circle next to or beneath it. As these are integrated into the syllable blocks instead of being placed outside of them, it seems inappropriate to regard them as diacritical marks at par with those discussed here. Graphically however they use the same means.)

The tone marks (*pangjŏm* 傍點 ‘side dots’) used also for Korean proper in early texts usually took the shape of short strokes, but they were obviously created after Chinese models—the same indeed as gave birth to diacritical marks in Japanese writing to be discussed presently. Somewhat less certain but still quite probable is the assumption of Chinese influence when it comes to punctuation marks.

Korean was originally written without spacing as was Chinese and also Japanese, but Mongolian and consequently also Manchu did make use of spacing. Whenever these were written in transcription only the need

Table 10. <,> in *Han Ch'ōngmun'gam* versus spaces in *Qīngwénjiàn*

definition of <i>rìshí</i> 日食 ‘solar eclipse’:			
<i>šun, biyai yabure de teisulebufi</i> <i>dalibuha</i> (be, <i>šun jembí sembi</i>).			
„(it is called <i>šun jembí</i> when) the sun is covered, the moon in its motion having met it“			
(the portion in round brackets is left out in <i>Han Ch'ōngmun'gam</i>)			

arose to retain the information on segmentation provided by spaces in the original scripts. This was the case for instance with the longer definitions in the *Han Ch'ōngmun'gam*. These were adapted from those found in Manchu in the *Qīngwénjiàn*, but are given here in *han'gŭl* only. Wherever the original Manchu has a white space, the Korean transcription adds a comma-like <,> under the lower right corner of the preceding syllable block. Compare Table 10 which reproduces one sample definition from the *Han Ch'ōngmun'gam* (I/3b) together with its Manchu source.

The same kind of short stroke was also used in other works, an interesting example being the multilingual vocabulary *Pangŏn yusŏk* 方言類釋 (manuscript finished in 1778, but never actually printed). Here all foreign languages except for Chinese are given in *han'gŭl* transcriptions only, just as was done in the various closely related *yuhae* dictionaries. The short stroke as a punctuation mark is put into use not merely for Manchu and Mongolian as would be expected, but its use is extended to include Japanese as well—which originally does not use any kind of spacing.⁹

Similar devices to segment Japanese sentences into smaller units, often going below the level of words, were introduced for didactic purposes in *Chunggan kaesu Ch'ōphae sinŏ* 重刊改修捷解新語 (1781) as the last

⁹ As an anonymous reviewer pointed out, the alternation of Chinese characters and *kana* syllabograms in Japanese writing can to some extent fulfill a function quite similar to that of spacing. This is however little more than a rule of thumb—and therefore quite unlike the case of actual spacing in Mongolian or Manchu—, as it is not rare for such alternations to occur *within* words, and likewise common for word boundaries to fall *in between* two characters of the same type.

installment in the series to contain a parallel text in Korean and reading glosses in *han'gŭl*. It is however the Japanese main text to which small circles are attached here, as expected in the same position as the short strokes in *Han Ch'ŏngmun'gam* and *Pangŏn yusŏk*. The principles underlying the use of these circles are not always as straightforward as the mechanical replacement of white spaces with strokes in the case of Manchu (see Tsuji 1991 [1997: 173–192] for an analysis of their usage), but in any case it seems not unlikely that this kind of segmentation for a language that is usually reduced to writing without any spacing is nothing but an extension of what was first introduced in the teaching materials for Manchu and Mongolian.

While the Manchu portions of *Tongmun yuhae* (1748) take over the spacing from Manchu usage intact—despite the use of *han'gŭl* throughout—the latter works *Pangŏn yusŏk* (1778) and *Han Ch'ŏngmun'gam* (1779?) retain the idea of word spacing but use short strokes instead. Interestingly this also applies to the Korean texts of some works printed during the second half of the 18th century, as noted by Tsuji (1997: 192, note 20). It thus appears hardly coincidental that at about the same time a new edition of the *Ch'ŏphae sinŏ* is published that transfers the idea of segmentation to Japanese. For didactic purposes this was undoubtedly a huge leap forward, but at the same time it also allows us to observe the Korean compilers' analytical view on Japanese as an almost isomorphic foreign language.

Finally to come back to the above-mentioned *Ahakp'yŏn* once again, where we also find cases of a short stroke <·> next to the upper right corner of syllable blocks, now however to mark long vowels in Korean, Japanese as well as English. See table 11 for examples.

Type B1: Diacritics taken from Mongolian and Manchu letters

A case leaving no doubt that neither Chinese influence was involved nor a genuinely Korean invention is the horn-like diacritical mark employed in the teaching materials for syllable-initial /l/ in Manchu and Mongolian (whereas syllable-final /l/ is indicated by a circle and /r/ left unmarked).

It was introduced to cope with the fact that the two languages have a phonemic contrast between /r/ and /l/ (which is also reflected in writing by virtue of different letters) while no such contrast exists in Korean phonology. The modern language merely features an allophonic variation between [l] and a flap [ɾ], and there is reason to believe that the realization as a flap was originally—and still so in Middle Korean when the

Table 11. <·> to mark vowel length in *Ahakp'yŏn*

character	Sino-Korean	Sino-Japanese	English	transcr. of English
<i>shī</i> 師	sa ㅅㅏ	si ㅅㅣ (= <i>shi</i>)	Teacher	<i>thi</i> : - <i>chwa</i> 티`취
<i>zhòng</i> 仲	cu:ng 중`	cyu: ㄱ유` (= <i>chū</i>)	Second	<i>sse-khon-ti</i> 새콘드

script was created—used in most environments showing [l] today. In any case, Korean orthography is strictly phonemic here and accordingly uses the same single letter irrespective of its actual realization.

The distinction between narrow versus broad transcription in the works on Manchu has already been mentioned above. What triggered the use of a narrow transcription was the absence of the original script, in this case the absence of Manchu script. All of the textbooks mentioned in the introduction have the main text written in original script, to which a transcription in *han'gŭl* as well as a translation into Korean is added. As /l/ and /r/ have separate letters in Manchu script and the text in exactly this script was present, there was no necessity to indicate which of the two was meant in the transcriptions, which were identical for both. The dictionaries are different however: As was the case with the other *yuhae* for Mongolian and Japanese, the main text of the Chinese–Korean–Manchu dictionary *Tongmun yuhae* is entirely in Chinese characters and *han'gŭl*. The Manchu translations of the head words are merely transcribed, but not given in original script. The case of *Han Ch'ŏngmun'gam* is somewhat different, as at least the translations of the headwords are also found in original script here. The longer definitions in Manchu however are in transcription only and accordingly make consistent use of diacritics for /l/ versus /r/—while the transcriptions for the headwords do not.

Where did the compilers get their inspiration for the horn-like diacritic from then? Even a cursory comparison of the examples from the *Tongmun yuhae* (facsimile edition YTTY 1956) given in table 12 with the various latter shapes of <l, m, a> in Manchu usage as shown in table 13 immediately reveals its origin: If the “spine” added in gray in the latter table is ignored together with the remaining elements all three letters have in common, it is a horn-like element pointing upwards that remains as the distinctive shape of <l>. The diacritic used in the above-mentioned works is then nothing else but this distinctive element of the letter <l>.¹⁰

¹⁰ For a work on Manchu outside the tradition of the Bureau see for instance the mid-18th century *Ch'ŏnghagŭm* 清學音 studied in Lee (1973). Here neither special letters nor

Table 12. Diacritics to indicate Manchu /l/ in *Tongmun yuhae*

<i>qíngle</i> 晴了	<i>galaka</i>			
	'(the weather) cleared up' (I/3a)			
<i>qiū</i> 秋	<i>bolori</i>			
	'autumn' (I/3a)			
<i>diàn</i> 電	<i>talkiyan</i>			
	'lightning' (I/2a)			

Type B2: Diacritics taken over intact from Japanese

Initially Japanese phonographic writing used separate syllabograms depending on the presence or absence of (prenasalization and) voicing. Before long the distinction was largely lost however and phonograms formerly used to render syllables with voiceless initials could be used to render those with voiced ones as well. A new means to differentiate between the two categories—which remained intact in the language, still forming a phonological opposition—was developed in a situation of language contact: Sinological studies demanded a precise notation of the various classes of initials in Chinese, including the already mentioned one termed (*quán*)*zhuó* (Japanese *daku*), i.e. that of voiced unaspirated obstruents. Tone dots used to mark the tone a given character is to be read in did not only give birth to the so-called side dots in Middle Korean texts. It also led to a parallel tradition in Japan.

diacritics are used in what are evidently transcriptions by ear. Generally both Manchu /r/ and /l/ are rendered by <l> (i.e. /l/ [r]), the latter however tends to be transcribed as <rn> (writing, as was usual at that time, Korean /ll/ [l:] intervocally).

The same strategy of singleton /l/ [r] versus double /ll/ [l:] to render foreign /r/ and /l/ respectively is still seen in modern loanwords, at least in intervocalic position. In *Ahakpyŏn* however this is also extended to English /r, l/ in word-initial position, simply by transposing these initial consonants into intervocalic ones through prosthesis. Cf. *liver* as <il-li-və> 을리애 versus *river* <i-li-və> 으리애 (phonetically [il:ri:və] versus [irivə]; pp. 5, 8).

Table 13. Letter forms of <l, m, a> in Manchu script

	initial	medial	final
<l>			
<m>			
<a>			

As initial types had influence on tonal developments the different classes of initials were indicated by distinct signs, e.g. a single dot for *quánqīng* ones, but two dots for *quánzhuó* ones. Despite their name these tone dots existed in a variety of shapes, including besides dots also circles or short strokes, and it is a double stroke used in this manner that developed into the standard diacritical mark to indicate voiced obstruent initials (called *dakuten*, or 'dots [to indicate] *zhuó*[-type initials]'). Thus for instance <ta> 夕 versus <da> 夕.

Now Korean lacks phonemic voicing contrasts. Stops and affricates are usually voiceless in initial position and only become voiced in voiced environments. While older works on Japanese at the Bureau concentrated on prenasalization rather than the accompanying voicing and introduced new consonant clusters of nasals plus homorganic obstruents as we have seen above, this became less and less of an option with prenasalization being gradually lost in Japanese. It is likely a consequence of this phonetic change that more recent works have at times simply borrowed *dakuten* marks and applied them to *han'gŭl* blocks. Probably among the earliest examples is a manuscript closely related to the dictionary *Waeö yuhae* mentioned above, entitled *Hwaö yuhae* 和語類解 (1837),¹¹ but the same can still be observed in the early twentieth century. Table 14 reproduces part

¹¹ Manuscript in the possession of the library of the Graduate School of Letters, Kyōto University (shelf-mark Philology|2D|41c). For a facsimile edition see e.g. Chung (1988). Note that especially in the second volume the *dakuten* tend to be placed to the left of syllable blocks.

Table 14. *Han'gŭl with dakuten*

	-a	-i	-u	-e	-o
	ガ	ギ	グ	ゲ	ゴ
g-	가 [˘]	기 [˘]	구 [˘]	계 [˘]	고 [˘]
	ザ	ジ	ズ	ゼ	ゾ
z-	사 [˘]	시 [˘]	수 [˘]	세 [˘]	소 [˘]
	タ	チ	ツ	テ	ト
d-	다 [˘]	디 [˘]	두 [˘]	데 [˘]	도 [˘]
	バ	ビ	ブ	ベ	ボ
b-	바 [˘]	비 [˘]	부 [˘]	베 [˘]	보 [˘]

of a syllable chart found on pages 120f. of *Nik-Kan Kan-Nichi gengoshū* 日韓韓日言語集, published in Tōkyō in 1910 (wrongly assigned glosses were moved to their proper position). The extent however to which these diacritics are actually used in this textbook is nothing compared to *Hwaō yuhae*, or also the horn-like diacritic used for Manchu and Mongolian.

Assimilation in Terms of Writing Direction

Another interesting aspect of Korean writing used to render foreign languages has less to do with adaptation than with assimilation, namely in terms of writing direction. Following the Chinese model, Korean like Japanese was traditionally and to some extent still is written in columns from

Even if only in passing, it seems noteworthy to mention a rather similar approach in one of the two romanizations of Japanese advocated by Italian orientalist Antelmo Severini (1827–1909). He proposed to employ either a strict transliteration thruthful to the original spelling, with diacritics such as *dakuten* carried over without change, or a pronunciation-based transcription, depending on the audience and purpose (see Congrès international des Orientalistes 1874: 114–130, 390–417; especially pp. 115–117). The former kind of romanization is found in several works by Severini and other scholars, such as his student Carlo Puini (1839–1924). To name but one example: already in the title of their collaborative publication *Repertorio Sinico-Giapponese* (Florence 1875) the title of the dictionary *Wa-Kan onshaku shogen jikō setsuyōshū* 和漢音釋書言字考節用集 is romanized as “*Wa kan won seki siyo ken si kau setu you siu*”—which not only strictly follows the then-current *kana* orthography (with e.g. <ka-u> かう for *kō* or <si-u> しう for *shū*), but also retains the *dakuten* in <ken> けん for *gen* and <si> し for *ji*.

right to left. It is thus only natural to see this direction retained in all pre-modern Korean works on Chinese and Japanese. Mongolian and Manchu are different however: While they are similarly written in columns, the direction is from left to right instead.

At least in part of the materials on Mongolian and Manchu one finds the Korean portions to imitate the direction of the surrounding text, they thus proceed from left to right, as would otherwise be quite unusual. To take the works on Manchu as an example, such an assimilated direction of writing is found in all textbooks proper, i.e. *Soaron, P'alsea, Samyōk ch'onghae* and *Ch'ōngō nogōltae*, namely in all phrase-for-phrase translations of the original text into Korean.

The two dictionaries *Tongmun yuhae* and *Han Ch'ōngmun'gam* are under the influence of Chinese, as they are in fact all trilingual (Chinese–Korean–Manchu) with Chinese on top of the hierarchy. As is the case with all works on Chinese alone, the Chinese direction of writing is retained despite the primarily Manchu-oriented content. Interestingly here even the definitions in Manchu, which as was noted above are only given in transcribed form here, are written from right to left. As assimilation therefore occurs in both directions it is apparent that the direction of writing for *all* languages present in a given work is here simply determined by that of the main text or, in the case of the dictionaries, by that of the language used for the head words.

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The Idea of Writing

Writing Across Borders

Edited by

Alex de Voogt and Joachim Friedrich Quack



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