sweeping lines, but a broken mosaic that must be reassembled methodically, bit by bit.

There is nothing "wrong" with the comparative method. Some linguists are just too impatient.

Notes

1. The name "Altaic" was chosen at the time of the initial organization of the panel for the conference on which this volume is based. Changes in the makeup of the committee which were necessitated by defections of original members made the final group somewhat less sympathetic to "Altaic" than the original one. (Ed.)
2. Clark's paper is not included in this volume. (Ed.)

Morphological clues to the relationships of Japanese and Korean

Samuel E. Martin

0.   The striking similarities in structure of the Turkic, Mongolian, and Tungusic languages have led scholars to embrace the perennially premature hypothesis of a genetic relationship as the "Altaic" family, and some have extended the hypothesis to include Korean (K) and Japanese (J). Many of the structural similarities that have been noticed, however, are widespread in languages of the world and characterize any well-behaved language of the agglutinative type in which object precedes verb and all modifiers precede what is modified. Proof of the relationships, if any, among these languages is sought by comparing words which may exemplify putative phonological correspondences that point back to earlier systems through a series of well-motivated changes through time. The recent work of John Whitman on Korean and Japanese is an excellent example of productive research in this area. The derivative morphology, the means by which the stems of many verbs and nouns were created, appears to be largely a matter of developments in the individual languages, though certain formants have been proposed as putative cognates for two or more of these languages. Because of the relative shortness of the elements involved and the difficulty of pinning down their semantic functions (if any), we do well to approach the study of comparative morphology with caution, reconstructing in depth the earliest forms of the vocabulary of each language before indulging in freewheeling comparisons outside that domain. To a lesser extent, that is true also of the grammatical morphology, the affixes or particles that mark words as participants in the phrases, sentences (either overt clauses or obviously underlying propositions), discourse blocks, and situational frames of reference that constitute the creative units of language use. But the functions of the grammatical morphemes are more easily categorized, and often the looseness of the attachment of a particle or suffix clearly shows that it goes back to an independent element that was "glued on" to perform a specialized task. That is particularly true of the case

markers of Korean and Japanese, less so for those of the other languages in question. But there are examples in each of the languages, I believe, that will show a readiness to discard an old marker for a new, or to use both markers as competing (or distributionally specialized) variants, while retaining the functional category that the marker represents.

One of the functional categories shared by Korean and Japanese but not found in other languages, so far as I can tell, is the particular bundling of features in particles of focus and contrast, essentially features beyond the clause level that are disparately handled in many languages by word order, phonetic salience (phrasal juncture and sentential "stress"), or intonation. Here, too, the actual morphemes representing the bundles of features are subject to replacement by competing morphemes, often loosely attached as specialized uses of independent words. (Semantically complex phrasal postpositions are coming into the grammar all the time, of course, as are phrasal prepositions in languages like English.) The two languages offer virtually identical packages of subtle uses for the subdued focus that often marks old information ('as for ...'), represented by K $un / n(un) < (~^u/_on/~n^u/_on$ and J $wa < ~fa < ~pa$, and for the highlighted focus that often marks new information ('too; even; ...'), represented by K $to < ~two$ and J $mo < .mo (? < *~mo.o)$. The morphemes are not cognate with each other, but it is possible to find other morphemes in each language which are plausible candidates for at least two or three of the missing cognates.

In this paper, I explore the possibility of Korean and Japanese cognates for some of the more important particles and endings, building on earlier work (in particular, Martin 1968 and 1975), with a very few remarks on Tungusic, Mongolian, and Turkic forms. Unlike the Altaicists and the Nostraticists, I do not start with the premise that these languages (or any others) must be related, but seek, rather, to find ways in which their forms might best be explained as shared inheritance from a common earlier stage.

1. The genitive-nominative markers enjoy a wide range of functions in Korean and Japanese. Despite the presence of more than one morpheme in each language, all of the functions can be found existing for each of the morphemes in both languages, provided we stop looking merely at the modern standard languages and take into account earlier and dialect forms. The major functions can be roughly described as follows:

Table 1. Genitive-nominative markers

	Korean	Japanese
(1.1)	$~^u/_oy$? < [G]oy < *ka i	?—
(1.2)	ka ? < ˙ka (/ˉkwo) 'question'	ga < n ka (? < ka 'question')
(1.3)	˙i ? < postadnom ˙i 'one/fact/person' ? < ˙i/ywo 'this (one)'	(i)[2]
(1.4)	s ? < postadnom ˙so/to 'fact' NUMERAL -s[3]	tu NUMERAL -tu
(1.5)	—	no ? < [mo]no[4]
(1.6)	?—	n
(1.7)	—	n tu > -zu-; n ka > ga na

(1) Marking a noun, noun phrase, or nominalized sentence as adnominal to an overt noun.

(2) Forming a nominalization. This can be regarded as an adnominalization to an unstated noun of the type that I have described for Japanese as a postadnominal, either summational ('the fact that ...') or extruded ('the one [thing, person, time, place, ...] that ...').

(3) Marking the subject of a clause. This is the normal subject marker, but it is suppressed when the antithetical particles of focus (Japanese wa and mo) are attached, leading to the illusion that the particle of subdued focus (Japanese wa) is the subject marker except in subordinate clauses. In a sense, all clauses of Korean and Japanese are subordinate; the independent clause or traditional "sentence" is a higher-level unit of discourse.

(4) Marking the affective (cathectic) object of expressions of emotion ('liking wine', 'afraid of ghosts', 'ashamed of the child') and, very occasionally, other kinds of objects.

(5) Marking the complement of a mutative or putative structure ('[so as] to be ...'), or of a variety of copular structures that include such meanings as identification ('=') and propredication ('[it] is [an instance of]'). More commonly in Japanese these are marked by the essive ni that underlies the copula structures themselves.

The forms are shown in table 1. With reference to the Korean notations, those unfamiliar with the language should bear in mind that $~^u/_o$ represents the minimal vowel, usually either a reduction from one of the stronger vowels (e a wo wu i) or, typically for grammatical morphemes, inserted by epenthesis. The higher/lower

articulation of this "shwa" is either determined by the vowel of the preceding syllable ("vowel harmony") or, at times, freely variable. For other features of the notation, see note 1.

The distribution of the Japanese particles *no* and *ga* varies with dialect and period, but each is attested in identical functions. The distribution of Korean *$^u/_o$y* and *i* overlaps with respect to marking the subject of adnominal clauses but in other subordinate clauses, I believe, only *i* marks the subject. It should be noted that the modern Seoul pronunciation of the particle *uy* is identical with that of the allative/locative/dative *ey*, though we expect /i/; that pronunciation occurs in dialects, but it is unclear whether the dialect /i/ is a raising of /ey/ or the direct development expected, non-initial *uy* > *i*, or possibly even a survival of the particle *i* itself. I have toyed with the notion that the two particles differed in tightness of attachment: Middle Korean normally contracts the particle *i* to *y* after a vowel, while *uy* seems to be so contracted less often, though there are examples (one being *. na ˙ oy → :nay* 'my'), and I now suspect that the two particles differed less than has been generally assumed. (Yet it must be noted that there are no Middle Korean examples of "*i*" for a clearcut genitive, **N i N = N oy N*.) For the origin of the particle *oy* we offer the hypothesis that it is a reduction of **[G]oy < *ka i*, just the opposite of the later (pleonastic) *... i ka → y ka*, as in *nay ka < na i ka* 'I'. The *-G-* represents a voiced laryngeal or velar fricative which was only indirectly written by the fifteenth-century orthography. The sound vanished early but left traces by blocking an expected liaison in the spelling of *l* followed by *i*, *y*, or *z*; those are the only environments for which *-G-* is generally hypothesized, though I have reconstructed it also for other environments (Martin 1982/1983). But reconstructing the pleonastic string of particles **ka i* presumes the existence of the particle *ka*, and that is poorly attested in the early texts. In modern Korean the two particles stand in a suppletive relationship: *i* after a consonant, *ka* after a vowel. The origin of the suppletion is a perplexing question; spelling *... i* (or "*y*") after a vowel obviously continued long beyond the period in which that was the spoken norm. It seems unlikely that the substitution of *... ka* was influenced by the language spoken by Hideyoshi's invaders at the end of the fifteenth century, who would have used a nasal velar (*ŋa* or *ŋga*), in any event, nor by later contacts with Japanese. Kim Hyengkyu

(1954) imputes two instances to the Koryŏ songs (*sok . ka*) "Twong-twong" and "Sekyeng pyelkwok", but this has not been confirmed. There is but a single clear example in the early Hankul texts: ˙ *qilq-* ˙ *chyey˙ka* 'all [believe]' (1463 Pep-hwa 1:120), explicating a Chinese passage. The next examples are a few attested from the latter half of the seventeenth century, such as *poy ka ol kes in i* 'the boat will probably come' (1676 Chep-hay sin-e 1:8, translating a Japanese sentence). I am inclined to think that *... ka* was there all along, perhaps as a colloquial emphatic. Modern *-uni-kka (n) = -uni* 'because' is thought to be a semantic extension of *-ni-s-ka* (question), and *-ta-ka = -ta* 'and then; only when' is said to be a direct attachment of the infinitive of *taku-* 'bring near', but maybe we should take another look. Compare the development of the meaning 'but' for Japanese *ga* and the antithetical uses of the nominative-marked and accusative-marked nominalizations in both languages. On the Korean *i/ka* see Kim Panghan (1957); Nam Kwangwu (1957); LSN (1958); Kim Hyengkyu (1954, 1964), who attributes the modern rise of *ka* to avoidance of hiatus; Hamada (1970); Hong Yuncak (1975); and ¹Yi Sunguk (1981), who would derive *ka* from the verb *ka-* 'go'. See also Se Cengmok (1982) on subject-marking in Middle Korean subordinate clauses; and, on the genitive particles, An Pyenghuy (1968) and Kim Sungkon (1971). The widespread attachment of *-i* to nouns ending in consonants in the northern provinces, especially Hamkyeng, is thought to be an accretion of the same etymon (either by way of the nominative or directly), which is often taken to be the postadnominal meaning 'person', though I view that as a special case of a more general pronominal meaning 'one (= person/thing); fact' just like the postadnominal use of Japanese *no* (and in dialects *ga*). The favorite sentence type of Middle Korean was adnominalization + *i*, either as a bare nominalization or one predicated by a copular form; the perfect/imperfect endings are analyzed as *... -n/-l i* (*[i]la*), a formal analog of modern J *... no da* 'It is that ...'. That accretion of *-i* (after vowels *-y*) by nouns may well have encouraged the use of the particle *ka*, since the original case marking would be obscured once the noun was generalized as ending in *-i* (or *-y*); notice that the example cited above has a noun ending in *-y* (*poy ka* 'boat', in this instance the *-y* being a part of the etymon and not an accretion), but it is hard to see how that explanation could apply to those dialects which show very little of the *i*-accretion, such as the standard

central dialect, nor why it did not apply earlier to the many nouns which basically ended in -i or -y all along. If we set up a Proto-Korean-Japanese morpheme *i for the nominative/genitive marker, it may be possible to enlarge the original scope of that etymon to include several other morphemes found in the two languages. In Japanese, the verb infinitive -i, from which many free nouns are derived, was taken by Martin (1987) as -Ci (the missing consonant was perhaps a voiced velar fricative) but the initial may be an internal Japanese hiatus-filler or just an artifact of the analysis; there is also the old Japanese verbal prefix i- of unknown semantic force. For Korean we find the postadnominal i 'one, person, thing; fact'; the suffix -i that derives nouns and adverbs (`khi < kh[u]-i 'largeness; height', `khuy < khu-i 'greatly'); and the deictic `i 'this'.[5]

The genitive marker s is obsolete in modern Korean, except as a relic in fossilized compounds, analogous to the Japanese marking of noun compounds by (nasality-and-) voicing that reflects an earlier adnominal marker n. In Middle Korean, the two particles s and "/ₐy had identical functions, but attached to different kinds of nouns: the s was chosen as the marker for inanimates and exalted (honorific) animates, "/ₐy for ordinary animates. This may well have been a local and temporary specialization, like the semantically similar distribution of Japanese no and ga in certain dialects and times. I believe this subsyllabic particle s is etymologically identical with the postadnominal so/to 'fact', which forms the heart of a number of Middle Korean clause formations (...-lq s[o] i-la, ...-lq t[o] i-la, ...-lq so y, and others). The likely Japanese cognate for this etymon is the obsolete genitive particle tu, fairly fossilized already in Old Japanese; this tu is often treated as specifically a "locative genitive" (nifa tu tori 'the bird in the yard' = 'chicken') but there are examples that point to a wider use, such as asatuki 'chives' < asa tu ki 'mild onion' with the adjective stem asa(-). The non-adnominal forms of the numerals have accreted this morpheme (hito-tu < *pito tu 'one') — in at least one instance after a different adnominal marker (yoro-zu < yoro-˜du < *yoro n tu 'ten thousand; many') — as a kind of nominalization of a basically adnominal morpheme, the number, which in seventh-century Japanese often directly preceded a noun without an intervening marker, as did the adjective stem, too.

Japanese ga < *n ka probably originated as an emphatic use of the interrogative postadnominal ka 'question',[6] attached to the noun

by the adnominal marker n. The element n is sometimes assumed to be a reduced form of the particle no (or ni), and that, in at least some instances, it may indeed be. But I have a more intriguing idea. We seek the origin of the essive ni '[to] be', which I take to be the source of the allative, dative, and other uses of the particle ni; we must explain, too, the adnominal use of no '...[that] is' and the similar form na '...[that] is'. Suppose we assume an essive verb 'be' that has the forms ni, no, na. Our ni will clearly correspond to the infinitive, but what are the other two? In the case of the superficially similar Old Japanese negative auxiliary verb we find (-)ni for the infinitive, as in sirani 'knowing not' and (-)nu for the attributive/predicative, as in siranu '(...that) knows not'. (The predicative later developed as siran[i] su > sira[~] zu with the auxiliary su[ru] 'do'.) The stem of the negative verb appears as the particle na, either preposed as an adverb (na tori so 'do not take it') or attached as a sentence particle after the predicative form (toru na 'take it not'). In the case of the essive verb, we find the infinitive ni and the stem na, but where we expect the attributive/predicative form *nu we find instead the anomalous attributive /no/. I suggest that this is the attributive expected from the eastern (Azuma) dialect, where the expected predicative form would be *nu; in the central dialect, the attributive and predicative forms merged for this "quadrigrade" conjugation of verb stems except for their accent, and it is to the likely accentual difference that I would ascribe the weakening of the attributive *nu to n. The use as a predicative became obsolete before the seventh century, replaced by n[i a]r-i, the infinitive of a complex copula consisting of ni + auxiliary ar-, and the eastern form survived as the attributive /no/ while the western attributive (/predicative) *nu → n was limited to compounds.[7]

2. The accusative particle marks the object of a transitive verb, the path or area of a motion ('walk the line, turn the corner, pass the bank, jump the hurdle'), the point of departure ('leave home', 'depart this world'), the time spent ('sleep seven hours'), and the usual functions found in other languages. In Korean the accusative sometimes substitutes for the allative (cf. English 'attends school' = 'goes to school') or dative ('Gimme' = 'Give it to me'). The forms:

(2.1)   (ᵘ/ₒ)l, · lᵘ/ₒl   —

(2.2)   —   [w]o ? < *bo[8]; wo si-te

(2.3)   —   [wo] ba < n pa

In the orthography of the 26 songs extant from the old Sinla language, the accusative particle is written with at least three different characters.[9] There are two examples that write the particle with the semanto-phonogram interpreting Sino-Korean e < "qe" < .q(y)o 'to; at/in', for which there is a traditional Korean tag translation nul (as given in the 1576 character dictionary [Sin-cung] ¹Yuhap) = nu[l-u]lq, the imperfect adnominal form of the verb nul- 'to increase/advance; to better/best'.[10] Kim Wancin takes this as an attempt to write lᵘ/ₒl in hyangka 13: 3 (NE-*lul* 'you') and 17: 10 (TYE-*lul* 'him'). The accusative is usually represented by the character meaning 'Second Stem [of the Twelve Stems]', with the later Sino-Korean reading ul (< "qulq" < Chinese qyet). That appears after consonants (16: 6 MWOM-ul 'body', 26: 1 NIM-ul 'lord', 22: 6 MYENG-ul 'life', 06: 3 PANG-ul 'room'; 21: 3 SWON-ul = swon ol 'the hands') and at least once after a vowel (20: 4 PEP-WU-ul 'a rain of the Law'). But it is also represented by a character meaning 'to bustle; ...', Sino-Korean hul < "hulq" < Chinese hyet (also given the Sino-Korean reading hil)[11], which led R. A. Miller (1977) to the immediate conclusion that the "Old Korean" accusative marker was /hel/ (presumably with mid front vowel), for which he would adduce cognateship with a "proto-Altaic" *-g, based on Turkic -g and Mongolian -(i:)g and/or with the Tungusic directive-locative *ki-lā and directive-prolative *-ki-lī. Miller (1987) reaffirms his commitment to this notion. There are at most eight examples of the accusative marker written with hul, and the noun in seven of these is written with a semantogram for which we must infer the native Korean translation. In three cases, the Korean noun carries a basic final -h in later Korean (03: 7 I STA-hul 'this ground' = MK i stah ol; 07: 1 MWULWUP-hul 'knees' = MK mwulwuph ul and modern mwuluph, muleph, mwulwuph-ak, mwulph-ak) and while 02: 4 KWOC-hul 'flower' lacks aspiration in attestations of the fifteenth century (1449 kwoc ·ol Kok 6), the -h is attested in the early seventeenth century (kwoch ul 1632 Twusi cwung-kan 15: 33) and in modern Korean (kkoch ul, with kk- from truncation of compounds ... s kwoch), so that it may have been present in an unwritten dialect all along. These examples can prob-

ably be explained as examples of orthographic conflation (for later examples of which see Martin 1982) or simply as "send-off" cues to indicate that the character is to be taken as its Korean translation rather than given the Chinese reading. (There are similar examples after semantograms that for cues use the phonograms muy and moy to write ... m ᵘ/ₒy with the genitive, use mun to write ... m on with the subdued focus marker, and even use um-*mul* to write ... m ul with the accusative. On these and other orthographic phenomena, see Kim Wancin 1980, one of the more important studies that Miller seems to have overlooked.[12]) More of a problem are the examples of 02: 3 NA-hul 'me', 03: 6 I-hul 'this', 07: 5 NWUN-hul 'eyes', and 16: 07 TEK-HOY-hul 'the Sea of Virtue'.[13] (I set aside the example of 03: 5 *han*-hul 'the people' because of the hypothetical nature of the noun that Kim Wancin proposes as derived from the perfect adnominal ha-n '[the] many'; if he is correct, the noun may have picked up a final -h under the influence of the initial.) Assuming that these examples are not due to scribal corruption,[14] they may be explained as an attempt to write the variant or allomorph ol for which, unlike ul, there was no syllable available in the Sino-Korean repertory, and that explanation may well be true of the cases with the aspirate-ending nouns, too. It should be borne in mind that there are accusatives where the hyangka texts do not have -hul despite a noun that ends in an aspirate in later Korean: 06: 4 AL-ul 'egg' = MK alh ol, 18: 2 KIL-ul 'way' = MK kilh ul, 20: 8 PATH-ul 'field' = MK path ol. There are two other examples of the phonogram hul to be found in the hyangka: 11: 2 MEMUS-hul-i-kwo, which Kim treats as memus-kulikwo 'hesitating', and 05: 5 TWUVUL-hul-un 'as for the two' (repeated in 05: 6), which Kim treats as TWUVUl-un, with the final liquid alone serving as the conflated cue. (He is probably right, but the final aspirate of MK :twulh 'two' ? < *twupulh may invite other notions.)

It may be that the Korean accusative marker will remain isolated, with unknown prehistory and no likely cognates. Before giving up on it, however, I would like to explore parallels between this morpheme and the marker of subdued focus (ᵘ/ₒ)n 'as for; ...', parallels that are morphophonemic as well as etymological. If we treat the basic shapes as just /n/ and /l/, with epenthetic ᵘ/ₒ after a consonant and with optional pleonastic formations nᵘ/ₒn and lᵘ/ₒl after a vowel, they are the same as the adnominal morphemes -n and -l that are

attached as suffixes to the verb stem to form the perfect and imperfect.

But there is a difference. In Middle Korean, the imperfect adnominal suffix is spelled with a final glottal *-lq*, or a reflex of that in the form of gemination (*-lq ka* = *-l kka* 'whether to [do/be]'); the accusative particle is never spelled that way. Therefore it has been speculated that the modern liquid phoneme may be a merger of two different earlier phonemes /r/ and /l/. Perhaps, however, the *-lq* is an attempt to represent an incorporation of the genitive *s*, for which a bit of other evidence can be adduced (Martin 1982/1983). In the *hyangka*, the imperfect adnominal is written with the phonogram CORPSE: *HO-si-l TI* 'if one deign to do' 3: 4, *HO-l TI* 'if one do' 3: 8, *KU[LI]li-l MOZOM* 'yearning heart' 1: 7, *NYE-l MUL-S-KYEL* 'passing waves' 13: 6, *TAO-l NAL* 'the day I will fulfill [my desire]' 25: 2, *KI[L]l PSU-l PYE[LI]li* 'a star to sweep a path' 7: 10, *CULKI-l* 'to enjoy' 14: 8, ... And CORPSE is also used to write the cue for final *l* in a number of Korean words after a semantogram (such as *NAl twu* 'the day too' 25: 2), so there seems to be no way to avoid the conclusion that in the *hyangka* it is used to represent the liquid and that sound only, despite the misgivings of Miller and others that the phonogram really ought to represent a syllable with a sibilant, as indeed it does in the traditional writing of certain place names and Chinese transcriptions of Korean words. Yu Changkyun and Hashimoto (1973) explained the anomaly as a reflection of the reconstructed initial cluster **sl* of archaic Chinese, but the thousand-year discrepancy makes that explanation improbable. A likelier possibility is a scribal abbreviation of a complex character containing the same shape, such as *lwu* < Chinese `lyu* 'often', which was used as a phonogram for the Japanese syllable *ru* in the 720 work *Nihon-Shoki*. But even more plausible is the explanation of Kim Wancin (1986) that the character is nothing more than a scribal misunderstanding of a common script form of the character *ul* 'Second Stem'. If that is true, then there is no *hyangka* evidence for a phonemic difference in the accusative marker and the imperfect adnominal, nor for a genitive *s* incorporated into the latter.

The hypothesis I propose would identify the accusative marker *l* with the imperfect adnominal *-l* and the focus marker *n* with the perfect adnominal *-n*.[15] Notice that the focus marker is used to subdue old information that is "known" (= given = done). And the accusative marks the object, the target that is "to be affected" by the verb. It might even be possible to make a case that the two particles are reductions of the adnominal forms of the common auxiliary *ho-* 'do/be/say', namely *ho-n* and *ho-l*, even at the risk of providing grist to the miller of the unaccepted reconstruction **hel*.[16] The idea that the subdued-focus particle might derive from *ho-n* in the sense of 'said' is not so far-fetched as it might at first appear; notice the modern use of *ila [ha-]n(un)* 'said/saying it to be' → 'as for' and a similar use of the quotative *tte* and *ttara* in Japanese.

3.   The shapes of the Korean particle of subdued focus differ from those of the accusative marker by ending in (or being) a dental nasal /n/ rather than the liquid /l/. The shape after a consonant is $^u/_o n$, conflated with an epenthetic vowel. After a vowel the form is either just *n* or the pleonastic $n^u/_o n$. We assume that the basic shapes of the accusative and the focus are *l* and *n*, respectively, and those forms are found in the earliest Hankul texts, but there are many more examples of the pleonastic $l^u/_o l$ and $n^u/_o n$.[17] For modern Korean, it is convenient to regard forms like *na l* 'me' and *na n* 'as for me' as contractions of *na lul* and *na nun*, but that may not be the best description of their history. Yet, there is evidence for the early existence of the pleonastic forms in the orthography of the *hyangka*, according to Kim Wancin (1980: 14). He cites the use of Sino-Korean *e* < "*qe*" < *.q(y)o* 'to; at/in' as a semanto-phonogram read *nul* = *nu[l-u]lq* 'to increase/advance; to better/best' and used as a way of writing the otherwise untranscribable /lul/, as was mentioned above. He seems to assume that a spelling such as *NE-un* 'as for you' (10 : 2) is intended to represent *ne nun* rather than, as I would take it, *ne n*. Kim Wancin takes many cases of the accusative after a vowel that are written with the regular phonograms for *ul* (rather than the semanto-phonogram with the traditional reading *nul*) as representing $l^u/_o l$, rather than just *l*, as we would prefer.[18] There is one example of the focus particle written with the phonogram RESENT *hun* ← Chinese *hen`* 'resent' in the character string DAY-CORPSE-RESENT (24 : 5), which is treated as *nal-on* 'as for the day' rather than **nal-hon* by Kim Wancin (1980: 204) "for the same reason that not all instances of BUSTLE are treated as *hul/hol*".[19] Kim Wancin thinks that vowel harmony can be detected in the *hyangka* choice of phonograms but at the

same time he seems to feel the particles were (at least sometimes) written morphophonemically, as if free words.[20]

The forms for the marker of subdued focus are:

(3.1) $(\, ^u/_o)n, \, ^.n^u/_o n$ (—)

(3.2) -*n* '*pa* 'situation' '*wa* < *fa* < *pa 'as for'

The Japanese particle *wa* < *pa must come from the noun *pa 'place, situation'; the noun *ba* 'place' results from a truncation of compounds like *[ari]-ba* 'location' < *... *n pa* 'place of [being]' with the genitive marker. Compare the use of ... *(no) ba-ai* '[in] the situation of ...' to mean 'as for; in the case of; if [it be]'.[21] Corresponding Korean forms with the postadnominal *pa* are obsolescent in the modern colloquial language, but they are well attested in the Hankul texts of earlier centuries.

4. The focus particle *than* can be regarded as an antonym of Japanese *wa* is *mo* 'too; even; indeed; yet, but', for which the Korean equivalent is the particle *to/twu* < MK '*two*,[22] but some of the uses of the Korean particle correspond to the use of a particle *to/do* in earlier Japanese. The opposite of the Japanese (VERB)-*ey ba* 'when/because ...' is (VERB)-*ey do* 'even if ..., though ...'. In the concessive meaning ('even; yet'), we also find morphemes deriving from nouns that mean 'place', Japanese *to[ko]* or *tokoro* and Korean *tey* < '*toy* (cf. the 'site').

Japanese has an emphatic sentence particle *zo* 'indeed' and its Ryūkyū reflex *du* underlies a few copular formations (... *du a-* < *zo a[r]-*), but that is thought to go back to a particle *so/zo* that derives from the mesial deictic 'that'. It has been suggested that the particle *koso* 'precisely' (earlier '*ko.so*) and perhaps .*kosō*, which imparts a spotlighting focus, derives from *ko* 'this' + *so* 'that'. Yet the Middle Korean particle '*kwos* 'precisely, just' corresponds quite nicely in meaning. And there is another mysterious Korean focus particle, *ya/iya* < '*i[ˈz]a* and dialect *sa* < *(i/l)* '*za*, to be accounted for perhaps in connection with the old Japanese deictic *sa* 'so/that' (and the modern assertive ... *sa!* 'indeed') and the Old Japanese emphatic particle *si*.

It is not easy to track the prehistory of the Japanese particle *mo* 'even; also, indeed; yet, but', from .*mo* or possibly '*moò* (see Martin 1987: 170, 347), but I suspect it is a shortening of *o[mo]* '[very]

thing', the initial syllable of which may be cognate with the Korean *mu-* 'wh-' and *amu-/amo-* 'any'. The Miyako version *mai* would seem to argue in different directions, but its unresolved diphthong makes us fairly confident that *mai* is a secondary replacement, which I have proposed to be a contraction of *madi* < *made* 'even; all the way to/till'.

5. There is a profusion of dative and allative particles in both Japanese and Korean. While for particle forms we find narrowed or specialized meanings (dative or allative or locative, personal or impersonal, honorific or non-honorific, static or dynamic), the functions of the basic elements overlap considerably when we take into account earlier usage and dialects. Japanese offers the three forms *ni, e* < *f(y)e* < *pe, and *sa* 'to, in, at, for, ...', as well as a number of compound postpositions (like *ate ni* and *ni site*). The most widely used and general is *ni*, which specializes the use of the essive as infinitive of the copula (= noun predicator) into a variety of meanings; the gerund *ni-te* (> *de*) also enjoys a wide range of meanings, including those of circumstance, reason, or cause; means, medium, or instrument; exclusive agent; and general locative.[23] The etymological background of the particle *sa* is unclear (see Martin 1987: 803 – 805). The accentual history of the particle *e*, as well as its vowel, suggests a disyllabic origin *e* < *pye < **pi [C]a*, maybe *pina as an early loan from Chinese .*pyen* 'edge, boundary; side, location' (as in Beijing *nèbiar* < *nà (yi) biān* 'there'. In any event, these particles have no direct ties with Korean.

The Korean markers used for dative and allative functions include forms clearly derived from verb forms (*pwokwo* 'looking at', *tele* < *toľye* 'leading') or a noun of location, as in *hanthey* < *han tey* < *hon* '*toy* 'one place' — earlier used as an adverb 'together'. A similar incorporation of a noun meaning 'place' is found in the personal dative forms *eykey* < '*ʸ/ₒykey* < '*ʸ/ₒy-kungey* < *ʸ/ₒy ku-ng[ek] ey* or '*ʸ/ₒy-ke* '*kuy* < *ʸ/ₒy k[u-nge]* '*k-uy* (< *ku-[ngek* '*eĵy*) and honorific *kkey* < '*skuy* < *s k[u-ngek]* '*ey*, all meaning 'to that place of'.[24] The major particle for the dative and allative is *ey* < '*ᵉ/ₐy*, and it is well attested throughout the history of the language. From the evidence of the *hyangka* phonograms we assume that the Old Sinla language had both *ᵉ/ₐy* and a shorter *ᵉ/ₐ*. The Hankul texts of the fifteenth century also often use *ʸ/ₒy*, indistin-

guishable from the form of one of the genitive markers, and similar readings have been imputed to some of the *hyangka* examples, but I am not sure those can be supported.[25] The $^e/_a$ form appears before the adnominal (genitive) *s* in *CIP a s PWO la* 'is the jewel of the house' 24:7 (a passage so construed by all) and *MOZO[M-u]m a* 'in one's heart' 25:9, clearly written with a phonogram read *.[q]a* in Chinese and Sino-Korean. In what Kim Wancin writes as *I ye* (12:10) and three others write as *I ya* the initial *y* of ' *ya* 'is indeed' cues the reading *i* 'this' for the preceding semantogram and the passage means 'to this'. More of a problem is Kim Wancin's *KYE-ZUL-uy-ye* 'it is in winter' 13:4 with phonograms *.[ng]uy* 'conclusive particle' and ' *ya* 'is indeed'.[26] And I am not sure that *I-uy TYE-uy* 'here and there' (11:6; phonogram *.[ng]uy* 'conclusive particle') is to be taken as deictic + case-marker. The examples *COYVO[K]-[a]k-huy* 'in the gravel' 4:6 and *KOS-huy* 'at the side of' carry an initial *h-* in the phonogram meaning 'rare', which Kim Wancin (1980: 69) says is to be disregarded just as is that of the phonogram *hul* used to write the accusative. If we follow what I take is ¹Yi Kimun's thinking on the "*hul*" reading, it would be fitting here to reconstruct something like **coypokh* 'gravel' and **kosh* or **kozh* (or, better, **ko˙soh*) 'edge, side' for these nouns. The longer form $^e/_ay$ is seen in *PWUL-CE[N]-n-ay* 'in front of Buddha' 9:3. A dissyllabic form *a-hoy* has been proposed for *PWUL-HWOY a-hoy* 'to the assembly of Buddhas' 20:2.[27] There was a convention among Korean official scribes of the ¹Yi dynasty to write the dative-allative postposition with the Chinese-character string *LYANG-TYWUNG* 'good-midst' and to read that "*ahoy*", though we have no evidence that such a pronunciation was used in speech. The string itself was taken from a *hyangka* usage and it has been generally assumed that the scribes were maintaining a phonetic tradition ancestral to the Hankul-attested particle $^e/_ay$. Since most of the clear examples in the *hyangka* do not attest the *-h-*, I suspect that it is an aberrancy; in 20:2 it could be an echo of the initial of *HWOY* 'assembly'.[28] Miller (1987: 59) toys with a reconstruction of the marker as **akai* (> **agai* > *ahoy*), which he would associate with a Tungusic **kai*. At the same time, he would set up a "locative-directive" *-ak* to account for the example *NALA-ak* (3:10) with the phonogram 'bad' (Chinese and Sino-Korean *qak*) and modern dialect forms such as *anak* 'inside' and *ttulak* 'in the garden' (Miller's 'in' is gratuitous, the nouns are synonymous variants). But these words are simply conflated (or uncompressed) reflexes of Middle Korean monosyllables ending in another of those overlooked *h*'s: ˙*anh* > *an* / *anak*, ˙*ptulh* > *ttul* / *ttulak*.[29] And the word for 'nation' is MK *na˙lah*, so that it is appropriate to transcribe the *hyangka* citation as *NAL[A-]ak*. It has been noted that the Japanese place-name *Nara* was written not only in phonograms that clearly indicated the usual pronunciation of the name but also with the character 'joy' carrying the Sino-Japanese reading *raku* (as in *Man'yō-shū* 80 and *Nihon-Shoki* 95), so that a variant *Naraku* may have existed for this place-name, long suspected of being a borrowing from the Korean word. The very peculiar scribal writing of *LYANG-TYWUNG* for the dative-allative particle (however it was pronounced) is a case of an obscure assignment of characters like some of the Japanese "*ate-ji*", such as *RYŪ-SEKI* 'flowing stones' for the adverb *sasuga* 'indeed'. Other cases of the character *LYANG* 'good' may well reflect the liquid initial, however, and one of a more troubling set of examples has led Kim Wancin (1980: 91–92) to set up an Old Korean doublet **tolal/tolala* for 'moon', so that "MOON-GOOD" in 12:9 is taken as the unmarked noun *TOLA[L]-l[a]* = *tolala*, and similarly *TOLA[L]-l[a]-two* = *tolala two* 'the moon too' 12:6, but in 5:1 it is taken as *TOLA[L]-la* = *tolal a* 'in the moonlight'.[30] The shorter variant appears in *TO[LAL]-la-li* = *tolal i* 'the moon [as subject]' 4:2 and 13:5, and with a semanto-phonogram *al* 'below' in *TOL-*al*-i* = *tolal i* 'the moon [as subject]' 9:1. There seems to be no other evidence that the word for 'moon' had more than one syllable (1103 *Kyeylim* ¹*yusa* writes it with a single phonogram), but a compound such as *tol-al* 'under the moon' or **tol-al[h]* 'moon egg [= round object]' can easily be pictured as replacing the simple noun.[31]

Our oldest Korean dative-allative marker, then, appears to be the particle $^e/_a$ and an expanded form with *-y*, which I suspect is an accretion of the copula or the nominative *i*. Perhaps it is unwise to disregard the later scribal particle "*ahoy*" or the troublesome case in 20:2 cited above. It would be pleasing to have an old Korean locative or allative with a velar-initial element meaning 'place' incorporated, since several Japanese etyma meaning something like 'place' begin with a velar (such as the suffixes *-ka, -ko,* and *-ku* and perhaps the first syllable of *kuni* 'land') but I suspect that if such a velar ever existed in Korean it was before the vowel of the dative, rather than after it, **-[G]a*. And I am reluctant to impute external

origins to particular forms until we have tried to account for them internally. The various Ryūkyū dative, allative, and locative particles *nkai, nakai, nai, kai, kee, nai, nee,* ... , are compressions of periphrastic expressions such as *naka ni* 'at/to within', *muka[w]i < *muka-pa-Ci* 'facing', and/or the Old Japanese (-)*gari* = /nkari/ < *n ka ari* (< *ara-Ci*) 'being place of', rather than directly related to complex forms hypothesized for the languages of the Korean peninsula and further west.

6. Are there forms in Tungusic, Mongolian, or Turkic that may be cognate with the Korean and Japanese markers treated above? In Tungusic, only four case markers are shared by all the languages, according to Cincius, and two of these are adverbs rather than affixes in Manchu (cf. Benzing 1955: 78). The reconstructions are:

Accusative	*ba (*pa)[32]
Dative	*dua (*nu)
Locative	*lā, *du-lā
Directive	*tikī, (*sikī)

The instrumental (*-ži) and the genitive (*-ŋi) fall together as -i in Manchu (but sometimes -ni for the genitive). This resembles the nominative-genitive *i* /^{u}/$_o$y of Korean, with possible Japanese cognates, but the initial nasal of the proto-Tungusic marker is unexplained. The accusative *ba* (Manchu *be*) loocks promising as a cognate for Japanese *wo* ? < *bo* or for the focus particle *wa* < *fa* < *pa*, if it was originally different. Manchu *ba* 'place' is strikingly like Japanese *ba* 'place' and the comparison survives even after we take into account the derivation of the Japanese noun from a truncation ... *n pa.* In view of Korean *pa* 'place, situation', we are tempted to set up a Japanese-Korean-Tungusic etymon *pa* 'place; focus/accusative marker'. But matters are not so simple, for the proto-Tungusic word for 'place' is reconstructed as *buga* (Benzing 1955: 80). Is the Tungusic particle *ba*, like the Manchu noun *ba* 'place', a compressed form of *buga*? Or perhaps the etyma for the accusative and the noun should be kept distinct, the accusative *ba* going with Japanese *wo* (did the vowel assimilate to the labial initial?) and not with *wa* < *pa* 'place', recognizing a Korean cognate for the latter but not the former.

In an unpublished paper, J. Ross King has proposed an accusative *ba/*be* for both proto-Mongolian and proto-Altaic accusative on the basis of the forms mentioned above together with the elusive Middle Mongolian particle *be* and its variant *ber*, which King suspects may be complex (*be-r*).[33] He also hypothesizes a theme marker *n*, which would go well with the Korean subdued-focus particle *n*, and perhaps with the Japanese adnominal *n* or directly with the nominative-genitive *no*, if we defer or reject my suggested derivation of those from an essive stem. In addition, King envisages an engaging scenario whereby a proto-Altaic focus marker *i/yi* got specialized as an affix of "definiteness" and from that went on to become the marker of a definite accusative in Mongolian (after *ba/be* lost that function). King does not find Turkic elements to relate to his *ba*, but he suspects that the marker *i/yi* may be hidden in the "mystery morpheme" hypothesized by Pritsak (1964) to account for the Turkic developments that have been dubbed "lambdacism" and "rhotacism".

7. It is perhaps misleading to speak of case marking in Japanese and Korean in the way the term is usually applied to suffixes found in the Indo-European languages. The markers are postpositions much like English prepositions, and we see widespread competition, shifting, and semantic specialization among formally disparate morphemes and larger structures, just as the English locative is marked by 'at', 'in', or 'on'; the dative by 'to', 'for', or word order; the agentive by 'by', 'of', or word order; the instrumental by 'by (means of)', 'with (the medium of)', 'through (the use of)', 'in [pencil]', 'on [the computer]', and others. Many of the Japanese and Korean morphemes used for such grammatical functions appear to be cognate with each other. As we try to reach beyond these two languages, our comparisons grow more and more speculative, and this suggests that the time depth for the relationship of Japanese and Korean is less than that for either language with other languages of northern Asia, if such relationships can be shown to exist.

Notes

1. The traditional term Middle Korean ("MK") is used to designate early modern Korean of the Hankul texts dating from the middle of the fifteenth century. Most features of modern Korean dialects can be explained as stemming from a

form of the language only slightly older than what we find in the early Hankul texts. Our knowledge of the still earlier language is limited to a few hundred words found in a handful of works written in Chinese during the preceding four hundred years, the transcriptions of Korean-peninsula names found in Chinese works through many centuries, and the 26 *hyangka* discussed below, which are difficult to interpret and subject to much controversy, though they are generally assumed to be written in the language of the Sinla (Shilla) kingdom, which lasted till 935 A. D., and of the early period of its successor, the Kwolye (Kolyǒ) (918–1392). The Middle Korean forms are given in a modified version of the Yale romanization: *u* and *o* represent the minimal vowel, the unrounded counterparts of *wu* and *wo*. Modern Korean no longer maintains the unrounded *o* as a distinct phoneme, so that we are free to abbreviate "*wo*" to just "*o*". And *u* is not distinguished from *wu* after labials in modern Korean, so we shorten the transcriptions *mwu* and *pwu* to *mu* and *pu*. The pitch accent of Middle Korean is indicated by dots placed to the left of the syllable, as in the Hankul texts. A high single dot (ˊ) represents high pitch, a double dot or colon (:) indicates a rise that starts low and ends high, and the pitch of unmarked syllables is presumed to be either low or irrelevant.

2. A particle *i* meaning 'in particular (that ...)' has been postulated as an emphatic subject marker for Old Japanese; in the *Man'yō-shū* examples it is usually followed by the focus particles *fa* or *si*. Later it was used only in annotations to help construe texts written in literary Chinese (Kanbun). The adverb *aru-i-wa* 'or; perhaps' is a relic of the postadnominal use of the morpheme. And the morpheme may be present in the verb form ... *ey [-ba/-do]* < **... a-i* (? < **-Ci*). There is little evidence for this particle in later Japanese, but it is reported that *i* is used as a nominative particle in the southern part of Ōita prefecture in Kyūshū: *hito i miyuru = hito ga mieru* 'a person appears' (*Hōgen to hyōjun-go* 355). Whitman suggests that some of the nouns ending in the Old Japanese vowels that go back to the diphthongs *Ciy* and *Cey* may display the accretion of this etymon, just as many nouns of north Korean dialects have picked up a final *-i* or *-y*. I would like to propose that the Old Japanese expression *si ga* 'you/that' is from **soy ga* (< **so i n ka*) with a pleonastic accumulation of genitive markers reminiscent of the origin of the modern Korean nominative phrases *nay ka* 'I' < *na i + ka* and *ney ka* 'you' < *ne i + ka*. There is evidence for a second-person pronoun *i* (*ga*) 'you (as subject)' in three Chinese passages of *Koji-ki* and *Nihon-Shoki*, and it is tempting to find in it the missing Japanese cognate for Korean *i/ywo* 'this' but other explanations are possible; perhaps it is merely the Chinese pronoun *i* 'he; this' itself.

3. Korean *:seys* 'three', *:neys* 'four', and *ye·les* 'several' occur without the *-s* before a noun, and Japanese numerals normally lack the *-tu* before a noun; but Korean *tases* < *ta·sos* 'five' and *yeses* < **yo·sos* 'six' are usually intact. Matters are further complicated by the occurrence of *-h* rather than *-s* in *ho·nah* 'one' (just *ˊhon* before a noun), *:twulh* ? < **twu·pulh* 'two' (*:twu* before a noun), *ˊsu·mulh* 'twenty' (*ˊsu·mu* before a noun), and *yelh* 'ten'; also, by earlier versions with *-h* and *-k* (*:sek = :seh* 'three', *:nek = :neh* 'four') or just *-h* (*.ye·leh* 'several'). I have heard *hanak ssik* 'one each' from a Seoul speaker; if not influenced by the final velar of *ssik*, that seems to indicate *k* rather than *s* for the ancestor of the final *h* of 'one'.

4. Perhaps the postadnominal *no* 'one, fact/thing/person/ ...', which is a kind of resumptive pronoun, has a different source from the particle in its other uses (and from the copula alternant) and could have come from a shortening of [*mo*]*no* 'thing; fact'. But notice that all uses of *ga* and *no* are shared by each in one dialect/time or another (Kōchi uses *ga* as the postadnominal), so that seems unlikely. The probable Korean cognate for Japanese *mono* is the indeterminate *mu-* 'wh-/any-'. I have thought of deriving the adnominal particle *no* from a contraction of *n[-i ar-]o*, the essive infinitive of *ni* + the Azuma adnominal ("attributive") form *-o* of the existential auxiliary *ar-* 'be'. But below we will explore a more interesting hypothesis, also involving the adnominal ending of the old Japanese eastern (Azuma) dialect.

5. The likely cognates for the deictics are askew. The Japanese mesial *so* 'that [near you]' goes with the Korean distal *ce* < *ˊtye* 'that [away from me or you]', the Japanese proximal *ko* 'this [near me]' (and perhaps the deictic verb stem *ko-* 'come [to me]') goes with the Korean *ku* ? < **ke*. There is no Japanese cognate for Korean proximal *i* 'this', except perhaps in *ima* 'now' ? < *i-ma* 'this interval', unless we so consider the old verbal prefix *i-*; there is no Korean cognate for Japanese *a/ka* 'that [near neither me nor you]', unless we so consider the deictic verb stem *ka-* 'go' (i. e., "to thither"). I will leave open the tantalizing question: whence the Korean deictic verb stem *o-* 'come [to me]'? Also yet to be explained are the Korean forms proximal *yo*, mesial *ko*, and distal *co*. These lively variants are sometimes thought to be quite modern, but the first two are attested in earlier Hankul texts: *ˊywo* 'this' (1447 Sekpo 11: 19, 1481 Twusi 15: 12), *kwo* 'that' (1517 Sohak 9: 46).

6. The indeterminate *ka* is found in Korean as well as in Japanese. The two languages also have an interrogative postadnominal *ya*; I suspect that the Korean element may derive from an interrogative use of the nominalizing *i* + either the vocative-exclamatory particle /a/ or a reduction of [*k*]*a*, and that Japanese *ya*, though quite old, had a similar origin. Ryūkyū dialects attest a Japanese interrogative *i*, as in Shuri *qami = qam i* 'does it exist?' and *neeni = neen i* 'doesn't it exist?'.

7. I am quite aware that the wider use of *na* in later Japanese to adnominalize adjectival nouns is usually taken (perhaps correctly) to be a shortening, *na [ru]* < *ni aru*, and that the attested Old Japanese use of *na* was limited to a fairly small set of collocations *N na N*, for which the genitive interpretation is generally appropriate. I am also aware of arguments that *na* is a "vowel harmony" alternant of *no*, but I do not find them convincing.

8. Japanese *wo* has sometimes been taken as an expletive, 'lo ...!'. Notice also Korean *pwo-* 'look' ('lo' is short, after all, for 'look!'). An outside possibility is that *wo* may simply be an assimilated version of *wa* < **pa* despite the problems of chronology *wa* < *? fa* < **pa*. For more on this, see below.

9. Songs 1–14 are from 1285 Samkwuk 'yusa and are attributed to monks and others of the Sin.la period, 15–25 are from 1075 Kyun.ye-cen, and 26 is attributed to the Yeycong period (1105–22). The dates of the texts as we know them are not necessarily so old, and it is unwise to assume a relative chronology for the attestation of the language forms variously claimed to exist in these few poems. In our *hyangka* citations the pure semantograms, including Chinese loanwords, are written in CAPITALS; semanto-phonograms (Korean tag trans-

lations used only for their phonetic values) are delimited by *...*; pure phonograms, with Sino-Korean ("SK") values, are written in lower-case letters. The Chinese ("Ch") phonetic values reflect a rough approximation to some kind of seventh-century Middle Chinese, in the notation of Martin (1987) (q = glottal stop; ng = velar nasal; preposed low dot = "even" tone; preposed high dot = "rising" tone; postposed high dot = "going" tone). We treat *NE* 'you' in *hyangka* 10: 2 and 13: 3 as a semantogram despite the resemblance of its sound, Ch ˙*nyo* > SK *nye*, to the Korean translation *ne*; in 16: 10 the semantogram is Ch ˙*nay* > SK *nay* '(you) there'. The more frequent *na* 'I, me' is consistently written with the semantogram Ch ˙*ngwo* > SK *[ng]wo* (2: 3, 7: 7, 7: 9, 11: 9, 19: 4, 19: 5, 20: 3, 22: 4, 23: 6, 24: 10, 25: 2).

10. Although this would seem to be evidence against the proposal that the liquid endings of accusative and imperfect adnominal differed phonetically, the evidence is not strong, for the semanto-phonogram could be taken from a slightly different contraction *nul[-ulq]* or from just the verb stem (cf. the semanto-phonogram *twu* from *twu-* 'put away', discussed in note 21). There is something suspect, in any event, about assuming that the imperfect adnominal of *l*-ending stems collapsed the string ...*lulq* (as in modern Korean) since the early Hankul texts show the forms uncontracted; cf. Martin (1982/1983). There are but two passages for which Kim Wancin proposes this "*nul*" as representing the accusative marker, and his construal of the passages may well be wrong.

11. These are the traditional prescriptions; there are no non-Chinese passages that attest this character as part of the Korean language, but it is an entry in the 1447 character dictionary *Tongkwuk cengwun* (1447), with the two readings.

12. Miller failed to consult six of the eight published interpretations of the *hyangka* basing his pronouncements on the oldest two, those of Ogura Shinpei (1929) and ˈ*Yu Cwutong* (1942), the latter in part through an English translation inspired more by literary than linguistic interest. The interpretations Miller missed (Ci Hen.yeng 1948, ˈYi Thak 1958, Kim Senki 1967–1975, Se Caykuk 1974, Kim Cwun.yeng 1979, and Kim Wancin's own) are extensively discussed in Kim Wancin (1980), which includes many of the modern Korean translations made by each. Werner Sasse has written a dissertation on *hyangka*, too, but I have not yet had the opportunity to see it. There are probably other studies that have not come to my attention.

13. LKM (1980) implies that he thinks the 80-odd Middle Korean nouns ending in -*h* were but the tip of the iceberg and that there may have been many more earlier, for which our only attestation would be precisely the *hyangka* orthography in question. Presumably that means that Old Korean (meaning the Sinla language, not any old language spoken on the Korean peninsula, an unfortunate extension of the term) would have *nah 'I/me', *ih 'this', *nwunh 'eye'. But other forms of these words occur in the *hyangka* clearly without the -*h* where it would be expected: *NWU[N]-*noy** = *nwun uy* 'of the eye' 1: 5, *NA-*uy** = *na oy* 'my' [genitive] 19: 4 19: 5 24: 10 25: 2, *I-uy : i uy* 'of this' 10: 1 11: 2 11: 6; the vowel quality of phonograms that incorporate the harmonizing Korean vowel may seem discrepant, but that is perhaps because there were no Sino-Korean syllables of the needed type, such as *oy* or *nuy*, so that the phonograms perforce represented an orthographic neutralization of the harmonic vowels. However, perhaps these examples are evidence for a juncture before a genitive *uy* as

contrasted with a nominative *i*; the *hyangka* unfortunately offer no examples of **na(?h) i*, **i(?h) i*, **sta(?h) i*, **nwun(?h) i*, **kwoc(?h) i*, or **mwulwup(?h) i*. Kim Wancin (1980) seems to assume that the initial "*h*" of the phonogram, if real, is of no etymological relevance. Miller (1987) covers his tracks with respect to the overlooked MK -*h* by explaining it as an analogical extension of the accusative form, which for some reason he seems to think more common, to the other forms of the paradigm; that is, he would have us believe that *mwulwuph* 'knee' got its final *h* by a misanalysis of the morpheme division of *mwulwup hel [sic] as *mwulwuph ol* and extension of that to other members of the paradigm, such as *mwulwuph oy* 'of the knee'.

14. Our earliest extant woodcut edition of *Samkwuk* ˈ*yusa* is dated 1512, though the work was written in 1285 and the poems came from earlier sources.

15. The third subsyllabic morpheme of Korean is the nominalizer -*m*, on which a variety of structures are built. That morpheme is likely to be cognate with the Japanese imperfect etymon **ma-*, the stem of the auxiliary verb ...*mu(ru)*, which underlies the "future" constructions of tentative and hortative. Martin (1968) proposed a cognate relationship between the Korean verbal endings -*m*, -*n*, and -*l* and proto-Japanese *-*m*, *-*n*, *-*r*, verb suffixes reconstructed on the basis of Ryūkyū forms. Tungusic cognates for *-*r* and *-*m* may be sought in the Manchu imperfect participle -*r(a)* and the imperfect converb (also a perfect participle?) -*me*.

16. The grist is a Trojan gift, for the *h*- of the Korean auxiliary must come from *s-, as indicated by the likely Japanese cognate *so*-, the original stem of modern *si* / *su(ru)* 'do', and perhaps by the Korean verb *sikhi*- (first attested in the seventeenth century) < *si* ˙ *ki*- (1447 Sek 13: 52) 'cause to do'.

17. Dialect accusative forms *u* and *lu* are secondary developments, probably having to do with the phonetic peculiarities of /*l*/.

18. Kim Wancin also sees evidence for vowel harmony in the choice of competing phonograms such as *un* = "*qun*" < Ch ˙*yen* 'secret' versus *en* = "*qen*" < Ch ˙*yan*/.*hhyan* 'how; (to) this'. That is apparently why he assumes the pleonastic form in *NA non* 'as for me' (phonogram *en*) and *NE nun* 'you' (phonogram *un*). Yet he takes the characters BODY MYRIAD (*man*) SECRET (*un*) as representing *mwoma non*, which would seem to undercut the argument, as it would even if we rejected the hypothesized *mwoma* (> *mwom* 'body') and interpreted the passage as *mwom man on* 'as for just the body'; similar remarks can be made about *CACHWOY-wo-un* interpreted as *cachwoy non* 'as for the traces'. Other passages which show the two phonograms harmonically complementary, such as 3: 1-2-3 and 17: 5-6, are difficult to judge because we do not know whether to assign native or Chinese readings to the character writing the noun that precedes the particle. In fact, the problem of interpreting all of these texts makes statements about Old Korean based upon them highly speculative, to say nothing of claims about Proto-Korean (which must have existed) or "Altaic" (which perhaps did not), as well as assertions that these poems are magnificent literature, which we have no way of judging.

19. The phonogram CORPSE here represents the final liquid of *nal* 'day', *NA[L-u]l on*; see the discussion of the accusative above. The character RESENT is given the traditional reading *hun*, but the Sino-Korean repertory provided no way to write the syllable *hon* except, perforce, the same character. Had the

example not escaped his perusal of the texts, Miller would presumably insist on an interpretation ... *s hen*, with or without discovering "Altaic" congeners. Our notion of what Sino-Korean syllables were available is based on values found in Hankul texts from the middle of the fifteenth century, mostly couched in the prescriptive readings of the character dictionary *Tongkwuk cengwun* (1447), which adhered strictly to the traditions of Chinese phonologists. Within that framework there were no phonograms to write the syllables **nul, *nol, *nel* or to write **lul, *lol, *lel*. ('Yi Tonglim 1959: 320 is mistaken in the reading "*lelq*" for *kwelq* 'vacancy', and the character does not even appear in the location he cites, Wel 1: 8.) Characters were available for the sounds *qun, qon*, and *qen*; for *hun* and *hen* but not **hon*; for *hul* and *hel* but not **hol*. Since there was (later and by tradition) a way of writing the syllable *qon*, which appears in Sek 6: 3 in the binom *qon˙-qoy˙* 'favor and love' (modern *un-ay*), we wonder why such a character was not put to use as a phonogram in the *hyangka*, if an effort was indeed made to note vowel harmony. ('Yi Tonglim 1959: 216 gives variant forms of the character meaning 'secret' as carrying the readings *˙qon* and *qon˙* but he must be mistaken, for they do not appear in the locations cited, Sek 6: 28 and Wel 10: 38 respectively, nor in *Tongkwuk cengwun*, which gives only the one entry 'favor' for the syllable *qon* and reads 'secret' as *qun˙* or *˙qun*.)

20. And there could be no free word **lul/*lol* so perforce it would be written *ul* ("*qulq*") or *hil/hul* (< "*hulq*"), the most innocuous approximation to the non-existent **ol* ("**qolq*"). Perhaps the one instance of "*hun*" for ... *on* (instead of the available "*qon*") was by analogy. We do well to bear in mind that the scribes were probably aware of the Chinese phonological tradition known as *fǎn-qiè* whereby the sound of a syllable is given by two characters, the first to be read for its onset (the "initial") and the second for the rest of the syllable (the "final" or rime, including the tone).

21. The particle is combined with some of the other particles. The initial labial has a voiced reflex after the accusative, *[w]o ba*, and after certain verb forms with which the focus particle is combined (*-a-ba, -e[y] ba*); the /b/ goes back to the pronunciation [mba] = /npa/, which seems to incorporate the genitive marker *n*.

22. In the *hyangka* this is usually written with the semanto-phonogram PUT AWAY (Ch *tryey˙* > SK *chi*), for which the Korean translation is the verb stem *twu-*. That raises a question about the vowel. Modern Korean *twu* is thought to be a recent raising of the still common pronunciation *two*, the only version found in the Hankul texts before 1586. There are only two passages in the *hyangka* where the particle is written with a phonogram: *PWU[THYE]-thyey two* 'even Buddha [as subject]' 24: 9 with the character meaning 'knife', Ch *.taw* > SK *two* and *THOYK two* 'even a house' 14: 10 with the character for 'capital', Ch *.to* > SK *twu*. We have the unhappy choice of either deciding that the particle must have had variants *two* and *twu* even in early days or concluding that the verb *twu-* raised its vowel from an earlier **two-*, for which no other evidence is to be found. The problem is independent of one's judgment as to the merit of the proposal (by Kim Wancin and others) of a great vowel shift that serves to buttress arguments deriving the horizontal vowel harmony of Korean from an earlier vertical system. Under that interpretation, the pre-Hankul version of *wu* would have been front-rounded and its harmonic counterpart would have been high: the ancestor of *wu* would be pronounced like some versions of modern *wi* (< *wuy*) and the ancestor of *[w]o* like modern *wu*.

23. Miller (1987: 279) has the Japanese particle *ni* incorporate a "pre-Jap. **-n.lī*", taken as a "prolative-locative", and fall together with another *ni* ("used for marking the subject of a causative or other secondary verb") that derives from "a nominal stem-final **-n* followed by the original Altaic acc. **-i*", but that seems an improbable scenario.

24. The development of these forms from compounds within Middle Korean is quite clear, and there is no need for Miller (1987: 63—64) to speculate that they indicate a "fairly late (Koryŏ?) borrowing (or, re-borrowing) back into Korean of some Altaic form closely related to the Proto-Tungus suffix **.kai*". The Korean particle *se* (ablative or locative) is from *[i]sye*, the infinitive of *isi-* < **pisi-* 'exist' (modern *iss-* is an irregular development), and *puthe* < *pu˙the* '(starting) from' is the infinitive of *puth-* 'adhere'.

25. Kim Wancin has *PA[M]-muy* 'at night' 21: 5 with the phonogram meaning 'not yet', for which we have evidence only of a reading *˙mi* (as in Sek 13: 59), but perhaps 'not yet' is taken as a graphic abbreviation of some other character, such as 'younger sister' with the reading *moy˙*; Kim Wancin was perhaps influenced by the phrase *PAM uy* 6: 4 with the phonogram *.[ng]uy*, but he may be wrong on his construal of that passage and *uy* here is perhaps the genitive. (Of our eight interpreters, only Ogura Shinpei reads *PAM i* for 21: 5, and he reads *PAM ay* for 6: 4.) In the passage *SALOM-moy EP[S]-s[i]-kwon* 19: 6, Kim takes the character for 'rice' as *moy*, but the only reading of the character for which we have evidence is *.mi*. (Of our eight interpreters, only Kim Senki and Kim Cwun.yeng take the passage as *salom i* with the nominative.)

26. I am unsure whether Kim Wancin intends the *˙ya* character to be taken as a phonogram, with /ye/ a version of /ya/, or as a semanto-phonogram, with *ye* reduced from the copula infinitive *i[y]-e*. If it is the latter, then our transcription should be *I *ye** and *KYEZUL-uy-*ye**. The others are of little help on this, since with one exception they take the passage to mean something quite different. The word for 'winter' was *kye˙zolh/kye˙zol*, a doublet, in the fifteenth century and 'autumn' was *kozolh/kozol*, also a doublet.

27. Miller (1987) cites another example from 'Yang Cwutong ("... *CWON ohoy*", for which read *CWON uy-huy*; the phonograms are *.[ng]uy* 'conclusive particle' and *.huy* 'rare') but Kim Wancin (1980: 116) makes a good case for a different interpretation of the passage (9: 5, mistakenly cited as "9: 2" by Miller): *MOLO *wos* POLA WUL.WEL-LE = molo [G]wos wul[G]welle* 'looking up at the Lofty One Himself', with translational readings for all the characters except the semanto-phonogram 'garment' (as a phonogram read *uy*, SK *quy* < Ch *.qyey*), to represent the lenited form of the particle *kwos* 'precisely', pointing out that the verb 'look up at' is transitive and would take an accusative (here masked by the focus particle), not a dative. Kim Wancin (note 32) rightly cites 1804 Cwuhay Chenca-mun as carrying the passage *molo cwong CWON YA*, roughly 'the character, read *cwong* and glossed as height, means venerated' (26 v), but for *cwon* 'venerated' itself the gloss (14 v) is *nophul* 'lofty'.

28. I have two thoughts on the intervocalic -*h*- implied by the phonograms in *ahoy*. First, perhaps *ahoy* consists of the simple particle *ᵉ/ₐ* followed by a reduced form of *ho.ya*, the infinitive of the auxiliary *ho-* 'do; be', with a unique -*y*- of

unexplained origin. (For an analogy, look at the Japanese ... *ni site* and ... *ku site*.) Second, the scribes may have tried to cope with the same problem facing later spellers: since their *-h-* between voiced sounds readily drops, Koreans often omit an etymologically appropriate *-h-* and also, like a good Cockney, sometimes supply an haitch for which there is no morphophonemic or etymological motivation. The non-initial syllables of Korean words have been subject to lenition and compression throughout the history of the language; their vowel color has been neutralized in harmony with the preceding vowel and/or reduced to the minimal vowel quality of *u/o* (vowels that are rare in word-initial position), and even dropped altogether.

29. On words of this type, see Kim Tongso (1982). Miller took the notion of a suffix *-ak* 'within' from 'Yang Cwutong, who would thus account for the use of the character for 'bad' (Ch and SK *qak*) in the first phrase of the troublesome line 20: 2, *PEP-KYEY ak OY s PWUL-HWOY ahoy*, taken as meaning 'to the assembly of Buddhas of within the realms of the Law (*dharmadhātu*)', but it seems strange for such a suffix to be attached to a Chinese binom, and I am surprised that Miller did not simply take *akoy* as forming a doublet with *ahoy*, thus avoiding a pleonastic genitive (*[...-ak] oy s*) in favor of a genitivized locative (*... akoy s*). I am not happy with the interpretations of this passage and would reserve judgment on them as evidence for linguistic forms.

30. There is no connection with the Beijing word *yuèliang* 'moon', with the adjective *liàng* 'bright' suffixed to the noun, which must be a late coinage in northern China, for in a similar formation Cantonese uses the equivalent of *guāng* 'shine'.

31. In a scolding of the tradition of "scholarship in the Old Korean texts", Miller (1987: 315) claims the phonogram *LYANG* 'good' has been "uniformly taken as" ... *ay* on the basis of Hankul *tolay* 'in the moon' in a version of one of the poems in the 1493 Ak-hak kweypem. The long passage found there (224 – 225) of the 1973 reproduction published in set 2 of *Hankwuk kocen chongse*) is a retelling of the story of Che-yong (as found in the Chinese text of *Samkwuk 'yusa*) in the colloquial language of the day, for which the expression *tolay* was appropriate, but that passage has certainly not kept the philological interpreters from treating the relevant line of the poem itself in other ways, as witness both Kim Wancin and Se Caykok.

32. The parenthesized forms appear in certain restricted environments and can be ignored for our purposes.

33. On the Mongolian particle, see Street (1981) and the sources cited there.

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