

A New Look at Paekche and Korean: Data from *Nihon shoki**

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The study of the dead language of Paekche has concentrated mostly on the toponyms recorded in *Samkuk saki*, and *Samkuk yusa*. These data are of great importance, but several methodological problems have hampered the study of this language. The present study takes a different angle, and looks at 42 Paekche words preserved in *Nihon shoki*. Paekche reconstructed forms are posited, and these are compared with Middle Korean, Old Japanese, and Tungusic forms. This paper concludes that the Paekche language is very closely related to the language of Silla (Middle Korean).

1. Introduction

The study of the ancient language of Paekche¹ has gathered momentum lately, with the work of Choy (1987), Kim (1983), Kôno (1987), Lee (1991), Lewin (1980), Mabuchi (1980), Ryu (1994), and Toh (1981, 1984) joining the tiny group of earlier works by Miller (1979c) and others.² These scholars have noticed that *Nihon shoki* (hereafter *Shoki*) contains fragments of the Paekche language; however, no one has devoted serious study to the

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¹ I transcribe Korean forms in Yale romanization, aside from the traditional spellings for well-known names.

² As far as I can ascertain, Toh (1977) is the only full-length work previous to Miller.

numerous Paekche words found in this Japanese record, aside from Kōno (1987).³ The research conducted so far has been tantalizingly interesting, but just as limited in scope. The study of Paekche is actually in an embryonic stage, which should excite scholars in the field, because there is much left to do.

That is not to say that the general research on Paekche has been without serious shortcomings. Careful research into the language of Paekche has been hampered by one serious methodological problem. Because the majority of the fragments of the language of Paekche are preserved in Chinese phonograms, where the sound of a Chinese character is borrowed to represent the sound of the Paekche words, the only way to extract any information is to rely on reconstructions of Old Chinese (OC, actually, the latest stage of Old Chinese, or Late Old Chinese, LOC). Most of the scholars working on Paekche have continued to rely on Karlgren's work, or Karlgren-like reconstructions, despite the fact that these are the result of research that needs updating.⁴ In this paper I will use the innovative research of Starostin (1989, 1999).

Another problem deals with scholars ignoring most of the crucial evidence

³ I have been told that Bruno Lewin (1980) essentially covers the same ground. My own work, as presented below, lists 42 Paekche words. Lewin does mention about 20 Paekche words. He also presents the entire list from Toh (1981), but this is nothing more than a simple listing of data. There is no discussion of the value of these words related to the phonology of Paekche. Furthermore, too many assumptions underlie his data as presented (cf. 1980:177, 180). For example, what value is Pak(u)suki(no)e 白村江 (1980:177)? Paku likely is Chinese for white (OC *brak, LOC *bak), and tells us nothing about the Paekche language. Also, what do we do with Lewin's list when there are words like: Mite 彌氏 (written incorrectly as 彌氏) or Nimi 尼彌? These are names, and there is no way to check the semantics. Thus, his work merely hints at what we can learn from a closer examination of Paekche material. Mabuchi (1980) does much the same, but he at least examines the underlying Chinese using Karlgren's reconstruction of Old Chinese.

⁴ As a case in point, Miller (1979a, 1979b) expends great energy attempting to prove that the sinograph 尸 could not have been used in Old Korean *hyangka* poetry to transcribe -l as many Korean scholars have suggested. He suggests the graph is transcribing -s, but his reliance on Karlgren has led him astray (Karlgren reconstructs 尸 as *šjər). Consider the evidence provided by Miyake (1998:348), where the three graphs, 尸邪耶, are lateral initial in Starostin's (1989) reconstructions (respectively *cliy, *lhia, *lhia). It should be noted that Miyake did these OC reconstructions without reference to *hyangchal* to avoid the problem of circularity. Clearly there is a lateral element in 尸, so Miller's tongue-lashing of Korean scholars is off-the-mark.

in *Shoki*. This paper also intends to show what an important contribution *Shoki* can provide.

We cannot, perhaps, fault scholars for ignoring *Shoki* and its plentiful data, because no specific index of Paekche words in *Shoki* exists, and the only way to get any data is the old-fashioned way: read the record, and document all Paekche words encountered. This is what I have been forced to do. For the reader who is unacquainted with *Shoki* and its contents, I will give a simple breakdown, and explain the method I have used to gather data.

1.1. *Shoki* and its Data

Shoki is traditionally dated 720 CE for the year the finished manuscript was presented to Empress Genshō (r. 715–723). In spite of this late dating, much of the record is considerably older. *Shoki* was compiled by a rather large group of people working on various sections (individual records of specific emperors). A chronology was created (based on the Paekche royal chronology [cf. Mishina 1964]), and various events within Japanese history were lined up according to traditional Paekche dates. When the historical time line of Japan (or more accurately Yamato) bisects events occurring on the Korean peninsula, the compilers quoted from Paekche records that envoys or immigrants to Japan brought with them. These Paekche records no longer exist, but quotes from these records can be found within *Shoki* in two general formats: i) direct quotes, including the title of the work; ii) indirect quotes where whole sections of the record (down to the diurnal entry) appear. The second section is just as important as the first, because it would appear that these were included in the record of *Shoki* with little more than cosmetic surgery. Such surgery mainly meant altering individual usages, such as changing the appellation of Wa 倭 to Yamato 日本, or altering 'king of Wa' 倭王 to Emperor 天皇. We know that such surgery took place but it extended no further, because private records in possession of temples or individual clans have preserved the earlier usages.⁵ Paekche,

⁵Interesting that the infamous 'bureau of Yamato' *yamato no mikotomoti* (the Japanese bureau in Karak) is written in *Shoki* as 日本府, but a quote from the no longer existing *Kana nihongi* writes this bureau as 倭宰. This earlier spelling is less political than 日本府. Thus, not all editing was done to make Japan look good in the eyes of foreigners. Some was simply adjusting older terminology to conform to the more modern Chinese system, which the Japanese began importing seriously in the latter years of the eighth century.

Silla, and other peninsular names and toponyms remain intact in the *Shoki* glosses, with an orthography that is somewhat different from that used by the ancient Japanese to transcribe Japanese names and toponyms, or the words in songs. The biggest difference between the two orthographies is a higher inclusion of graphs with closed syllables in Paekche, while the Japanese sections rely on graphs with open syllables. As a simple example, compare usages of three syllables, as seen through the Japanese orthography, transcribed by Paekche and Japan (in figure i)⁶:

(i)

Syllable	Japanese Transcription	Paekche Transcription
/e/	愛哀埃	遠緣燕
/sa/	佐左沙差作瑳娑舍狹	佐左嵯釋三贊産匝叱姐宿石積
/ti/	知智致扱苔池遲直馳	知智致池遲治嫡適竹中仲沖珍

Only two of the sinographs in the Japanese transcription column (作直) have a closed syllable (2:21, 10%), but of the 29 sinographs in the Paekche column, 18 (62%) have closed syllables.⁷

I have employed a very simple method for gathering my data: scan the text of *Nihon shoki* and jot down words that are from the language of Paekche.⁸ Many of these are *katakana* glosses on Chinese graphs. All glosses are from the critical text of Iwanami Shoten's *Nihon koten bungaku taikei* (NKBT), volumes 67–68. The critical text of the edition mentioned above is the Urabe Kanekata text for the first two books, the Age of the Gods section, while the remaining 28 books are from the Urabe Kanesuke manuscript. The Kanesuke manuscript is from the Kamakura era, but clearly was based on older copies in the library of the Urabe clan.⁹

From an analysis of the text of NKBT, I have found 42 Paekche words. Because the sinograph and its *kana* gloss either appear in a direct quote from a Paekche record, or in the second type of section noted above, I have taken the word to be from the Paekche language. These readings were then

⁶ The graphs in the Paekche column have been gleaned from Ryu (1994: 195–207).

⁷ For a fuller treatment of the origins of the orthography, see Bentley, forthcoming.

⁸ I have relied on the text of *Nihon shoki* in Ienaga et al. (1985).

⁹ For a discussion of the Kanesuke text and its relation to the rest of the *Nihon shoki* textual stemma, see *Tenri toshokan zenhon sōsho, washo no bu* (hereafter TZH), vol. 56, pp. 24–29.

checked against *Shaku nihongi*, a late 13th century compendium of earlier lectures on the text of *Shoki*.¹⁰ When the original manuscript of *Shoki* was presented to the court in 720, it quickly became apparent that many of the Chinese passages could not be read in the vernacular, so a series of lectures were opened where readers could ask scholars how a certain character was to be read in Japanese or some other language. The first lecture was in 721. 'Minutes' were taken during these lectures, and were later titled *Shiki* 私記. These were compiled into *Shaku nihongi* sometime between 1274 and 1275. This record has provided a control to make sure the spellings are the same.¹¹ Because there are some spelling discrepancies (mainly -o- versus -wo-), I have checked all glosses in NKBT against the Urabe Kanesuke text, contained in *Tenri Toshokan zenhon sôsho*.¹² Naturally, cautious scholars will wish to know if we can actually trust these Paekche data. Below is a simple test.

The characters used to denote the king of Paekche (百濟王) are glossed as *konikisi* or *kokisi* in *Shoki*. In the twentieth year of Emperor Yûryaku, the Chinese characters for the queen of Paekche (大后) are glossed as *konioruku*. These two words are important, because the Chinese historians who compiled *Zhōu shū* recorded that the Paekche word for king was 韃吉支, and the word for queen was 於陸. The following chart shows how I interpret these two Paekche words (figure ii). Early Middle Chinese (EMC) is based on Pulleyblank (1991).

¹⁰ I have used the *Shaku nihongi* text in Onoda 1986. Most of the glosses here are also in *katakana*, but there are a few which are direct quotations from earlier *Shiki*, and these are written in phonograms; e. g. 私記云己富里, "Shiki says [this is read] *kopori*."

¹¹ There are a few differences. Many examples of initial o- in the manuscripts of *Shoki* have been recorded as wo- in *Shaku nihongi*. Confusion of o- and wo- occurred in the Heian era (794-1192), so I have relied on the interlinear readings of *Shoki*, which are collated from various manuscripts. The textual issues are very complicated, because the interlinear glosses originally were written in *man'yōgana*. For example, in the *Hei-hon* manuscript of *Shiki* (ca. 965?) the name of a person from the Korean peninsula 微叱己知 is glossed 美志己知 *myisikoti* (Kuroita 1932: 165), but in *Shaku nihongi* this has become ミシコ\カチ, where phonograms have been written in *hentaigana* to the extent that the modern editors have printed these in *katakana* (plus one manuscript has ka instead of ko). If the *katakana* is all that remains, then the value of the vowels is impossible to posit. For the *kō-otsu* values, a tenth century manuscript written in *man'yōgana* will also be of little value, because so many mergers had already taken place.

¹² TZH, See note 8.

(ii)

Character	Starostin LOC	EMC	Shoki	Paekche
韃吉支	*kən-kjit-ce	kian-kjit-tɕi	konikisi	*kən-kici
於陸	*ʔo-luk	ʔoluwk	oruku	*oruk

Granted, the reconstructed Paekche forms are based on somewhat tenuous evidence, but it is difficult to argue that the Paekche form quoted by the Chinese is unrelated to the form recorded by the Japanese. And this is the method I use to glean Paekche evidence from the Chinese phonograms. I have mainly relied on Starostin's LOC reconstruction. When Starostin (1989) does not have a specific sinograph (or a related graph that could have been borrowed, being homophonous), I have relied on his electronic database. When relevant to the discussion at hand, Starostin's OC has also been used. I will discuss the problem with reconstructing the Paekche vocalism below.

1.2. Assumptions

As the example above in figure (ii) hopefully has shown, I have chosen LOC over Pulleyblank's EMC because the material I am presenting is older than the sixth century CE, which is what EMC represents.¹³ Starostin's LOC represents the language of the third and fourth centuries CE.

The remainder of this paper will divide Paekche words found in *Shoki* into three groups: 1) those words with a good semantic and phonological fit, either with Middle Korean (MK), Manchu-Tungusic (MT)¹⁴ or Mongolic (MON); 2) those with a less-than-satisfactory semantic or phonological fit; 3) words with no known external etymology. Needless to say, words that had very poor semantic or phonological comparisons have been included in this last group.

Several assumptions underlie the Paekche reconstructions that I present, and these need to be addressed first. Because I believe Japanese did not have enough vowels to accurately reflect the Paekche vocalism, I have tentatively reconstructed Paekche phonology on the following data: where

¹³ I have relied on Pulleyblank's EMC (1991) when relevant regarding *man'yōgana*.

¹⁴ It is true that this is a translation of the Russian term, but some scholars would rather use the simpler term Tungusic. I believe Vovin's important classification of this language family (1993) has shown that Manchu was the first language to split from the family, so I prefer to call this language family Manchu-Tungusic.

the lexical item is preserved in Old Japanese records in phonograms, I reconstruct the vowels accordingly (i. e. 岐 *kyi* [ki] but 奇 *kiy* [kɨ]). If, however, our data are only preserved in *kana*, then glosses with -i- are transcribed as I. Glosses with -e- are transcribed as E, and glosses with -o- as O. It should be noted that as a marked vowel, the vowel I is likely *i, but I leave that question open because we cannot be sure at this point.

Also, where the OC reconstructions have retroflex consonants, I have written simple consonants in the Paekche reconstruction (知 OC *tre, LOC ʈe > PCH*te). This assumption is made because neighboring languages-- Korean, Manchu, and Japanese--do not have retroflex consonants. I have also ignored Starostin's distinction of long vowels, tones, and aspiration because I do not think these correspond to anything in Paekche. I have kept the distinction of retroflex vowels, however, transcribing these with an uppercase r.¹⁵ Furthermore, I have converted Starostin's glides (-j-) to -y- in my Paekche reconstruction. I have written -yi- (< -ji-) as just -i- because neither Japanese nor Korean make a distinction between /i/ and /yi/.

I do not reconstruct voiced obstruents in initial position, because I adhere to Eom's results (1994:410-415). Eom conducted a survey of all Sino-Paekche (mainly toponyms in *Samkwuk saki*), and concluded that Paekche did not have voiced initial obstruents. A simple search through the Paekche place names in *Samkwuk saki* (SKSK) will make it clear rather quickly that alternations with voiced and voiceless initial sinographs show no voiced obstruents in initial position. For k- initial Paekche orthography uses graphs like 仇 (OC *gu) and 貴 (OC kuts), with k/g alternation. For t- one finds sinographs 突 (OC *dut) and 珍 (OC tər), with t/d alternation.¹⁶

There are cases where the LOC sinograph ends with a velar nasal (such as 良 *laŋ). I reconstruct this sinograph as *ra, analogous to ra used in *man'yōgana* in Japan (良 LOC *laŋ, 羅 LOC *la, both represent ra in OJ). As Miyake has already shown (1998:353) 羅 and 良 both were used in *Hyangka* to transcribe Old Korean (OK) *la.

I have also reconstructed a liquid for what LOC has as *-t. It has been suggested to me that because of alternations in the Paekche orthography to

¹⁵ As Ramsey (1996) has shown, an earlier stage of Korean appears to have had two liquids, and there either was a merger, or a loss in certain environments of one of the liquids. In an attempt to save as much data as possible from OC and LOC, I have retained retroflex vowels that may have been used to transcribe liquids.

¹⁶ Data graciously supplied by Marc Miyake (p.c.).

transcribe place names, sinographs with *-t, *-n, and *-Ø were used to write a PCH *-r that no longer existed in Chinese. In other words, LOC *-t sounded like *-d, and this was close to the Paekche liquid (Miyake, p.c.). Thus, I posit that the underlying phonemic value of Paekche *-t and *-n in the LOC data are actually transcribing an *-r.

2. Data

2.1. Group One

Below (in figure iii) I list all Paekche words that I have been able to find that have a good semantic fit either with a MK or MT/MON word. I have added Old Japanese (OJ), because in some cases, the only external etymology appears to have survived in Japanese (as a reflex or as a loan). After the chart, a simple explanation of each lexical item is listed, following the number in the chart. These data from MK and MT have been chosen to do double duty--providing evidence that PCH was related to the Manchu-Tungusic family and that various words of PCH words survived into what later became Middle Korean. What this last relationship portends will be discussed below.

(iii)

Number	Sinograph	Gloss	PCH
(1)	上 'above, north'	okosi	*okOsI
(2)	熊 'bear'	kuma 久麻	*kəma ~ *kuma
(3)	下 'below, lower'	arosi ¹⁷	*arUsI
(4)	帶 'belt'	sitoro	*sItOrO
(5)	荷 'burden'	nŏ能	*nə
(6)	評 'district'	kŏpŏri ¹⁸ 己富里	*kəpəri

¹⁷ Various manuscripts of *Nihon Shoki* and the text of *Shaku nihongi* have the sinograph 下 glossed either as *arusi* or *arosi*. There may have been dialect variation, or the Paekche word had a back vowel that was neither Japanese -u- nor -o-. My reconstruction of the PCH form reflects this latter suspicion, using -U- as a cover symbol for back vowel, height unclear.

¹⁸ Several assumptions underlie the glosses from *Nihon shoki* and *Shaku nihongi*. In cases where no phonograms are provided, the glosses come from *katakana* glosses in the texts. On the overwhelming evidence presented by Miyake about Old Japanese p-initial syllables actually being a voiceless bilabial stop (1999: 396-400), I have transcribed ハヒフヘホ with p-initials instead of f-.

(7)	鷹 'falcon'	kuti 俱知	*kutI
(8)	津 'ford'	nuri	*nurI
(9)	嶋 'island'	sema 斯麻	*syema
(10)	大 'large'	koni	*kən-i
(11)	主 'master'	nirimu 爾林	*nyerIm
(12)	母 'mother'	omo 意母	*əmə
(13)	山 'mountain'	mure 武禮	*murE
(14)	表 'outside'	poka 保加	*poka
(15)	后 'queen'	oruku	*oruk(u)
(16)	南 'south'	aripisi	*arIpIsI
(17)	川 'stream'	nare / nari	*nari
(18)	城 'walled city'	ki 基	*ki
(19)	城 'walled city'	sasi	*casI

(1) PCH *okŌsI. The most obvious comparison is with OJ okos- 'raise, get up'. Other possible cognates are MK wuh L 'top', and MT *ugi- 'top'.

(2) PCH *kəma ~ *kuma (久麻 OC *k^wə?, LOC kəw), OJ kuma LL, and MK kwom R. At this state, it is not clear what the vowel of the first syllable was, so I have hedged. A likely cognate is MA kūwa-tiki bear cub, and MA kūwa-tiri 'an animal resembling a bear.'

(3) PCH *arUsI. This is cognate with MK alay LH 'below.' Miller (1979c: 50-51) relates this word to MON ala 'space between the legs,' EV alas 'thigh, shank' and Old Turkic al 'front side.' The semantics leave a lot to be desired, so I have set aside that comparison.

(4) PCH *sItOrO. Kōno (1987: 77) has suggested this is cognate with MK stuy H 'belt' which he takes back to an earlier *(i)turi.

(5) PCH *nə. This word appears in the place name 荷山 glossed as ノムレ *nomure* 'burden mountain.' This word is clearly related to OJ niy 'burden,' the free form, and nō- the bound form. This same character appears in a place name in *Nihon shoki*: 荷取, glossed as 能登利 *notōri*. On this evidence I reconstruct a central, unround vowel.

(6) PCH *kəpəri. The OJ word kopori is clearly a loan from Paekche. This word is likely cognate with MK kwoul LH or kwowolh LH 'county seat, district.'

(7) PCH *kutI. This word was borrowed into the Japanese language, because *Wamyōshō*, one of Japan's oldest encyclopedias mentions the word, but *kuti* referring to 'hawk' does not appear to have survived beyond the Heian era (794-1192). Murayama (1974: 190-191) compared this word with

Nanai gusi, Orok gosi, and Evenki gusikōn 'eagle,' but the correspondence of -t- and -s- needs explanation. Perhaps a better comparison is with MA xeturxen 'small hawk,' especially since the word in *Nihon shoki* is embedded in a story of hawking in Japan.

(8) PCH *nurI. This is very likely cognate with MK nolo LL 'ferry.'

(9) PCH *syema. This word is preserved in sinographs as 斯麻 (OC *se-mhraj, LOC sje-ma^r), suggesting PCH *syema. The obvious cognates are MK syem R 'island,' and Japanese sima LL 'island, territory.'

(10) PCH *kən-i. The obvious cognate would be MK ha- H 'many, great,' with lenition of k- > h-. It should be noted that Choi (1994) has already dealt with this word, but his exposition is riddled with problems. He says (1994:38), "When it comes to this word 韃 ACh. *ki^wen, it is not convincing that B. Ch. Park...takes it for the word *han- meaning 'big, great,' at least from the phonological point of view. The Korean reading of the word should be kən or kWn, not han. If the word would have one syllable, Japanese reading would have been kon, not koni, for Japanese has the two different characters for /n/ and /ni/." First, there was no syllable-final /n/ in Old Japanese, and the -ni may actually be just the attributive form plus a bound noun "one that; fact that", ka-ni > ha-ni. It should be further noted that both MK ha- and khu- 'big' are likely related to this Paekche word in a complicated fashion, which cannot be elucidated here. It should also be noted that MK khu- may go back to *huku- (cf. Ramsey 1993:440), but the -ku- element and ha- are what I believe are related to PCH *kən-i

(11) PCH *nyerIm 'master.' *Nihon shoki* preserves the name of a castle in Paekche spelled 爾林 (OC *n(h)ejʔ-rəm, LOC nje-lim), suggesting *nyerIm. This is cognate with MK nim R 'master.' The rising tone shows the word was originally disyllabic.

(12) PCH *əmə. This is cognate with MK eme-nim H 'mother,' OJ omō 'mother,' and MA eme 'mother.'

(13) PCH *murE. This can be compared with MK mworwo LH 'mountain, ridge,' and MT *mulu 'ridge.' The Manchu-Tungusic form appears to have originally pointed to something of great height. Thus the glosses of this word in Cincius (1977:555) are 'roof beam,' 'pinnacle,' or 'mountain range.' This semantic range may explain why there are two related words in Paekche, PCH *murE mountain and PCH *mora 'high'. PCH mora may also be related to Old Japanese moru < (*mor-) pile up.

(14) PCH *poka. This is cognate with OJ poka 'outside, other.' It is also

tempting to compare this with MK pask L 'outside,' but the fricative and vowel need explaining. It should be noted that a variety of the Hamkyeng dialect found in the language of Koreans living in Russia (pre-Soviet Union Russia) preserves 'outside' as pak-ê (King 1991 : 440). Furthermore, it has been pointed out to me that the form cited in King (1991) may include the locative particle MK e/ya (Samuel Martin, p.c.).

(15) PCH *oruk(u). I put the final vowel in parentheses because it is not clear if the vowel was actually there. The Japanese transcription may have added it because OJ had no closed syllables. On the other hand, the Chinese transcribers may have ignored the final vowel. I compare this word with MK el-Gi-l LR 'mate with, marry [a daughter] off to,' which is the causative of elu-, presumably derived from *el[u]-ki- (Samuel Martin, p.c.). This word is important in the study of the Paekche language. It suggests the Paekche and Silla (Middle Korean) are more closely related than first suspected, because a term from Paekche royalty has been preserved in MK.

(16) PCH *arIpIsI. This is cognate with MK alph L 'front.'

(17) PCH *nari. I have posited a high front vowel for the second syllable on the basis of the transcription in *Samkwuk saki* (那利 LOC na-lhi). I compare this with MK nayh R 'stream.' The Russian variety of Korean preserves 'stream' as nye (King 1991 : 229). This PCH word may also be cognate with MA jari 'swamp,' EV jārut 'lake,' Udehe jau (<*jaru) 'bog,' Even jarika 'swamp,' Nanai niarō 'bog,' and MT *niaru 'lake, swamp' (proto-form from Starostin 1999).

(18) PCH *ki. This appears in Japanese records transcribed with graphs like 紀 (LOC *ki, EMC ki) and 基 (LOC *ki, EMC ki). This PCH reconstruction is reconfirmed again below, ((29) in figure iv). I know of no external etymologies.

(19) PCH *casI. This word is likely cognate with MK cas H 'walled city,' and I reconstruct the PCH form as *casI. OJ had no affricates, and the Japanese appear to have transcribed *casi* as *sasi*.¹⁹ I compare the MK form with MA jase 'frontier, border.'

It is interesting now to compare these data and the phonological changes that are implied with data found in the geographical sections of *Samkwuk*

¹⁹ It should be mentioned that some alternations in the *Samkwuk saki* place names give one the impression that there was no affricate in Paekche either, because there are cases of *s- alternating with *c-. But that does not explain the spelling in *Zhōu shū*. For the moment I err on the side of caution and reconstruct *c-.

saki. Figure iv is a simple chart of Paekche words from Book 36 of *Samkwuk saki*, the Late Old Chinese (LOC) reading for the characters, and other relevant data. Toh (1981:27-30) believes there are more Paekche fragments than these, but I find many of his reconstructions too fanciful to be included.²⁰

(iv)

Gloss	SKSK	OC	LOC	PCH
(1) 'bear'	金馬	*kəm-mraʔ	*kim-ma ^r	*kəma
(2) 'bird'	浦	*pha	*pho	*po
(3) 'black'	甘勿	*kam-mət	*kam-mit	*kamir
(4) 'clear'	伐	*b(h)at	*b(h)ət	*pər
(5) 'dragon'	古麻	*ka-mhraj	*ko-ma ^r	*koma
(6) 'fart'	比	*pić	*pji	*pi
(7) 'field'	豆盼	*dhoh-hət	*dho-hit	*tohir
(8) 'fire'	伐	*b(h)at	*b(h)ət	*pər
(9) 'gold'	仇知	*kru-tre	*g(h)əw-ʔe	*kəwte
(10) 'grove'	所非	*swo-pje	*šo-pwij	*sop(w)iy
(11) 'grove'	其	*gə	*gəw	*kə
(12) 'high'	毛良	*mhaw-raŋ	*mhaw-laŋ	*mora
(13) 'horse'	古馬	*ka-mraʔ	*ko-ma ^r	*koma
(14) 'iron'	實	*lit	*zit	*sir
(15) 'land'	夫里	*pa-rə	*pwo-li	*pworī
(16) 'large'	翰	*g(h)arh	*g(h)an	*kən
(17) 'market'	加知	*kraj-ʔe	*ka ^r -ʔe	*ka(r)te
(18) 'moon'	珍	*trər	*ʔin	*tər
(19) 'new'	沙	*sa	*ša	*sa
(20) 'nine'	埃	*dut	*twit	*twit

²⁰ For example, a place name in *Samkwuk saki* is spelled so that we can discover what number nine was in Paekche, that spelling being: 埃坪 for a Silla replacement, 九阜 (埃 = 九). Toh (1981:29) takes this phonogram to represent Paekche *aku* which then becomes MK ahop 'nine.' This is my first misgiving concerning Toh's work, a reliance on an inaccurate reconstruction of Old Chinese. Coblin reconstructs 埃 as *dot (1994:355), and Starostin as OC *dut. The relationship with *dut and *aku* now requires a lot of explanation. My second misgiving is Toh's manipulation of textual data to create unexplained correspondences. Toh believes that 埃 also represents 'mouth' MK *aky*, suggesting that final MK y alternated with zero in MK, and this all corresponds to OC *-t. This may be the case, but there is no explanation.

(21) 'orphan'	鳥兒	*ʔa-ŋe	*ʔo-ŋje	*onye
(22) 'path'	只良	*keʔ-raŋ	*kje-laŋ	*kyera
(23) 'precious'	丘斯	*khi-se	*khəw-sje	*kəwsye
(24) 'rain'	比	*pić	*pji	*pi
(25) 'red'	所比	*swo-pji	*šo-pji	*sopi
(26) 'scholar'	奴斯	*no-sje	*no-sje	*nosye
(27) 'stone'	珍惡	*trər-ʔak	*ʧin-ʔak	*tərak
(28) 'stream'	那利	*na-ri	*na-lhi	*nari
(29) 'swallow'	一奔	*ʔitmu	*ʔjit-m(h)əw	*itməw
(30) 'swallow'	豆仍	*dhoh-neŋ	*dho-ŋiŋ	*toni
(31) 'thou'	仍利	*neŋ-ri	*ŋiŋ-lhi	*niri
(32) 'valley'	山''	*ka-cliy	*ko-si	*kori
(33) 'village'	彌知	*m(h)jetre	*mje-ʧe	*myete
(34) 'walled city'	忽	*hwət	*hwət	*hwər
(35) 'walled city'	己	*kə	*ki	*ki
(36) 'water'	買	*mrac	*mie ^r	*mie(r)
(37) 'west'	臂	*peh	*pje	*pye
(38) 'wilderness'	闕也	*ʔat-lhiajʔ	*ʔat-dhe	*arde
(39) 'work hard for someone else'	馬斯良	*mrah-se-raŋ	*ma ^r -sje-laŋ	*masyera

(1) PCH *kəma ~ *kuma. In this instance, the OC reading is likely closer to the pronunciation of the Paekche word than the LOC, especially since *Nihon shoki* has this word as *kuma*. See the word above for etymologies.

(2) PCH *pə. There are no apparent cognates, but I wonder if this word is preserved in MK pwokwom cari LLLL 'nest' (cari is 'seat, place to sleep'), thus a place for a bird to sleep.

(3) PCH *kamir. This is cognate with MK kam R. Martin (1996:24) posits *kamo- LH as an earlier form. A tempting cognate is Turkic kömür 'coal' (Starostin reconstructs *kömür, 1991:199). If these two words are cognate, the final liquid in the Paekche form would be of great importance.

(4) PCH *pər. The external etymologies are only marginally promising: MK polk L 'clear, bright', and MA bolgo 'clear'.

(5) PCH *koma. The resemblance of this word with *kəma ~ *kuma 'bear' is striking. The state of Koguryo is called 'Koma' by the Japanese, and *Nihon shoki* writes this appellation with the character 狛 'legendary wolf'.

(6) PCH *pi. This may be cognate with Japanese fe (<*pe²¹) 'fart' and piru 'to fart.' There is also MA fioo 'fart,' and it is tempting to relate this

to MK *pwul* R 'blow' (<**pwu-lu*²²).

(7) PCH **tohir*. This is likely cognate with MK *tuluh* LH, perhaps through metathesis. Miller (1979c:47-48) reconstructs 豆吩 as **tohel*, and notes that "Yang Chu-dong...carried over the theoretical vocalization of Middle Korean intact into the presumed Old Paekche form and therefore read **tuhul*." No where does Miller mention that this *tuhul* is a lexical ghost, as no MK word appears in Yu's dictionary of Yi dynasty Korean (1964). Miller compares his Old Paekche word with MON *toyurusun* 'dust'. Starostin (1999 electronic database) reconstructs proto-MT **turV* 'earth, dust'.

(8) PCH **pær*. This surely is cognate with MK *pul* H 'fire', as well as OJ *piy* / *pə* 'fire'. This form can also be compared with MA *file-* 'heat'.

(9) PCH **kəwte*. This may be cognate with MK *kwuli* LH 'copper', and OJ *ku-* 'yellow'. This word may also be another case where *-t-* is actually *-r-*. If this is the case, then another possible cognate is MT **kuri(n)* 'brown'.

(10) PCH **sop(w)iy*. I put *-w-* in parentheses because I am not sure that /*wiy*/ existed in the Paekche inventory of syllables. The word **sop(w)iy* is likely cognate with MK *swuphul* LL/LH 'grove.'

(11) PCH **kə*. It seems very likely that this PCH word is cognate with pre-OJ **kə-i* 'tree,' an important element because to date no good etymologies for OJ *kiy* 'tree' (*kiy* < **ko-i*) have been found, aside from a supposed cognate in the language of Koguryo (cf. Vovin 1997).

(12) PCH **mora*. Very likely the LOC vowel cluster *-aw-* represents a back, rounded vowel /*o/* or /*ɔ/*, because as Miyake has shown (1999:540), /*aw/* was not allowed as a final in MK. This is also true of OJ, where sinographs like 高 'high' (OC **kaw*, LOC **kaw*, EMC *kaw*), 刀 'knife' (OC **taw*, LOC **taw*, EMC *taw*), and 毛 'hair' (OC **mhaw*, LOC **mhaw*, EMC *maw*) represent OJ *kwo* [ko], *two* [to], and *mwo* [mo]. Also, Go-on in Japanese has this as *-ou*. On this typological evidence, I reconstruct Paekche **o*. As noted above, this is cognate with MK *mworwo* H 'mountain', and MT **mulu* 'ridge.'

(13) PCH **koma*. The obvious cognate is OJ *kwoma* 'colt'.

(14) PCH **sir*. I have posited a voiceless initial here, because both *dz-* and *ʃ-*initial characters are used to transcribe the same place name in *Samkwuk saki*. I do not think there were voiced fricatives in initial position

²¹ *Wamyōshō* records, "Break wind, in the vernacular this is 倍比流 *pepiru*." It is not clear whether this is *pye* or *pey*.

²² Cf. Martin (1996:41).

in Korean. This word may be cognate with MK swoy H 'steel', and MA sele 'steel'. PCH *sir can also be compared with OJ sor- 'shave'.

(15) PCH *pwori. This is cognate with MK p̄el L 'land, field'. This may also be cognate with MA fala 'floor, courtyard, farm'.

(16) PCH *k̄ən. This is one of the few words where several transcriptions exist. The Chinese transcribed this with the sinograph 鞞 *k̄ən (OC *kar > k̄ən), and SKSK transcribed it with 翰 *g(h)an (<g(h)arh), showing that the vowel was non-rounded. Thus, the Japanese transcription of コ could be either kwo or k̄ə, and k̄ə seems the best candidate.

One other thing to be noticed is that both graphs (鞞·翰) have *-r at an earlier stage. If this is another case (like iv. #18 'moon') where the OC reading survived down to the era when these words were first recorded, and the Japanese heard PCH *-r as -n,²³ then perhaps this word is actually cognate with MT *gere-n 'many'. As noted above, I believe we can compare the PCH word with MK ha- H 'many'.

(17) PCH *ka(r)te. External etymologies are only marginally promising: MON qudaldū 'barter', and Japanese kasi 'market, river bank'. The Japanese word is not attested before 1809, and Japanese scholars theorize this word originates from kawa-gisi 'river bank' with loss of medial -wagi- (cf. Nakata et al. 1983:352). I reject this etymology, because the loss of medial -gi- at such a late date is highly improbable. While it is difficult to project the word kasi back to the OJ era, I mention it here for two reasons. The semantics match, and the phonology works nicely. Whitman (1985:27) has postulated that pre-OJ *tyi lenited to si. Thus, the development of this word would be: PCH *ka(r)te > pre-OJ *kati > kasi.

(18) PCH *t̄ər. The sinograph in question is 珍, and does not appear in Starostin (1989), but other characters of the same rhyme in Starostin show the following development: 珍 OC *d(h)̄ər² > LOC d(h)̄ən, or 珍 OC *t̄ər² > LOC cin (1989:580-581). The PCH evidence appears to point to the retention of -r in these graphs later than Starostin (and other scholars) believe. This is further supported by evidence in *Nihon shoki*. In the record of Empress Jingū a Paekche man named 波珍干岐 appears. The *Hei-hon* manuscript of *Shiki* glosses this name in phonograms: 波止利加支 *pat̄ori kak̄yi* (Kuroita 1932:165). Thus, the graph 珍 is glossed *t̄ori* [t̄əri] which not only underscores the existence of the liquid, but also provides evidence for the nature of the

²³ A change of -r to -n is a phonological phenomenon also seen in Thai (Miyake, p.c.).

vowel /ə/ as reconstructed by Starostin. PCH *tər is cognate with MK tol H 'moon'. This can then be compared with MON tergel 'day of the full moon'.

(19) PCH *sa. This can be compared with MK say H 'new', and OJ sara (ni) newly. King also notes that the Hamkyeng dialect surviving in Russia preserves 'new' as sia (1991:403). It is tempting to relate this to MT *sila(n) 'scare, barely', but the semantics need to be addressed. Perhaps a better etymology is MT *señe 'new'.

(20) PCH *twit. Miller (1980:234) compares his own reconstruction of this Paekche number with Old Turkish toquz 'nine', and Chuvash tã (ħr 'nine'. The semantic fit is nice, but the phonological fit is less than desirable. I would rather compare this with MA žiri 'a single measurement.' Starostin compares the Manchu form to yel H 'ten' (1999, electronic database). If this etymology is sound, then perhaps the following evolution took place in Old Korean, as it did in Japanese: *d > *t > y.

(21) PCH *oñye. I tentatively compare this with MK oylwo LL 'orphan', but the phonological match is poor. This word may also be cognate with MA umudu 'orphan', and MON öncin 'ibid'.

(22) PCH *kyera. A likely cognate is MK kil H 'road'. Interestingly, the North Kyengsang dialect preserves 'road' as kerı (Choy 1994:84).

(23) PCH *kəwsye. This can be compared with MK kwusul LH 'gem', and OJ kusiro 'gem bracelet'.

(24) PCH *pi. This is likely related to EMK piWi 'rain', which is cognate with MT *pigi- 'rainstorm'.

(25) PCH *sopi. This can be compared with OJ swopyi [sopi] 'reddish color'.

(26) PCH *nosye. Surely this is the same word as in OJ nusi 'master'. As was true of (9) island, PCH -ye- is again reflected in Old Japanese as -i-.

(27) PCH *tərak. I compare this with MT *žolo 'stone', and perhaps this Paekche word is also related to MK twolh R 'stone' (< *twolok²⁴). Another possible cognate is with OJ two 'whetstone'.

(28) PCH *nari. This is cognate with MK nayh R 'stream'.

(29) PCH *itməw. This word does not appear to have any external etymologies, unless MON itayu 'partridge' is related, but the medial velar requires explanation. Notice, however, that the MON word becomes itu in

²⁴ Cf. Martin (1996:36).

MA, and itay in Solon.

(30) PCH *toni. There are no apparent external etymologies, though MA has tengguha 'a kind of bird'.

(31) PCH *niri. This can be compared to MK ne H 'thou'.

(32) PCH *kori. I base the reconstruction of this word on OC, believing that ㄹ was retained to transcribe a lateral, even after the Chinese pronunciation had changed. The most obvious comparison is with modern Korean koc 'cape', but as Vovin (1999:295) has pointed out, the correspondence of -l- (my r-) to -c is problematic. A deeper problem, however, concerns semantics. The graph 岬 is often interpreted as meaning 'cape', perhaps due to the influence of the Japanese assigning the reading of *misaki* 'cape' to this graph. As Morohashi (1976.4:236) points out, the Chinese meaning of 岬 is 'side of a mountain, between two mountains', which I interpret to be a valley. This PCH form is likely cognate with MK kwol R 'valley', going back to *kwoli. Martin [1996:39] notes the form kwoloy is attested in 1481.

(33) PCH *myete. This appears to be cognate with OJ myiti 'path'. A comparison with MON mör 'path' is more problematic. The semantics come from settlements along a path. Starostin (1991:277) relates MON mör 'path' to Pyongyang mol-da 'pursue after'. This is not entirely impossible, since the Japanese word *myitibyiku* 'lead, guide' is very likely just a compound of *myiti* 'path' and *pyiku* 'pull, guide'.

It should also be noted that the proto-Japanese form of this word may have been *mye-ti. My own work on reconstructing proto-Yaeyama, a language in the southern Ryûkyûs of Japan, shows the following interesting correspondences:

Ishigaki	Hatoma	Proto-Yaeyama
ï	i	*i
i	i	*e
u	u	*u

Thus, words such as *meti 'road' and *medu 'water' are reconstructed with a mid-front vowel, instead of a high-front vowel.

(34) PCH *hwær. It is usually assumed that this is cognate with MA hoton, a loan from MON qotan 'city', but Miyake (p.c.) has suggested to me that this Paekche form may actually be cognate with Orkhon Turkic qorvan 'fortress'. Also consider that Koguryo preserves the word for 'walled city' as both 忽 (LOC *hwæt) and 𑖇𑖆 (LOC *khwit), suggesting that neither Koguryo

nor Paekche had *h-. Also if the above external etymology is true, then perhaps we could say that PCH *h- was actually *k-. In the Paekche inventory of consonants below, I put *h- in parentheses, showing I am not sure.

(35) PCH *ki. This word is only found as a loan in OJ, kiy 'walled city'.

(36) PCH *mie(r). The retroflex vowel perhaps shows that a liquid actually was preserved in the word. External comparisons strengthen this premise: MK mul H 'water', and MON müre-n 'river'. OJ myidu is likely cognate, but as is it appears to be a compound, myi 'water' and some other element.

(37) PCH *pye. This is cognate with Japanese pyi 'sun', again showing PCH -ye- > OJ i (/yi/ romanization is just a convention).

(38) PCH *arde (< *arVde?). This may be cognate with MA ajli- which Cincius glosses as 'to walk around without a road, wander' (1975:13), which is interpreted as someone being in an uninhabited area. This is reminiscent of the etymology for English 'wilderness', an area inhabited only by wild beasts.

(39) PCH *masyera. This is likely related to OJ masura- 'manly'. Miller (1979c:9-17) has already devoted over eight pages to this one lexical item, but is "unable...to establish an Altaic or other extra-Korean etymology" (1979c:12). A tentative cognate is MA masi-la- 'gain much'.

Other than *hwær 'walled city', which I believe is a loan from the dead language of Koguryo, all these words appear to be genuine Paekche words.²⁵ Several words have doublets ('grove', 'swallow', 'walled city'), meaning one may be from the language of Koguryo, and the other native Paekche. This fact strengthens the premise that Paekche was likely a mixed language. The royal family of Paekche fled Koguryo, bringing the northern language with them. This was then mixed with the local language of the commoners. Though our data are severely limited, I posit the following preliminary inventory of phonemes for the language of Paekche.

Paekche Vowels

i	i	u
e	ə	o
	a	

It should be mentioned that *i and *ə may actually be allophones of the

²⁵ A few words that were obvious loans from Chinese have been ignored, like 塞 'fortress' *sok(o) from LOC sək. I have left 'horse' in the list, because it is not completely clear that the word is actually a loan from Chinese.

same vowel, perhaps*ə. Without enough data from alternations, it is impossible at present to be more specific.

Paekche Consonants

p	t	c	k	
	s			(h?)
m	n			
	r			
		w		

The simplicity of the phonemic inventory of Paekche (and its lack of symmetry) likely reflects the paucity of evidence in our data, because I seriously doubt that Paekche had so few voiced obstruents in any position. Regardless, this is the picture painted by these data at hand.

Several other interesting conclusions can be drawn from these data. There were no r- initial words in Paekche. Also, the language of Paekche had closed syllables, but these were limited to *-k, *-m, *-n, and *-r. The canonical shape of Paekche morphemes seems to have been (C)V, CVC, and CVCV. There are two examples of VCCV ('swallow', 'wilderness'), but these may simply be because the sinographic transcription could not be more precise. The PCH form for 'wilderness' may have been *arVde, and *itVməw for 'swallow'.

It is also very tempting from these data to say that Paekche appears to have had two liquids. Our limited data preserve examples where PCH *-r corresponds to MK -r ('fire', 'high', 'moon', 'mountain', 'valley'), and PCH *-r corresponds to MK -y ('belt', 'black', 'iron', 'stream'), but there are also examples where PCH *-r corresponds to MK Ø ('master', 'thou'). I hesitate to posit two liquids at this stage, because more work needs to be done to explain the environment where a supposed l₁ and l₂ ('l' represents a liquid) are either retained or lenite. But these data strongly suggest Paekche preserved two liquids.

2.2. Group Two

There are only a few words in this second group, and most of them have problems phonologically as well as semantically, but I believe the problems are not insurmountable, so I have elected to address these words here (figure ix).

(ix)

Number	Sinograph	Gloss	PCH
(1)	子 'child'	yomo	*yOmO
(2)	父 'father'	kaso 柯曾	*kasə
(3)	尉禮 'good'	wire	*wIrE
(4)	世子 'heir'	makariyomo	*makarI yOmO
(5)	夫人 'imperial consort'	pasikasi	*pasIkasI
(6)	譯 'interpret'	wosa 曰佐	*wosa
(7)	女郎 'low consort'	epasito	*(y)epasItO
(8)	下 'lower'	oto 淤登	*ətə
(9)	正夫人 'main wife'	makari orikuku	*makarI orIkuku
(10)	中 'middle'	siso	*sIsO
(11)	君·王 'ruler'	kyisi 吉支	*kici
(12)	倉 'storehouse'	pesu	*pEsu
(13)	村邑 'village'	pure 布禮	*purE
(14)	村 'village'	sukyi 須祇	*suki

(1) PCH *yOmO. A possible comparison is with MA jui 'son'.

(2) PCH *kasə. This word is also found in OJ, kaso 'father'.

(3) PCH *wIrE. A possible comparison is with OJ wiya 'polite'.

(4) PCH *makarI yOmO. OJ preserves makar- 'entrust'.

(5) PCH *pasIkasI. This is likely a compound of two cognates found in MK: pes R 'companion', and kas L 'wife'. Since MK pes 'companion' has a rising tone, the earlier form is likely either *pesi or *pesu.

(6) PCH *wosa. This word is preserved in OJ, wosa 'interpreter.' A possible comparison is with MA ulasa 'tell, know.'

(7) PCH *(y)epasItO. There is a clear dichotomy of e- and oto [ətə] used with names in the genealogies preserved in *Shoki*, where e- means 'older, upper' and oto means 'younger, lower.' The question is whether this e- is actually derived from *iya- and monophthongized to e-, or originally was *e. A parallel case appears with MK et- R 'get.' It is tempting to relate this to OJ u- 'get' (modern eru). It is on this reasoning that I have tentatively related this word to MK e- 'elder.' The pasI of this word is very likely cognate with MK pes R 'companion,' as noted above.

(8) PCH *ətə. This is related to OJ oto 'younger,' used in names like oto-pyimye 'younger princess.' Murayama (1978:262) relates this OJ word to EV utu- 'get old, weaken.' I will set this etymology aside for the time being, because of the problem with semantics.

(9) PCH *makarI orukuku. Cf. (4) for makarI. Orukuku is likely a related form of *oruk(u). As noted above, this is cognate with MK el-Gi-l LR 'mate with, marry [a daughter] off to' Perhaps orukuku refers to a lesser princess or concubine.

(10) PCH *sIsO. This may be related to MK sus H 'between.'

(11) PCH *kici. This word is reconstructed mainly on data from the Chinese transcription. This one word provides valuable evidence that Paekche had affricates that the Japanese could not transcribe, and were transcribed as fricatives instead ($c > s$). The word is preserved in OJ as a title, *kyisi*, given to envoys sent abroad.

(12) PCH *pEsu. I know of no external etymologies, but MA fise 'shed' is a tempting word to compare Paekche *pEsu with.

(13) PCH *purE. It is interesting that the NKBT *Nihon shoki* glosses 村 邑 as *fure*. I believe the Kanesuke manuscript is correct, however, in glossing 村邑 *fure* (村) *suki* (邑).²⁶ *Suki* is noted below, (13). *Fure* may be cognate with Evenki *pūri* 'grain storehouse,' MA biregen 'bamboo fence,' forms that seem analogous with English 'town,' from Old English (Anglo-Saxon) *tūn* 'enclosed space, enclosure.'

(14) PCH *suki. A tempting comparison is with MK sukoWol HLL 'country,' but there are still problems that need to be addressed.

Because of the nature of these data, I am loathe to reach any conclusions, other than to provide what may or may not be etymologies from MK or MT.

2.3. Group Three

The last group (figure x) is given simply for reference and to facilitate further research, since these words do not appear to have any good external etymologies, at least not at this stage of our knowledge.

(x)

Number	Sinograph	Gloss	PCH
(1)	小夫人 'consort'	siso orikuku	*sIsO OrIkuku
(2)	王 'king'	orikoke	*orIkOkE
(3)	高麗 'Koryo'	kokusori	*kOkusOrI
(4)	狛 'Koryo'	koku	*kOku

²⁶ Cf. *Nihon shoki*, vol. 55 of *Tenri toshokan zenhon sōsho*, p. 188.

(5)	王子 'prince'	sesimu	*sEsImu
(6)	中夫人 'second wife'	kuno orikuku	*kunO orIkuku
(7)	上 'upper'	soku	*sOku
(8)	上臣 'upper minister'	makaridaro	
		萬加利陀魯	*makarIdarO
(9)	村主 'village chief'	sukuri 須久利	*sukuri

Below I have only commented on lexical items where something may be added, ignoring all items where nothing can be added at this stage of my research.

(5) PCH *sEsImu. Kôno (1987:81) suggests this is related to MK sonahi LLL 'male.' I interpret this to mean he believes the first syllable of the MK word (so-) to be cognate with PCH *sE-. He also believes -sImu to be a suffix.

(7) PCH *sOku. Is this related to OJ sakiy 'tip'?

(8) PCH *makarIdarO. This is an interesting form. As noted above, makarI is likely related to OJ makar- 'entrust.' The other word *darO is of unknown origin.

(9) PCH *sukuri. Nakata et al. (1983:875) suggest this word is a contraction of *sukyi* 'village' and *nirim* 'master,' but this theory is phonologically tenuous, because it would require word-medial contraction *and* the loss of the final nasal. Perhaps *sukuri is actually a contraction of *sukyi* + *ori* ('village' + 'leader'). If this word is actually derived from contraction, perhaps we could further claim that the posited *ori* is related to MK el- (cf. el-wun RL 'leader').

3. Conclusion

In conclusion, these scarce Paekche data allow us to open a small window on the world of the dead language of Paekche. It should not be surprising that there are precious relics of Paekche data in *Shoki*, since speakers of this kingdom fled their native homeland at its destruction in 663, and crossed the ocean to Japan.

The relationship of Paekche and Silla has not been clarified from this survey, but it cannot be denied that native Silla cognates of Paekche words have survived in Middle Korean. Thus, I believe these words are cognates, rather than borrowings. This is clear because many of the Paekche words surviving in MK are basic vocabulary.

Also, cultural words like 'queen' surviving into MK suggest Paekche and Silla were rather closely related. If we can say that Paekche and Silla are related languages, then scholars can take a step closer to actually reconstructing Old Korean.²⁷ In this respect, the evidence preserved in *Shoki* is of great value.

To illustrate how important this evidence is, and the plausible relationship of Paekche and Silla, these Paekche data are lined up with the MK forms. The chart below (figure xi) shows my reconstructed Paekche form, the MK form, and the proto-Korean form as reconstructed by Martin (1996).²⁸

(xi)

Gloss	PCH	MK	Martin (1996)
'bear'	*kə/uma	kwom	*kwoma
'black'	*kamir	kam	*kamo-
'fire'	*pər	pul	*puli
'high'	*mora	mworwo	*mwolih
'island'	*syema	syem	*syema
'mother'	*əmə	emi	*ema
'mountain'	*murE	mworwo	*mwolih
'queen'	*oruk(u)	el-Gi-l	*el[u]-ki-
'rain'	*pi	piWi	*poli
'south, front'	*arIpIsI	alph	*alpoH
'stone'	*tərak	twolh	*twolok
'stream'	*nari	nayh	*nalih

Further research into the phonology of Paekche will surely shed more light on this poorly understood language, as well as shed more light on Korean in general, helping scholars reconstruct a more accurate model of the parent language of both Paekche and Silla.

²⁷ An anonymous reader has suggested that perhaps the language of Koguryo was really a superstratum in the language of Paekche. This is an important point that requires further research, but which falls outside the scope of this paper. Kōno (1987) addresses this topic, but his data are limited, and his conclusions are still very tentative.

²⁸ The reconstructed form for 'queen' is from Martin (p.c).

Abbreviations

EMC : Early Middle Chinese	EMK : Early Middle Korean
EV : Ewenki	LOC : Late Old Chinese
MA : Manchu	MK : Middle Korean
MON : Mongolian	MT : Manchu-Tungusic
NKBT : <i>Nihon koten bungaku taikai</i>	OC : Old Chinese
OJ : Old Japanese	PCH : Paekche
SKSK : <i>Samkwuk saki</i>	TZH : <i>Tenri toshokan zenhon sôsho</i>

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