

คำศัพท์ร่วมในภาษาเกาหลีและภาษาไทย จากมุมมองเชิงประวัติเปรียบเทียบ*

ชิงดวง ยुरะยง**

บทคัดย่อ

งานวิจัยนี้ศึกษาคำศัพท์ร่วมในภาษาเกาหลีและภาษาไทยกว่าร้อยรายการโดยใช้กระบวนการทางภาษาศาสตร์เชิงประวัติเปรียบเทียบเพื่อวิพากษ์ราคำซึ่งสามารถจำแนกได้เป็นสามกลุ่ม ได้แก่ 1. คำยืมจีน 2. คำเลียนเสียงธรรมชาติ (คำสัทพจน์) และ 3. คำศัพท์ที่ไม่ทราบที่มาแน่ชัด จุดสำคัญในการเปรียบเทียบคำยืมจีนร่วมอยู่กับการแยกแยะอายุของรูปคำเนื่องจากคำยืมรูปก่อนภาษาจีนยุคกลางในภาษาไทยมักมีรูปที่ต่างออกไปจากคำศัพท์ร่วมในภาษาเกาหลี ในขณะที่ด้วยกันคำยืมรูปภาษาจีนยุคกลางหรือหลังจากนั้นในภาษาไทยมักมีความคล้ายคลึงกับศัพท์ร่วมในภาษาเกาหลีอย่างเห็นได้ชัดเจนนกว่า อีกจุดสำคัญอยู่ที่การเปรียบเทียบคำเลียนเสียงธรรมชาติข้ามตระกูลภาษา และการนำภาษาไทยและภาษาเครือญาติตระกูลไทกะไดมาบูรณาการกับการศึกษาศัพท์มูลวิทยาภาษาเกาหลี ผลลัพธ์จากงานวิจัยนี้สามารถนำไปพัฒนาการเรียนการสอนภาษาเกาหลีให้แก่ผู้เรียนชาวไทยและการสอนภาษาไทยให้แก่ผู้เรียนชาวเกาหลีได้ด้วย

คำสำคัญ: เกาหลีเปรียบเทียบ; ศัพท์มูลวิทยา; คำยืม; คำศัพท์จีนเกาหลี; สัทพจน์

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Cognate words in Korean and Thai

from a historical-comparative perspective*

Chingduang Yurayong**

Abstract

The present study examines a hundred of cognate words in Korean and Thai by using a historical-comparative linguistic method to discuss their etymologies, which can be classified into three categories: 1) Chinese loanwords, 2) onomatopoeic words and 3) other uncertain etymologies. A particular attention is paid to the issue of identifying the time depths of Chinese loanwords, given that Pre-Middle-Chinese loanwords in Thai might not seem obvious based on their Korean equivalents, while Middle-Chinese and later loanwords often look alike in both languages. Another emphasis is on the importance of onomatopoeia in cross-family lexical studies as well as the relevance of Thai and cognate Tai-Kadai languages for the studies of Korean etymology. The findings of the present study can also be used for developing Korean language teaching for Thai students as well as Thai language teaching for Korean students.

Keywords: Korean parallels; etymology; loanwords; Sino-Korean vocabulary; onomatopoeia

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** Doctoral student, Department of Finnish, Finno-Ugrian and Scandinavian Studies, Faculty of Arts, University of Helsinki, e-mail: chingduang.yurayong@helsinki.fi

1. Introduction

A number of learners of Korean in Thailand and Thai in Korean has been increasing rapidly during the recent decades, obviously thanks to tourism and exchanges of the culinary and popular culture between the countries. Linguistically, both languages are considerably different in terms of structure: Korean is an agglutinative language with a vigorous use of suffixes to modify meanings whereas Thai is an isolating language with a predominant use of word sequences and auxiliaries to express meanings. Practically, such a great deal of grammatical difference may cause difficulties in the foreign language acquisition.

Nevertheless, Korean and Thai surprisingly share a large amount of vocabularies, approximately no less than a hundred, some of which are evident to language learners due to their phonological resemblances, while the other large part requires more detailed explanation for identification. This does not come as a surprise because both Korean and Thai speech communities are parts of the East Asian cultural sphere. Therefore, many common or similar cultural phenomena and innovations as well as their reflections in language can be expected.

The aim of the present study is to illustrate the great deal of cognate words in Korean and Thai, the findings of which can be used for improving teaching materials for language learners with either a Korean or Thai background. Given that vocabularies belong to a fundamental part of language acquisition, the results can provide a great contribution to both teachers and students of the Korean and Thai language as well as studies of language in general.

2. Previous studies

In the 20th centuries, several comprehensive studies of Korean etymology have been published, most notably by Gustaf John Ramstedt (*Studies in Korean Etymology*, 1949) and Kim Minsu (우리말 언어사전, 1997). As for Thai, the studies of historical lexicology and reconstruction of an ancestor language form of Thai, the Proto-Tai language spoken prior to the 8th century in South China, have considerably advanced (e.g., Pittayaporn, 2009).

Meanwhile, the research interest in contrastive studies between Korean and Thai vocabularies is still in its infancy as only a couple of comparative lexical studies have been published so far by Potibal (2006) and Jung (2012). Both of them deal mostly with Chinese words (Sino-Korean, 한자어) and lack a diachronic aspect in terms of how these Korean and Thai word pairs are historically related as they primarily provide the lists of look-alike words in Modern Korean and Thai to help learners recognise similar words in the other language. For instance, no discussion of the original Chinese form or chronology of borrowing is provided and many Thai words have been mistakenly accounted as Chinese loanwords.

One example is the case of the Korean 두 ‘bean’ and 두부 ‘tofu’ and their Thai counterparts ถั่ว and เต้าหู้. The Thai words are of the same etymology but their distinct phonological shapes can be explained by the chronology of borrowing: ถั่ว is an older Late Middle Chinese loanword from *thəw^C*, while เต้าหู้ is a recent loanword from the Teochew *dao⁷hu⁷*. Meanwhile, 두 in both words follows the Sino-Korean reading, resembling the Middle Chinese pronunciation. In this regard, Jung (2015, p. 175) does not discuss any etymological connection between these two words, but only concentrate on establishing sound correspondences between Korean and Thai, which simply do

not work because different layers of borrowing that result in several variants of the same Chinese word are not taken into account.

To overcome this lack of a diachronic aspect, the current study will also take into account the diversity of the Chinese language at various time depths, which will provide a clearer chronology of borrowing. As a diachronic background to the discussion to follow, an approximate comparative chronology of Korean, Thai and Chinese is given in Table 1.

Table 1.

An approximate comparative chronology of Korean, Chinese and Thai¹

Century AD	Korean	Chinese	Thai
? - 1st c.	Proto-Korean	Old Chinese	Proto-Tai
2st - 6th c.		Early Middle Chinese	
6th - 8th c.	Old Korean	Late Middle Chinese	Proto-SW-Tai
8th - 12th c.			
12th - 14th c.		Pre-Modern Chinese	Old Thai
14th - 17th c.	Middle Korean	Modern Chinese	Middle Thai
17th - 19th c.	Early Modern Korean		
19th c. - today	Modern Korean		Modern Thai

¹ A chronology based on Nam (2009) for Korean, Chappell (2001) for Chinese, and Pittayaporn (2014) for Thai.

Apart from the Chinese loanwords, Potibal (2006, p. 6) also briefly discusses several non-Chinese words, among which some word pairs are definitely false etymologies. For instance, the Korean 상 ‘elephant’ and 온 ‘warm’ vs. the Thai ช้าง and อุณ, which are without controversy Chinese loanwords in both Korean and Thai (see Ramstedt, 1949; Pittayaporn, 2014), are thought to share a common non-Chinese origin. In contrast, the non-Chinese word หุ่น ‘young man’ in Thai is thought to share a mutual Chinese origin with the Sino-Korean word 남 ‘man.’ However, there are also several actual non-Chinese word pairs proposed by Potibal, above all the Korean 쌀 and Thai ข้าวสาร ‘husked rice’, which are worth discussing further (see Section 6.2).

As for the category of onomatopoeic words, a comparison between Korean and Thai was previously made by Jung (2015). However, his discussion mainly concerns phonological characteristics in general, such as syllable structures and the modification of nuances through different articulation patterns. Treating onomatopoeia as a disconnected phenomenon in both languages, he does not propose etymological relation between the Korean and Thai onomatopoeic words.

3. Data and methods

The primary materials for the current study are Korean etymological dictionaries (Ramstedt, 1949; Kim, 1997), as well as own observations. Other sources for the Korean language include dictionaries of Old Korean (한글학회, *우리말 큰사전 4 : 옛말과 이두*, 1992), Middle Korean (Yu, *李朝語辭典 이조어사전*, 1964) and Modern (South) Korean dialects (Choi, *한국방언사전*,

1978). In addition, individual studies that focus on individual lexical items are also used as additional references (Martin, 1997; Vovin, 2014, 2015; Bailblé, 2015). As for Thai, the main reference is the comparison of Tai languages and reconstruction of Proto-Tai (Pittayaporn, 2009) and other works on Chinese loanwords in Thai and cognate languages as secondary sources (Li, 1945, 1976; Manomaivibul, 1975, 1976; Nishida, 1975; Khanitthan, 2007; Pittayaporn, 2014).

The primary approach is a historical-comparative method that examines the history of particular language elements through comparison with cognate languages and reconstruction (Fox, 1995; Campbell, 1998). Systematicity of this method can produce more reliable results as an addition and revision of the previous studies on cognate words in Korean and Thai discussed above.

Methodologically, rather than searching for word pairs that phonologically resemble one another only at the synchronic level, the current study also takes into account a diachronic perspective that provides the time depth and distribution of each lexical item across the language families. One extreme case that shows the importance of a diachronic consideration is the Chinese word 鐵 ‘iron’, in which the Thai word เหล็ก was borrowed in an Old Chinese shape **ʔik*, while the Middle Korean form *ᄒᆞᆫ* (> Modern Korean 철) was borrowed from a later form of Chinese, possibly the Middle Chinese *thet^D*. This chronological difference results in the Modern Korean and Thai forms having no single sound in common.

Chance resemblance is also worth paying attention to. On the one hand, Korean and Thai word pairs can be phonologically and etymologically identical such as Korean 기마 and Thai ขี่ม้า, borrowed from Chinese 騎馬 ‘to ride a horse’ (e.g., Cantonese *kei⁴-maa⁵*). Note that the other Korean word for ‘horse’

말 was borrowed from Middle Mongolian *mori* (> Modern Mongolian *mör*). On the other hand, other word pairs may be accidentally identical in their orthographical and phonological shapes such as Korean 물가 and the Thai มูลค่า 'price, value.' However, these compounds share a common etymology only for the second word, which is a Chinese loanword 價 (e.g., Middle Chinese *kae*^C). Meanwhile, the first words are of two totally different origins: Korean 물 is a Chinese borrowing 物 (cf. Old Chinese *C.mut> Middle Chinese *mjut*^D), while the Thai มูลค่า is a Dravidian word *muḷā* 'source, origin' borrowed via the Sanskrit *mūla*-.

4. Chinese loanwords

The Chinese culture has played an important role in the development of the Korean and Thai societies over a millennium and the biggest group of cognate words in Korean and Thai are of the Chinese origin. As Chinese vocabularies are a very important part of learning Korean, parallels in Thai could help Thai learners memorise this lexical category with more ease, given that the same words also exist in their mother tongue.

Chinese vocabularies form the majority of the Korean lexicon, up to 74%, due to the long-lasting influence of Chinese, which can even be seen as 'Chinese Language Empire: ca 2nd BC to 19th century' (Bailblé 2015, p. 35). For two millennia, the Chinese language has been generating new words for the Korean lexicon in a similar way to the role of Sanskrit (and Pāli) as a lexical generator for Thai and other neighbouring languages. Due to the predominant status of Sanskrit in Thai, the role of Chinese is not as essential as in the case of Korean.

The oldest layers of Chinese loanwords in Korean and Thai are of different periods. The first influx of Chinese loanwords into Korean is thought to have taken place, at the latest, in the first century BC as stated by Sohn (1999).

‘... Chinese words and characters must have been used in Korea **as early as the 1st century BC**, when Han China colonised the western and northern parts of the Korean peninsula and established its four commanderies there. Historical records show that a Paycheyan named *Wang In* went to Japan with many Chinese books around 400 AD, suggesting that Chinese culture and writing had achieved considerable popularity during the Three Kingdoms period.’ (Sohn, 1999, p. 103)

In the present study, ca 80 items of certain common Chinese vocabularies in Korean and Thai have been identified. However, in reality common Chinese vocabularies can exist as many as we can identify in Thai. The reason being that Chinese vocabularies are still a productive category of Korean lexicon today, so lexical neologisms based on Chinese elements can be continuously generated in the same way as how Thai can produce neologisms by using Sanskrit resources.

To Korean and Thai learners of Thai and Korean, respectively, common Chinese numerals in Table 2, especially from ‘three’ to ‘ten’, are relatively obvious.

Table 2.

*Common Chinese numerals*²

² The current study uses the following sources: Old Chinese (Baxter & Sagart, 2014), Middle Chinese (Baxter, 1992), Middle Korean (Yu, 1964), and Proto-Tai (Pittayaporn, 2009).

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
one 一	*ŋit	ʔit ^D	일	일	*ŋit ^D	เอ็ด
two 二	*nij-s	nyij ^C	△ , 이	이	*ŋi: ^B	ยี่
two/pair 雙	*sʰroŋ	sraewng ^A	쌍	쌍	*so:ŋ ^A	สอง
three 三	*srum	sam ^A	삼	삼	*sa:m ^A	สาม
four 四	*s.lij-s	sij ^C	서, 사	사	*si: ^B	สี่
five 五	*C.ŋʰaʔ	ngu ^B	오	오	*ha: ^C	ห้า
six 六	*k.ruk	ljuwk ^A	육	육, 육	*krok ^D	หก
seven 七	*tsʰit	tshit ^D	칠	칠	*cet ^D	เจ็ด
eight 八	*pʰret	peat ^D	팔	팔	*pe:t ^D	แปด
nine 九	*kuʔ	kjuw ^B	구	구	*krw ^C	เก้า
ten 十	*t.gəp	dzyip ^D	십	십	*sip ^D	สิบ

At the same time, a number of Chinese loanwords are equally obvious or even look identical in Korean and Thai. Such look-alike words most of the time belong to a category of Middle-Chinese and later loanwords, to be discussed next.

4.1 Pre-Middle-Chinese vs. Middle-Chinese and later loanwords

Middle-Chinese and later loanwords are more obvious and easily recognisable without a need of detailed explanation as the forms in Korean and Thai often look alike as shown in Table 3 below.

Table 3.

Obvious common Middle-Chinese and later loanwords

answer 答 답 ตอบ	dye, to 染 염 ย้อม	ride, to 騎 기 ขี่
artisan 匠 장 ช่าง	fat 肥 비(อ้วน)พี	saddle 鞍 안 อาน
bean 豇豆 ถั่ว	float, to 浮 부 ฟู่	sound 聲 성 เสียง
book 書 서 (หนังสือ)	gold 金 금(ทอง)คำ	split, to 破 파 ผา
bucket 桶 통 ถัง	guest 客 객แขก	stem 幹 간 ก้าน
charcoal 炭 탄 ถ่าน	ink 墨 묵 หมึก	tea 茶 차 ชา
cooked/ripe 熟 숙 สุก	melon 瓜 瓜(แตง)กวา	ten thousand 萬 만 หมื่น
copper 銅 동 ทอง(แดง)	raft 簰 배 แพ	transcend, to 過 과 กวา
deliver, to 染 송 ส่ง	rice gruel 粥 죽 โจ๊ก	wide 廣 광 กว้าง

In contrast, there are a dozen of Chinese loanwords that were borrowed to Thai during Pre-Middle-Chinese period, while entering the Korean language in the Middle-Chinese (or later) forms. The difference in chronological layers of borrowing results in Korean and Thai counterparts, which are not necessarily obvious and easily identifiable to language learners, such as the word pairs in Table 4 below.

The difference between these common Chinese loanwords is due to several factors. The most crucial one is that the Thai counterparts preserve more archaic Old Chinese phonological shapes with complex syllable structures such as 1) initial consonant clusters (at least preserved in the orthography) in คราม ‘indigo’, เหล็ก ‘iron’, หนอง ‘pus’, ขวา ‘right’ and ขวัญ ‘soul’ and 2) closing diphthongs (with /i/ as a second component) in ซ้าย ‘left’ andทราย ‘sand’ Meanwhile, the Korean forms were borrowed in the Middle Chinese forms with simpler syllable structures.

Another issue that makes the Chinese loanwords in Korean significantly different from those in Thai is a distinction between initial /l-/ vs. /n-/ and /ny-/ vs. /y-/ in the Chinese originals, which is preserved in Thai and also in North Korean

dialects, but became neutralised respectively to /n-/ and /y-/ in South Korean dialects, consider the following word pairs: North Korean 로동 ‘labour’ and 녀자 ‘woman’ vs. South Korean 노동 and 여자.

Table 4.

Common Chinese loanwords (Pre-Middle-Chinese in Thai)

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
exchange, to 易	*lek	yek ^D	역	역	*lɛ:k ^D	แลก
indigo 藍	*N-k.r ^h am	lam ^A	람, 남	남	*gra:m ^A	คราม
iron 鐵	*l ^h ik	thet ^D	첼	첼	* ^h lek ^D	เหล็ก
leak, to 漏	*Nə-r ^h ok-s	luw ^C	루, 누	누	*rwo: ^B	รั่ว
left 左	*ts ^h ajʔ	tsa ^B	좌	좌	*za:j ^C	ซ้าย
lung 肺	*p ^h ot-s	phjoj ^C	폐	폐	*pwrɿt ^D	ปอด
narrow 狹	*N-k ^h rep	heap ^D	협	협	*ɛɛ:p ^D	แคบ
needle 鍼	*t.kəm	tsyim ^D	침, 침	침	*qem ^A	เข็ม
nourish, to 養	*granʔ	yang ^B	양	양	*liəŋ ^C	เลี้ยง
peel, to 剝	*p ^h rok	paewk ^D	박	박	*po:k ^D	ปอก
price 價	*C.q ^h raʔ-s	kae ^C	가	가	*ga: ^B	ค่า
pus 膿	*C.n ^h uŋ	nowng ^A	농	농	* ^h no:ŋ ^A	หนอง
right 右	*m-q ^w əʔ	hjuw ^B	우	우	*xwa: ^A	ขวา
sand 沙	*s ^h raj	hwon ^A	△ ㅈ, 사	사	*zwwəj ^A	ทราย
soul 魂	*m.q ^w ɛən	hwon ^A	혼	혼	*qwan ^A	ขวัญ
tooth/ivory 牙	*m-ɣ ^h ra	ngae ^A	아	아	*ŋa: ^A	งา

Besides these deviating features, there are also other noteworthy correspondence rules important for the identification of common Chinese loanwords in Korean and Thai, which will be discussed next

4.2 Identification of less obvious common Chinese loanwords

Despite common Middle-Chinese and later loanwords discussed above (Table 3) are often identical or easily recognisable, it is also worth discussing several principles that can help identifying possible deviations between Korean and Thai counterparts for the common Chinese loanwords.

Firstly, due to a wider range of initial consonants in Thai (glides /y, r, l, w/; velar nasal /ŋ/; glottal stop /ʔ/), which are not phonotactically common in Korean (especially in the native Korean words, *고유어*), these sounds inherited from the Chinese originals are normally substituted and transcribed by the initial letter ㅇ in Modern Korean, making the interpretation more ambiguous as shown in Table 5.

Table 5.

Korean ㅇ ~ Thai /y-, l-,ŋ-, ʔ-/

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
lend/borrow, to 賃	?	?	임	임	?	ยืม
two 二	*nij-s	nyij ^C	△ ㅣ, 이	이	*ɲi: ^B	ยี่
silver 銀	*ŋrən	ngin ^A	은	은	?	เงิน
tooth/ivory 牙	*m-ŋʳa	ngae ^A	아	아	*ŋa: ^A	งา
saddle 鞍	*ʔʳan	'an ^A	안	안	*ʔa:n ^A	อาน
exchange, to 易	*lek	yek ^D	역	역	*lɛ:k ^D	แลก
nourish, to 養	*grənʔ	yang ^B	냥	양	*liəŋ ^C	เลี้ยง
dye, to 染	*C.namʔ	nyem ^B	?	염	?	ย้อม
medicine 藥	*m-rewk	yak ^D	약	약	?	ยา

One way to predict the Korean counterparts is to identify the quality of vowel. The Korean high front vowel /i/ tends to correspond to the Thai initial /y-/ (see ‘to lend/borrow’ and ‘two’), the Korean unrounded vowel /u/ and /a/ often implies the Thai initial /ŋ-/ or /ʔ-/ (see ‘silver’, ‘tooth/ivory’ and ‘saddle’), while the Korean palatal vowels can point to either the Thai initial /l-/ or /y-/ (see ‘to exchange’, ‘to nourish’, ‘to dye’ and ‘medicine’).

Korean and Thai word pairs can also become less obvious due to the palatalisation of initial consonants in front of /i/, which is a common tendency among the languages of Northeast Asia such as Korean, Japanese, Ryukyuan, Ainu, Manchu, Mongolian and northern Chinese varieties (Yurayong & Szeto, 2020, p. 116). In any case, such tendency is not common in Southeast Asia and, thus, does not occur in Thai, as shown in Table 6.

Table 6.
Korean palatalised ~ Thai unpalatalised

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
dot/pole 點	*tʰemʔ	tem ^B	뎡	점	ʔ	แต้ม
ground 地	*lʰej-s	dij ^C	디	지	*di: ^B	ดี
needle 鍼	*t.kəm	tsyim ^D	팀, 침	침	*qem ^A	เข็ม

As can be observed from Table 6, the erstwhile forms prior to the palatalisation of initial consonants are often attested in Middle Korean. Moreover, there are a number of word pairs, in which Korean has initial sibilants ㄷ/ㄸ whereas Thai has initial palatal consonants จ/ช, as given in Table 7.

Table 7.

Korean /s(s)-/ ~ Thai /c(h)-/

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
elephant 象	*s-danʔ	zjang ^B	장, 상	상	*ja:ŋ ^C	ช้าง
fortress 城	*den	dzyeng ^A	성	성	?	เชียงใหม่

This is a case where Middle Korean palatal vowels were dropped and, thus, did not palatalise the initial consonants as would expected. A noteworthy remark is that Korean and Thai use the Chinese word 城 ‘fortress’ for many place names such as the capital of Koryŏ dynasty 개성 (開城) and the name of Seoul 한성 (漢城) during the Chosŏn era as well as a number of place names beginning with เชียง in the borderland between South China, Myanmar, Laos and Thailand such as เชียงของ, เชียงตุง, เชียงราย, เชียงรุ่ง and เชียงใหม่. This shows that the Chinese influence is also strong in the area of political tradition adopted in the Korean and Tai tribes.

Concerning vowels, Modern Korean has neutralised the Middle Korean diphthongs ㅏ /ai/ and ㅑ /ai/ to a monophthong reading /ɛ/ or /e/, while the original Chinese diphthongs are preserved in the Thai counterparts, as shown in Table 8.

Table 8.

Korean monophthong ~ Thai diphthong

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
defeat, to 敗	*(N-)p ^h rat-s	paej ^C	?	배	*ba:j ^B	พาย
in(side) 內	*n ^h up(-s)	nwoj ^C	ㄴ ㅑ	내	?	ใน

open, to 開	*k ^h ɕəj	khoj ^A	개	개	*k ^h aj ^A	ไ
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Interestingly, there is also a phonologically identical word pair in this category, that is, Korean 패배 and Thai พ่ายแพ้ ‘defeat’, but the etymology of แพ้ (meaning ‘to win’ in Old Thai) is subject to further investigation whether it is a Chinese loanword. Meanwhile, difference in places of articulation of vowels in the Korean and Thai counterparts also make the resemblance slightly less obvious such as the case of word pairs in Table 9.

Table 9.

Korean ㅈ ~ Thai /-e-, -ɛ-/

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
dot/pole 點	*t ^h em?	tem ^B	덤	점	?	แต้ม
model/law 法	*p.kap	pjop ^D	법	법	?	แบบ
line 線	?	?	선	선	?	เส้น

This mostly concerns the Korean bright vowel ㅈ, which was originally /e/ in Old Korean but later backed to /ə/ or also rounded as /ɔ/, as a result of vowel rotations in Middle Korean (cf. the Sino-Japanese reading *sen* ‘line’ in 新幹線 *Shinkansen*).

As for the syllable-final position, the factor that makes a big difference between Korean and Thai counterparts is a sound change in *-t>-/taking place in Middle Korean (see Martin 1997), considering word pairs given in Table 10.

Table 10.

Korean /-l/ ~ Thai /-t/

Gloss	Old Chinese	Middle Chinese	Middle Korean	Modern Korean	Proto-Tai	Thai
dig, to 掘	*k ^h ut	khwo ^t D	굴	굴	*k ^h ut ^D	ขุด
remove, to 脱	*t ^h ot	t ^h wa ^t D	?	탈	*t ^h o:t ^D	ถอด
seven 七	*ts ^h it	tshit ^D	칠	칠	*cet ^D	เจ็ด
eight 八	*p ^h ret	peat ^D	팔	팔	*pe:t ^D	แปด

With the correspondence rules and explanation provided in this section, the identification of common Chinese loanwords should become easier for Korean and Thai language learners. For instance, with this guideline such common word that every Thai arriving in South Korea by air would notice at the airport as 국내선 (國內線) ‘domestic route’ should be no longer too difficult for Thai learners of Korean to do a wordplay and transpose into the Thai counterparts of each word as กักในเส้น.

5. Onomatopoeic words

Several onomatopoeic words in Korean and Thai exhibit phonological resemblances when the reconstruction of their older forms is also applied. However, the phonological shapes of these lexical items are very onomatopoeic-like rhymes, which could easily have, by accident, look-alike words in other genealogically unrelated languages, as encountered in many accounts of computational linguistics related to automated similarity judgement (e.g., Matisoff, 1990; Bolnick et al., 2004; Müller et al., 2010).

A wide range of language-internal variation is also common among onomatopoeic words because their etymologies are less stable and, thus, prone

to irregular sound changes (Campbell, 1996, pp. 73-77). In other words, one and the same onomatopoeic rhyme is expected to have many variants within one language system. Therefore, data from a dialectological dictionary (Choi, 1978) will also be used to investigate the various forms reported in (South) Korean dialects.

Five onomatopoeic that the Korean literary and dialectal forms resemble those of Thai as observed in the data are presented in Table 11.

Table 11.

Resembling onomatopoeic words in Korean and Thai

Gloss	Middle Korean	Modern Korean	(South) Korean dialects	Proto-Tai	Thai
ambush, to	숨-	숨다	수:口 /su:m/ (S. Jolla) 심 (S. Jolla, S. Kyongsang)	?	ซุ่ม
beat/hit, to	ตี-	치다	때 (various) 때 (N. Kyongsang) 째 (S. Jolla, S. Kyongsang)	?	ตี
catch/hold, to	잡-	잡다	심 (Cheju)	*cap ^D , *ga:p ^D	จับ, ตาบ
pick/pinch, to	집-	집다		*ʔip ^D , *kep ^D	หยิบ, เก็บ
soaked, to be	촉촉-	촉촉하다	촉 (Kangwŏn) 취 (S. Jolla) 적 (various)	?	โชก
moist, to be	촉촉-	촉촉하다			

As illustrated in Table 11, Korean and Thai show a number of cases, in which the cognitive perceptions of various kinds of natural phenomena and human actions resemble one another. This resemblance is also observed in other language as far as to Europe, for instance, considering the parallel examples in Table 12 below. Given a broad distribution of these onomatopoeic

words, it seems that speakers across Eurasia share conceptual templates of sound symbolisms for various phenomena, which can be formulated as phonological rhymes in Table 12.

Interestingly, it seems that there is also an idiophonic relation between the vowel alternation in Korean 잡다 and 집다, given that the former open vowel /a/ concerns an action of grasping with a bigger instrument like hands or traps whereas the latter high vowel /i/ with a smaller instrument like finger or tongs (see Sohn, 1999, pp. 96-102), consider also pairs like English cap vs. keep, and Thai คาบ vs. คีบ.

Table 12.
Rhymes of common onomatopoeic words

Rhyme			Parallel examples
Initial	Vowel	Final	
s + fricative + alveolar	u,o + rounded + back	m + nasal + bilabial	Manchu somi- ‘to hide, conceal, bury’ Evenki sumeꞓ ‘to hide, conceal, disappear’
t, tt, tʰ + plosive + alveolar	i,e - rounded + front + high	(C) (+ plosive)	Sui tai ³¹ ‘to hit’ Middle Chinese 捶 tsywe ^B ‘to beat’ (< Old Chinese *tojʔ) Evenki tijeꞓ ‘to beat’
c,cʰ(,y) + alveolar + palatal + fricative	a - rounded + low	p,b + labial + plosive	Manchujafa- ‘to grasp, hold, grip’ Mongolianšob-xuru- ‘to pinch, grab’ Russian tsáp-at’ ‘to bite, grap, seize, snatch’ English cap
c,cʰ(,y) + alveolar + palatal + fricative	i,e - rounded + front + high	p,b + labial + plosive	Middle Chinese 拾 dzyip ^D ‘to pick up, gather’ (→ Thai คีบ) English keep

c,c ^h ,s + fricative + alveolar	u,o + rounded + back	p,b + velar + plosive	Evenki čūk-se ‘juice’ Latin sūg-ere ‘to suck’ > Italian suc-chiare Danish sug-e ~ English suck ~ German saug-en
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Meanwhile, another vowel alternation pattern is observed in the pair 축축하다 and 촉촉하다, of which the former high vowel /u/ refers to a concrete object being wet, while the latter mid vowel /o/ to a condition or quality at the abstract level, consider also a pair like English suck vs. soak.

These parallels of word formulation can be considered a common mode of thought that Korean and Thai share within the East Asian or even wider Eurasian cultural context, depending on the individual cases.

6. Other uncertain etymologies: ‘gourd’ and ‘husked rice’

This section discusses two resembling words for plants, ‘gourd’ and ‘husked rice’, which likely have some historical connection between Korean and Thai. However, they do not belong to the category of Chinese loanwords discussed in Section 4. As ‘gourd’ and ‘husked rice’ are among the most common ingredients in Korean and Thai cuisines, the potential etymological connection is worth investigating from a historical-comparative perspective.

6.1 Korean 박 & Thai พื้

The Korean word for ‘gourd’ is thought to have historical significance because it is the surname of the founder of Silla kingdom, as Lee and Ramsey (2011) observe it being attested already in Samguksagi and Samgukyusa.

‘The texts of the Samguksagi and the Samgukyusa themselves contain etymologies that have long piqued the interest of Koreanists. The most famous example is found in the first volume of the Samguksagi, where the surname of the founder of Silla, “Pak”, is explained as follows: “The people of [Silla] call a gourd **pak** (朴), and because the original, great egg [out of which the founder was born] resembled a gourd, he was given the name Pak”. “The man was born from an egg. The egg was like a gourd. The native people call a gourd **pak**; therefore, he was named Pak”. What to make of such legends is a question that will probably never be resolved.’ (Lee & Ramsey 2011:52-53)

This word is also found in Middle Korean compounds such as 수박 ‘watermelon’ (노변 하, 38) and as the derivative form 박아지 ‘half a gourd’ (Ramstedt 1949:183). This word is mostly pronounced /pak/ across the Modern Korean dialects as it was before (see Choi, 1978, p. 800), while in Koryŏ Mar (a.k.a. Soviet Korean) a Middle Korean form has evolved into *śu-bagi* with an epenthetic final /i/, which is a common tendency towards open syllables in Koryŏ Mar (King 1992, p. 206).

Regarding the origin, there is no etymological correspondent for 박 in Chinese that means ‘gourd.’ The semantics of Chinese equivalent of Korean 호박 ‘pumpkin’ does not either match, considering the following parallels in Table 13.

Table 13.
Chinese words ‘melon’ and ‘amber’

Gloss	‘southern melon’	‘golden melon’	‘amber’
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	南瓜	金瓜	琥珀
Cantonese	naam ⁴ -gwaa ¹	gam ¹ -gwaa ¹	fu ² -paak ³
Other Chinese	nóe-guo (Shanghainese)	kim-koe (Hokkien)	hó--phek (Hokkien)
Sino-Japanese reading	-	-	ko-haku
Sino-Korean reading	**남과	**금과	**호박

From the examples in Table 13, we see that the Chinese word 瓜 ‘melon’ is not used in the Korean word for ‘pumpkin.’ In addition, the equivalent to the Korean 박 in Chinese 珀 has nothing to do with plants and is best translated as ‘amber.’ Based on these arguments, the Korean 박 is clearly not a Sino-Korean word.

Besides the unlikely Chinese origin, Ramstedt (1949, 183) and Räsänen (1969, 233) also propose a Turkic origin. They refer to look-alike words meaning ‘pumpkin’ in many Turkic languages, derived from the Old Turkic *qa ‘vessel for liquid’ + *pak‘gourd(?)’, such as Middle Turkic *kapak*, Uyghur *qapaq*, Turkmen *kābak*, Azeri *qabaq* and Turkish *kabak* ‘pumpkin’; Kyrgyz *aşqabaq* and Kazakh *asqabaq* ‘gourd, pumpkin.’ However, this Turkic hypothesis is quite controversial. Firstly, the etymology of the second component in Turkic word *pak‘gourd(?)’ is not reliable and even doubted by Ramstedt and Räsänen themselves. Secondly, considering the cultural history involved, why would the Koreans, who practiced agriculture on the regular basis, have borrowed a word for ‘gourd, pumpkin’ from the nomadic Turkic-speaking people who mainly practiced pastoralism?

Given that the Korean 박 is not likely to be of Chinese or Turkic origin, Tai-Kadai languages might be better candidates for the donor language from both the linguistic and sociocultural perspectives. An interesting fact is that words with similar phonological shapes and meanings to the Korean 박 are widely

observed in Tai (Pittayaporn, 2009, p. 332) and Kam-Sui languages (Burusphat et al., 2000, p. 11; Burusphat et al., 2003, pp. 39-40), as given below.

Tai: Thai พัก, Shan *puk*⁴² ‘gourd, squash’; Southern Zhuang *fak*²¹ ‘a kind of pumpkin’; Saek *fak*³² ‘a kind of gourd’ (< Proto-Tai **wak*^D ‘ashgourd’)

Kam-Sui: Kam *pək*²² ‘radish, turnip’; Sui *pa(:)k*³¹ ‘radish, turnip’

Moreover, the word for ‘gourd’ (or ‘radish’ in Kam-Sui) is also used in many compounds in a similar manner to Korean 수박 ‘watermelon’ or 호박 ‘pumpkin’, such as the examples given below.

Thai พักทอง ‘pumpkin’ = พัก ‘gourd’ + ทอง ‘gold’

Shan *ma:k*¹¹ *puk*⁴² ‘pumpkin’ = *ma:k*¹¹ ‘fruit’ + *puk*⁴² ‘gourd’

Shan *phak*⁵⁵ *puk*⁴² ‘radish’ = *phak*⁵⁵ ‘vegetable’ + *puk*⁴² ‘gourd’

Kam *pək*²² *man*¹³ ‘carrot’ = *pək*²² ‘radish’ + *man*¹³ ‘yam’

Sui *ma*¹³ *pa(:)k*³¹ ‘carrot, cabbage’ = *ma*¹³ ‘fruit’ + *pa(:)k*³¹ ‘radish’

However, the Tai and Kam-Sui forms do not show regular sound correspondence for the initial consonant. Therefore, it may not be possible to reconstruct a commonform to Proto-Kam-Tai, a common ancestor language of Tai and Kam-Sui languages. If this is a loanword from some other source language, the previous assumption implies that this word should have entered Tai and Kam-Sui, at the earliest, after the diversification of Proto-Kam-Tai into Proto-Kam-Sui and Proto-Tai in the 10th century BC (see a chronology by Mitani, 1977).

Considering both the linguistic and archaeological evidence, the Tai-Kadai words for 'gourd' and 'radish' speak in favour of a connection with the Korean 박. Linguistically, the sound correspondence of the Korean initial /p-/ and the Modern Southwestern Tai languages' initial *f* (<*v) is possible, as in the case of the two following Chinese loanwords: 1) Old Chinese 浮 **m.bru* 'to float' > Middle Chinese *bjuw*^A → Korean 부 /pu/ ~ Thai ฟุ /fu:/ (<Proto-SW-Tai **vu*:^A); and 2) Old Chinese 伏 **bək*-s 'to hatch' > Middle Chinese *bjuw*^C → Korean 복 /pok/ ~ Thai ฟัก /fak/ (< Proto-SW-Tai **vak*^D). Accordingly, there is no obstacle to connecting the Korean and Thai words for 'gourd' in terms of phonology.

From an archaeological perspective, the earliest evidence of gourd is found in present-day Peru, dating back to 13000-11000 BC, and in Thailand, dating back to 11000-6000 BC (Prance & Nesbitt, 2012, p. 21, 348). Furthermore, archaeologists claim that the species of gourd found in America ultimately came from either Asia or Africa (Wade, 2014) because the gourd was likely one of the first domesticated plant species in Asia between 13000 and 12000 BC (Erickson et al. 2005). In addition to the archaeological argument, the gourd is also intimately related to the genesis mythology of the Tai-Kadai and some other Mainland Southeast Asian ethnicities, which hold that people are originated from a gourd, i.e. 'Peoples of the gourd' (Proschan, 2001).

Considering all these arguments, the Korean 박 may be a loanword that arrived from the south. However, because there is no evidence for direct contact between Korean-speaking and Tai-speaking people, it must have come from some unknown language, potentially an East Asian extinct substrate language, which passed the word on to Korean. Two scenarios are possible in this context: 1) this word was initially borrowed from Tai-Kadai into the substrate language, which passed it on to Korean, or 2) this word was borrowed from the substrate

language in two directions, to Tai-Kadai languages in the south and Korean in the north.

6.2 Korean 쌀 & Thai ข้าวสาร

This Korean word contains an intensified initial consonant ㅉ which is an outcome of the profusion of the former initial cluster ㅉ in Middle Korean. Lee and Ramsey (2011, p. 89) estimate that this profusion, which is found in a literary language form of the 15th century, began to develop in the 12th century through the syncope of the vowels that earlier separated the consonants (see the vowel in Old Korean **pas-* below). Diachronic results of the mentioned sound changes have been previously discussed by Vovin (2015), consider the timeline given below.

Modern Korean 쌀 < Late Middle Korean ㅉ, 己 *psɿr*^{H-a}
(in the 15th century literature transcribed as 舍利 *sari* and 米 *mi*)
< Early Middle Korean **psɿr* < Late Old Korean 菩薩 **pusar* ‘rice’
(in the 12th century literature, cf. Late Middle Chinese reading *phŭasar*)
< Early Old Korean **pasɿr*^{LH}, **pasar*^{LH}

Generally, 쌀 is considered a native Korean word. However, many hypotheses have been proposed by foreign scholars. In the early days, Ramstedt (in his personal note later published by Koh Songmoo in 1982) considered a potential relationship to the Uyghur *šali* ‘rice in the shell’ (also ‘rice plants, rice grains (before husking), scarf’). Cognate words are found in other Turkic languages such as Uzbek *sholi* ‘rice (as a crop), paddy’; Kyrgyz *šali* ‘rice plants’;

and Turkmen *şaly* ‘rice plants.’ In any case, Ramstedt seemingly had a very low level of certainty about this etymology because he did not include it in his actual 1949 volume. To revisit this explanation, several counterarguments against the Turkic etymology can be presented. Firstly, the semantic meaning in Turkic is ‘rice plants’ and not ‘harvested, uncooked rice’, as in the Korean sense. Secondly, the word is only found in Turkic languages in the Southern part of Central Asia and could be a *Wanderwort* (‘wandering word’) from the east: Turkmen ← Uzbek ← Kyrgyz ← Uyghur. Finally, considering the sociocultural and historical evidence, why would the Koreans, as the world’s top consumers of rice, have borrowed a term related to rice from the nomadic Turkic-speaking pastoralists?

Turning attention from Turkic in the west to Japanese in the east, Vovin (2015) proposed that the Korean was a borrowing from a Japanese dialect that used to be spoken in the Korean Peninsula until the 8th century (see Vovin 2013a), considering the Peninsula Japanese form ***wasar* (> Western Old Japanese 和佐 *wasā*, 和世/速稻 *wase* ‘early rice’) with the Early Old Korean **pasal^{LH}*, **pasa^{LH}*. One affirming feature in this Japanese connection is that the later Middle Japanese *wase^{LH}* and Middle Korean *psal^{LH-a}* similar have a trace of tone contour Low-High. Ultimately, those who believe in the idea of Korean being a cognate language to Japanese may even consider this word as a mutual Proto-Japanese-Korean word **wasər* ‘early stage of plant growth’ (Francis-Ratte, 2016, p. 243). However, one problem for the common Proto-Japanese-Korean origin is the absence of an equivalent word in Ryukyuan languages, which, unlike Korean, are definitely related to Japanese genealogically. On the one hand, an explanation to this is that the (Middle) Japanese 和世/速稻 *wasē* refers to early rice collected in the fall and that such a thing simply does not exist in

insular areas of the Ryukyus (Vovin 2015). On the other hand, there is still a high possibility of the Korean 쌀 being a Japanese loanword and not cognate word.

Shifting the focus from the west and the east to the south now, we can also consider additional data from Tai-Kadai languages, the speakers of which have been practicing rice agriculture for several millennia. Continuing the earlier observation of resemblance in the Korean and Thai words by Potibai (2006, p. 6), we observe a Thai word ข้าวสาร and its cognate words in other Tai-Kadai languages that suspiciously resemble the Korean 쌀 in terms of both phonological shape and meaning (Ostapirat, 2000, p. 227; Burusphat et al., 2000, p. 189; Burusphat et al., 2003, p. 246; Pittayaporn, 2009, p. 331), as given below.

Tai: Thai ข้าวสาร ‘husked rice’; Southern Zhuang *ʔa:n*³³ ‘cleaned rice’; Saeksa:¹¹ ‘white rice’ (< Proto-Tai *sa:^ʔ ‘husked rice’)

Kam-Sui: Kam *əu*³¹*san*³⁵ ‘husked rice’; *ʔau*⁵¹*ha:n*¹¹ ‘white uncooked rice’

Kra: Lahasa:^{ʔA1}, Pubiao*θa:n*^{A1} (< Proto-Kra *sa:^ʔ ‘husked rice’)

This broad distribution in the cognate languages of Thai does not come as a surprise since the majority of Tai-Kadai speakers reside in South China and its surroundings, a location where rice agriculture can be very effectively practiced. Nevertheless, Ferlus (2010, p. 65) claims that this particular rice word in Tai-Kadai languages is a borrowing from an Austroasiatic language (cf. Proto-Austroasiatic *sa:/ ‘to peel’ > Keniengsa:/, Khmu *ha:/*). Accordingly, the original sense of the Tai-Kadai *sa:^ʔ would be ‘peeled rice’, which makes sense given that in modern Tai (and Kam-Sui) languages, *sa:^ʔ alone does not mean ‘rice’

but is, rather, used as an attribute to modify a noun derived from the Proto-Tai **Ç.qaw*^C ‘rice’ in order to indicate a specific type of ‘huskedrice.’

If we are to assume that Korean-speaking and also Japanese-speaking people originally migrated from Continental China (see, e.g., Benedict, 1989; Vovin, 2013b), there could be, in an extreme case, some interaction with Tai-Kadai or Austroasiatic rice farmers, from which this word was borrowed into Korean and Japanese. In terms of chronology (see Table 1), if this is the case, such a contact event should have taken place very early in the Pre-Proto-Korean and Pre-Proto-Japanese stage, to which we have, unfortunately no reliable linguistic data to support. The only favourable argument is that the oldest archaeological evidence for rice planting in the Yangtze river valley is found in South China, near the estimated Tai-Kadai homeland, and dates back to 6000-4000 BC (Prance & Nesbitt, 2012, p. 56), which is earlier than the Proto-Tai-Kadai stage between the 3rd and 2nd millennia BC in Mitani’s (1977) chronology.

However, the problem with the hypothesis of Tai-Kadai or Austroasiatic as a source for Korean 쌀 is a difference in syllable structure. How can we postulate a diachronic explanation for the initial consonant cluster ㅉ in Middle Korean and ultimately the disyllabic structure **pasɾ* in Proto-Korean? Can we assume that this was originally a compound in which the second component was borrowed from some Tai-Kadai or Austroasiatic dialect and used with another native Korean word? Given this scenario, one potential candidate for the first compound component is the Korean word 벼 ‘rice plant’ (Song Ki-Joong, p.c.). However, in that case, the constituent order would become the non-canonical Noun-Modifier ‘rice plant + peel’, which is contrary to the head-final word order typology of Korean and other Northeast Asian languages.

Considering the linguistic and archaeological issues discussed above, there is only a small possibility of 찰 being borrowed from Turkic, Tai-Kadai or Austroasiatic languages. Despite this, Vovin's Japanese etymology may still be worth considering. Ultimately, there is definitely no harm in taking a humble approach and still retaining 찰 within the native Korean vocabulary until new data can verify any of the hypotheses discussed in this section.

7. Conclusions

Korean and Thai share no less than a hundred of cognate words, most of which (ca 90%) are Chinese loanwords, while the rest (ca 10%) consists of onomatopoeic words other uncertain or false etymologies that await further investigation. The current study has shown that the etymological information as presented in the discussion above can help language learners to acquire Korean or Thai vocabularies better and faster. Besides, the findings here are also relevant to the studies of history, etymology and loanwords in general as they refine our understanding of history of people in East Asia and the cultural contexts, in which foreign words were borrowed. Apart from vocabularies, other linguistic elements like grammatical constructions that Korean share with Thai can be an interesting topic to explore as some common macro-area patterns in Eastern Eurasia could have spread as far as to the Korean and Thai speech communities.

REFERENCE

- Bailblé, Olivier. (2015). A History of the Korean Lexicon. *International Journal of Teaching, Education and Language Learning*, 2(3), 34-66.
- Baxter, William. (1992). *A Handbook of Old Chinese Phonology*. Berlin: De Gruyter.
- Baxter, William, & Sagart, Laurent. (2014). *Baxter-Sagart Old Chinese reconstruction, Version 1.1 (20 September 2014)*. from <http://ocbaxter.sagart.lsa.it.lsa.umich.edu/BaxterSagartOCbyMandarinMC2014-09-20.pdf>
- Benedict, Paul K. (1989). *Japanese-Austro/Tai*. Ann Arbor: Karoma.
- Bolnick, D. A. W., Shook, B. A. S., Campbell, L., & Goddard, I. (2004). Problematic use of Greenberg's linguistic classification of the Americas in studies of Native American genetic variation. *American journal of human genetics*, 75(3), 519-523.
- Burusphat, Somsong, Suraratdecha, Sumittra & Yang Quan. (2000). *Kam-Chinese-Thai-English dictionary*. Bangkok: Mahidol University.
- Burusphat, Somsong, Wei Xuecun & Edmondson, Jerold A. (2003). *Sui-Chinese-Thai-English Dictionary*. Bangkok: Mahidol University.
- Campbell, Lyle. (1996). On sound change and challenges to regularity. In M. Durie & M. Ross (Eds.), *The comparative method reviewed: Regularity and irregularity in language change*, pp. 72-89. Oxford University Press.
- _____. (1998). *Historical Linguistics. An Introduction*. Edinburgh University Press.
- Chappell, Hilary. (2001). Synchrony and diachrony of Sinitic languages: A brief history of Chinese dialects. In H. Chappell (Ed.), *Sinitic grammar*:

Synchronic and diachronic perspectives, pp. 3-28. Oxford University Press.

Choi Hakgün. (1978). = 최학근. *한국방언사전*. 서울: 현문사.

Erickson, D. L., Smith, B. D., Clarke, A. C., Sandweiss, D. H., & Tuross, N. (2005). An Asian origin for a 10,000-year-old domesticated plant in the Americas. *Proceedings of the National Academy of Sciences of the United States of America*, 102(51), 18315-18320.

Ferlus, Michel. (2010). The Austroasiatic vocabulary for rice: its origin and expansion. *Journal of the Southeast Asian Linguistics Society*, 3, 61-76.

Fox, Anthony. (1995). *Linguistic Reconstruction. An Introduction to Theory and Method*. Oxford University Press.

Francis-Ratte, Alexander T. (2016). *Proto-Korean-Japanese: A New Reconstruction of the Common Origin of the Japanese and Korean Languages* (Doctoral dissertation). The Ohio State University.

Jung Hwan-Seung. (2012). = 정환승. 한국어와 태국어의 어휘 비교 연구 – 중국어 영향을 중심으로. *동남아연구*, 23(1), 151-185.

_____. (2015). = 정환승. 한국어와 태국어 의성어에 관한 연구. *한국태국학회논총*, 21(2), 91-133.

Khanitthan, Wilaiwan. (2007). = วิไลวรรณ ขนิษฐนันท์. 2550. อิทธิพล ภาษาอังกฤษ ภาษาเขมร และภาษาจีนในภาษาไทย มุมมองใหม่. *ภาษาและภาษาศาสตร์*, 26(1), 1-24.

Kim Minsu. (1997). = 김민수. *우리말 언어사전*. 서울: 태학사.

King, J. Ross P. (1992). Archaisms and Innovations in Soviet Korean Dialects. *Language Research*, 28(2), 201-223.

Lee Ki-Moon, & Ramsey, S. Robert. (2011). *A History of the Korean Language*. Cambridge University Press.

- Li Fang-Kuei. (1945). Some old Chinese loan words in the Tai languages.
Harvard Journal of Asiatic Studies, 8, 333-342.
- Li Fang-Kuei. (1976). Sino-Tai. *Computational Analysis of Asian and African Languages*, 3, 39-48.
- Manomaivibool, Prapin. (1975). *Study of Sino-Thai lexical correspondences* (Doctoral dissertation). University of Washington, Seattle.
- _____. (1976). Layers of Chinese loanwords in Thai. In T. W. Gething, J. G. Harris & P. Kullavanijaya (Eds.), *Tai linguistics: in honor of Fang-Kuei Li*, pp. 179-184. Bangkok: Chulalongkorn University Press.
- Martin, Samuel E. (1997). How Did Korean Get -l for Middle Chinese Words Ending in -t? *Journal of East Asian Linguistics*, 6(3), 263-271.
- Matisoff, James A. (1990). On megalocomparison: a discussion note. *Language*, 66, 106-120.
- Mitani, Yasuyuki. (1977). = 三谷 恭之. タイ・カダイ諸語の言語年代学的考察. *東南アジア研究*, 15(3), 421-429.
- Müller, A., Wichmann, S., Velupillai, V., Brown, C. H., List, M., Egorov, D., Belyaev, O., Mailhammer, R., Geyer, H., & Grant, A. (2010). *ASJP World Language Tree of Lexical Similarity: Version 3* (July 2010).
- Nam, Pung-hyen. (2009). = 남풍현. *고대 한국어 연구*. 서울: 시간의 물레.
- Nishida Tatsuo. (1975). Common Tai and Archaic Chinese. *Studia Phonologica*, 9, 2-12.
- Ostapirat, Weera. (2000). Proto-Kra. *Linguistics of the Tibeto-Burman Area*, 23(1), 1-251.
- Pittayaporn, Pittayawat. (2009). *Phonology of Proto-Tai* (Doctoral dissertation). Cornell University, Ithaca, New York.

- _____. (2014). Layer of Chinese loanwords in Proto-Southwestern Tai as evidence for the dating of the spread of Southwestern Tai. *Manusya, Special issue20*, 47-68.
- Potibai, Puttachart. (2006). The comparative study of some Korean and Thai lexical items (Paper presented at the 3rd World Congress of Korean Studies, 27-30 October 2006, Jeju National University).
- Prance, Sir Ghilleen, & Nesbitt, Mark (Eds.). (2012). *The cultural history of plants*. London: Routledge.
- Proschan, Frank. (2001). Peoples of the gourd: imagined ethnicities in highland Southeast Asia. *The Journal of Asian Studies*, 60(4), 999-1032.
- Ramstedt, Gustaf John. (1949). *Studies in Korean etymology*. Helsinki: Société Finno-Ougrienne.
- Räsänen, Martti. (1969). *VersucheinesetymologischenWörterbuchs der Türk Sprachen 1*. Helsinki: Société Finno-Ougrienne.
- Sohn Ho Min. (1999). *The Korean Language*. Cambridge University Press.
- Vovin, Alexander. (2013a). Northeastern and Central Asia: "Altaic" linguistic history (Chapter 24). *The Encyclopedia of Global Human Migration*. Wiley Blackwell. <https://doi.org/10.1002/9781444351071.wbeghm824>.
- _____. (2013b). From Koguryō to T'amna: Slowly riding to the South with speakers of Proto-Korean. *Korean Linguistics*, 15(2), 222-240.
- _____. (2014). Why Koreanic is not Demonstrably Related to Tungusic? In S. H. To & K. Chung (Eds.), *Korean within Altaic Languages and Altaic Languages within Korean*, 97-117. Seoul: ACSI, Gachon University.
- _____. (2015). On the Etymology of Middle Korean *psal* 'rice'. *TürkDilleriAraştırmaları (Festschrift für Uwe Bläsing)*, 25(2), 229-238.

- Wade, Lizzie. (2014). Scientists solve mystery of World travelling plant. *Science*, February 2014.
- Yu C'angdon. (1964). = 유창돈. 李朝語辭典 (이조어사전). 서울: 연세대학교출판부.
- Yurayong, Chingduang, & Szeto, PuiYiu. (2020). Altaicization and de-Altaicization of Japonic and Koreanic. *International Journal of Eurasian Linguistics*, 2(1), 108-148.
- 한글학회. (1992). *우리말 큰사전 4 : 옛말과 이두*. 서울: 어문각.

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