

An Investigation of the Reasons for the Solidification of Korean Inherent Sino-Korean

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Abstract: Inherent Sino-Korean are the words whose phonetic structure does not conform to the sound of Sino-Korean. They are the result of the fusion of Sino-Korean and inherent words. In this paper, we organize the Korean inherent Sino-Korean and investigate the reasons for their phonetic structure.

1. Introduction

Regarding the issue of Korean Sino-Korean, although there is still a lot of debate among scholars about whether or not official pronunciation words and phonetic words (also known as attached Sino-Korean) are Sino-Korean, and whether or not ancient Sino-Korean given new meaning by Japanese are Chinese-derived Sino-Korean or Japanese-derived Sino-Korean, the basic definition of Sino-Korean is unanimous, that is, “words that are constructed on the basis of Chinese characters, used in the Korean language system, and can be recorded in Chinese characters and their pronunciation conforms to the Korean Chinese-sounding norms”.

However, there are some words in Korean that are based on Chinese characters and can be recorded in Chinese characters, but their phonetic structure is not in accordance with the Chinese phonetic norms of Korean. Dechun Li, in his “Korean Chinese Words and Chinese-derived Words”, argues that “some of the Sino-Korean have already been inherent. Inheritance refers to the fact that these loanwords have changed in the language life of Koreans due to the long-term use of the phonetic structure, and are not associated with the original Chinese characters or the modern pronunciation of Korean characters. Thus, in the Korean consciousness, they have been recognized as inherent words rather than borrowed words.” “Although the Sino-Korean that have been inherited are based on Chinese characters and borrowed directly from the Chinese language, they are not related to the sound of the Chinese words in modern Korean and cannot be replaced with Chinese characters, so they should be regarded as inherited words and not as the present-day Sino-Korean. Such words should be classified as Chinese-derived words. [1]”

This paper argues that such words are Sino-Korean whose phonetic structure has changed under the deep influence of the contact and fusion of Sino-Korean and inherited words, and should be called inherited Sino-Korean instead of inherited Chinese-derived words, because the origin of such words is not only Chinese but also Korean and mixed Korean-Chinese words. This kind of vocabulary has unique academic value for the study of the history of extraterritorial development and transmission of Chinese vocabulary, and it also provides a glimpse of the deeper contact and integration between Chinese words and Korean words. In this paper, we have compiled the inherent Sino-Korean in the *한글+국어사전 (Korean Dictionary)*, and have conducted a preliminary investigation into the reasons for the inherent phonetic structure of the words, so that we can see the value of the inherent Sino-Korean for the research field of contact and integration between Chinese and Korean.

2. Arrangement and Classification of Inherent Sino-Korean

In this paper, we have compiled the inherent Sino-Korean in the *한글+국어사전 (Korean Dictionary)* and found that there are about 202 inherent Sino-Korean in this dictionary. Among them, there are 124 Chinese-derived

words, 41 Korean-derived words, and 37 mixed words.

(1) In medieval Korean historical sources, one or more of the inherent Sino-Korean that originated from Chinese language have been identified as ancient proverbial forms. For example, the word form of 관디[kwan ti] (guan dai [kuan tai]) was “관디[kwan tai]”; the word form of 귀양[ky jan] (gui xiang [kiuæi xiaŋ]) was “귀향[ky hjaŋ]”; the word form of 나귀[na ky] (luo ju [lua kjo]) was “나귀[na ky]”, “나귀[na ky]”, “라귀[ra ky]”; the word form of 나인[na in] (nei ren [nuæi ŋien]) was “나인[nai in]”; the word form of 능금[nin kim] (lin qin [liəm giəm]) was “능금[nin kim]”; the word form of 대추[te tsʰu] (da zao [dai tsou]) was “대초[te tsʰo]”, “대추[te tsʰju]”, “대초[te tsʰjo]”; the word form of 도량[to rjan] (dao chang [dou diaŋ]) was “도량[do rjan]”; the word form of 승냥이[sin njan i] (chai lang [dʒæi laŋ]) was “승냥이[sin njan i]”; the word form of 요[yo] (ru [ŋjʉk]) was “요[yo]”, “요[yo]”; the word form of 짐승[tɕim siŋ] (zhong sheng [tɕiŋ ŋeŋ]) was “짐승[tɕim siŋ]”, “짐승[tɕim siŋ]”, “짐승[tɕim siŋ]”.

(2) The Korean origin of inherent Sino-Korean is that the Korean people used Chinese lexical elements to create Sino-Korean according to the principles of Chinese word formation. Their origin can be confirmed by the proverbial form of the ancient language that can be found in the Korean historical records of the Middle Ages. For example, the word form of 가게[ka ke] (jia jia [kea kea]) was “가게[ka ke]”; the word form of 김치[kim tɕi] (chen cai [dʒiəm tsʰei]) was “김치[kim tɕi]”, “김치[kim tɕi]”, “김치[kim tɕi]”; the word form of 나중[na tsuŋ] (nai zhong [næi tɕiŋ]) was “나중[na tsuŋ]”, “나중[na tsuŋ]”; the word form of 사냥[sa njan] (shan xing [ʃæŋ rɕeŋ]) was “사냥[sa njan]”, “사냥[sa njan]”; the word form of 승룡[suŋ njuŋ] (shu leng [ziok leŋ]) was “승룡[suŋ njuŋ]”, “승룡[suŋ njuŋ]”, “승룡[suŋ njuŋ]”, “승룡[suŋ njuŋ]”, etc.; the word form of 잠깐[tɕam kan] (zan jian [dzæm keæn]) was “잠깐[tɕam kan]”; the word form of 채비[tɕhɛ pi] (cha bei [tʃʰæi bæi]) was “채비[tɕhɛ pi]”.

(3) The inherent Sino-Korean derived from Chinese-Korean hybrids are composed of inherited Kanji morphemes and inherent morphemes or inherent affixes. Since the phonological morphology of Sino-Korean has been naturalized, the word formed with a natural morpheme or a natural suffix is often unrecognizable to the user as a Chinese word component. In Dechun Li's *Sino-Korean and Chinese-derived Words*, it is mentioned that “Sino-Korean are combined with the elements of inherent words to produce new derived words or compound words. From this, there are also inherent Sino-Korean. Such words, even if there is no change in the meaning and sound of the Chinese characters in the Chinese morphological elements, will not be associated with the Chinese words. Such words, in which the Chinese sounds of the Chinese characters and their meanings do not change, would not be associated with Chinese words. For example, 향아리‘gang’, 보따리‘bao’, 겁쟁이‘qie’, 면바로‘mian’. In Korean, it is common to add inherent affix after Chinese morpheme to express common name, which is the result of contact fusion between Sino-Korean and inherent words, and the degree of contact fusion is even greater in the combination of intrinsic Chinese morpheme and inherent affix. 금자동이[kim tsa tuŋ i] (jin zi tong-[kiəm tsjə doŋ]), 약동이[jak tuŋ i] (-tong-[doŋ]), 엽동이[ɛp tuŋ i] (-tong-[doŋ]), 지렁이[tɕi rɕeŋ i] (di long [dʒei lijuŋ]), 천동이[tɕhən tuŋ i] (jian tong-[dʒiæn doŋ]), 팔삭동이[pʰa sak tuŋ i] (ba shuo tong-[peat ʃeuk doŋ]), 팔푼이[pʰal pʰun i] (ba fen-[peat pjuən]), 후동이[hu tuŋ i] (hou tong-[xu doŋ]) are naturalized Sino-Korean with the inherent suffix “이[i]” added [2]. 괴키다[kø rop ta]

(ku-[k'ŏ]) and 대수키다 [tɛ su rop ta] (duo shu-[ta j̥io]) are adjectives formed by combining an inherent Sino-Korean lexeme with the suffix -롭다[rop ta], which has the function of adjectival paraphrase.

3. Analysis of the Reasons of Phonetic Structure Solidification

The reasons for the changes in the phonological structure of inherent Sino-Korean are complex and long-standing, and some of them are difficult to verify. In this paper, we examined and analyzed some of the reasons for phonological solidification as follows.

3.1 Phonetic Assimilation

For example, 영계[jəŋ ke] means “chick” in Korean. It originates from “연계[jən ke](ruan ji [ŋjuæn kiæi])”. The change from “연[jən]” to “영[jəŋ]” is due to the assimilation of the consonant ㄱ-[k-] in the later syllable “계[ke]” into -ㅇ[-ŋ], which is the same part of the rhyme ending -ㄴ[-n].

3.2 Palatization and Inverse Palatization

For example, “김치[kim tɕʰi]” originated from “침채[tɕʰim tɕʰɛ] (chen cai [dʒəm ts'ɛi])”. It went through the process of 됌채[tim tɕʰɛ]>짐채[tɕim tɕʰɛ]>김채[kim tɕʰɛ]. The ㄷ-[t] sound changed to ㅈ-[tɕ-] sound. It is the palatization process. The ㅈ-[tɕ-] sound changed to ㄱ-[k-] sound. It is the inverse palatization phenomenon.

3.3 Preservation of Dialectal Accents in Korean Vocabulary

For example, the standard pronunciation of “cai [ts'ɛi]” in modern Korean is “채[tɕʰɛ]”. Its actual pronunciation is also “추[tsʰu]”, “치[tɕʰi]”, etc. The same is true for “배추[pɛ tsʰu] (bai cai [bek ts'ɛi])”, “상추[san tsʰu] (sheng cai [ʃɛŋ ts'ɛi])”, “김치[kim tɕʰi] (chen cai [dʒəm ts'ɛi])”. This phenomenon is the result of the retention of dialect accents in the standard vocabulary.

3.4 Preservation of Ancient Chinese Sounds in Modern Korean Vocabulary

For example, “부추[pu tsʰu]” originates from “육채[juk ts'ɛi] (yu cai [jʒok ts'ɛi])”. “육[juk](yu [ʒʒok])” corresponds to “부[pu]” because part of the class of characters that belonged to the ‘yu yu’ family in ancient times was pronounced [p-]. It is generally believed that ‘yu yu’ was developed long ago from [p-]>[w-]>[-]. In Korean, The “육[juk] (yu [ʒʒok])” sound corresponds to the “부[pu]” sound, which is preserved in the upper archaic. Another example is the pronunciation of the Chinese character “liang” in the modern Korean phonetic system as [rjaŋ], which is similar to the ancient sound of the Chinese word “liang”. In Chinese dialect “liang” is “laimu yangyun, sandeng kaikou” according to Li Wang in dialect structure system, the sound should be [ljaŋ]. The word “사랑[sa raŋ] (si liang [sʒə ljaŋ])” is pronounced as “[raŋ]” in Korean, which is similar to the ancient sound of “liang”. The ancient sound of “liang” is “laimu yangyun”. According to Li Wang's ancient sound construction system, its sound is [laŋ].

3.5 The Effect of Word Refinement

For example, in Korean, “칸[kʰan]” originates from “간[kan] (jian [kɛæn])”. In the 16th century, the translation of the *Translation of Chinese Learning Book*, and in the 18th century, the *Tongwen*

Leijie and *Hancheng Wenjian* were all in the form of “간[kan]”. Later, the meaning of a specific space such as a room, compartment, or compartment was “간[kan]”. For example, the pronunciation in the words “운전칸[un tsən kʰan](yun zhuan jian),” “이등칸[ɪ tɪŋ kʰan](er deng jian),” “화물칸[hwa mul kʰan](huo wu jian)” is “칸[kʰan]”, while it is pronounced as “간[kan]” in words “공간[koŋ kan](kong jian),” “시간[ɛɪ kan](shi jian)”. For example, 구완 [ku wan] (jiu yuan [kʲu ɣjuæn]) and 병구완 [pɲəŋ ku wan] (bing jiu yuan [bɲeŋ kʲu ɣjuæn]) mean “nursing the sick” rather than “rescue”. The modern Korean word for “rescue” is the Sino-Korean “구원 [ku wən]”.

3.6 Influence of the Law of Head Sounds

According to the “Head sound rule”, the Sino-Korean sound has the following variations. “냐,녀,뇨,뉴,니,네” change into “야,여,요,유,이,예”; “랴,려,료,류,리,레” change into “아,어,요,유,이,예”; “라,로,루,르,래,뢰” change into “나,노,느,내,노”. Therefore, “라구[raky](luo ju [lua kjo])” changes into “나귀[na ky]”. The prefix “당[taŋ] (tang)” is added and the word becomes “당나귀[taŋ na ky] (tang luo ju [dɑŋ lua kjo])”.

3.7 The Effect of the “ㅅ” Rule for the Suffix

The “ㅅ” rule (사이'ㅅ'규칙) in Korean means that the consonant of the latter syllable is affected by the preceding syllable and becomes a hard sound when pronounced. To indicate the general pronunciation phenomenon, the “-ㅅ” ending is added to the preceding syllable. The addition of this ending has led to a change in the morphology and pronunciation of some words. For example, “곶간[kot kan]” originates from Sino-Korean “고간[ko kan](gu jian [k'ɔ keæn])”.

3.8 Influenced by the Hard Pronunciation of Inherent Words

The majority of the Sino-Korean phonetic sounds are flat and airy, and only the three words “쌍 (shuang), 씨 (shi), and 꺾 (qi)” are pronounced with a hard sound (also known as a tight sound). However, some words of Chinese origin are pronounced with a hard pronunciation due to the influence of inherent words. For example, in “잠깐 [tsam 'kan] (zan jian [dzæm keæn])” and “근량퐁[kin rjaŋ 'tsuŋ] (jin liang zhong [kɲəŋ lɲɑŋ dɲuŋ])”, “깐['kan] jian” and “퐁['tsuŋ] zhong” are both pronounced as hard sounds.

3.9 Impact of Homophonic Declination

When two consonants of the same rhyme are pronounced together in Korean, the former consonant is dropped. For example, “간난[kan nan] → 가 난 [ka nan] (jian nan [keæn nan]),” “중용[tsoŋ joŋ] → 조용[tso joŋ] (cong rong [dzjuŋ jjuŋ])”.

3.10 Ending Sound Drop

Due to the weakening and disappearance of the rusheng rhyme of the ending sound, some Chinese words have dropped their ending sound. For example, words like “구화반지[ku hwa pan tɛɪ] (ju hua ban zhi [kjoek xoa pean tɛjei]),” “구화장지[ku hwa tsaŋ tɛɪ] (ju hua zhang-[kjoek xoa tɛjaŋ]),” “요[jo] (ru [ŋjok]),” “초[tsʰo] (zhu [tɛjok]),” drop their rusheng rhymes in the ending sound.

3.11 Addition of Inherent Terminology

One of the most important ways to derive new words in Korean is by fusing inherent affixes with Chinese morphemes to change the morphology of the language. For example, the word form of 상수리[san su ri](xiang shi [zɿɑŋ dzjet]) was “상실이[ɛjaŋ ɛil i]”. In *Object Spectrum*: “xiang shi ‘상실이 [ɛjaŋ ɛil i]’ is generated by reinforcing the word suffix ‘O|[i]’ to the Chinese character 상실 [ɛjaŋ ɛil] (xiang shi)”. Being influenced by the rule of hyphenation in Korean, the final form was solidified as 상수리 [san su ri], which is pronounced [ɛjaŋ ɛil ri].

3.12 The Preservation of Ancient Chinese Vernacular Words Transmitted through Spoken Language

The pronunciation of Chinese words was standardized after they were introduced into the Korean lexical system. It is possible that the existence of the above-mentioned Chinese words with pronunciations that do not conform to the Chinese phonetic system is related to the way they were introduced into the Korean language. The Chinese words in the Korean language range from literary words imported through ancient literature to Chinese loanwords from the Chinese translation of the Buddhist scriptures and Chinese words from the ancient Chinese vernacular. Liu Chen, in the book *The Lineage of the East*, argues that the vernacular words in the Chinese language were introduced to the Korean Peninsula in three ways: first, by immigrants from the mainland through the ages; second, by traders from the peninsula through the ages; and third, by Chinese vernacular works [3]. This paper argues that such Chinese words without standardized pronunciation are most likely to have been introduced into the ancient Chinese vernacular through oral speech, and their pronunciation was fixed and preserved in the Korean lexical system before they were standardized. In the article “On the Borrowing of Modern Chinese Language” by Jiwen Li, it is pointed out that there are more than 70 Chinese words and phrases from ancient Chinese vernacular in translation books from the 16th to the 18th century. For example, “배추[pɛ tsʰu](bai cai [bek tsʰei]),보배[po pɛ](bao bei [pou pai]),토시[tʰo ɛi](tao xiu [tʰou zju]),띠[tʰi](dai zi [tai tsjə]),폰주[pʰun tsu](pen zi [buən tsjə]),사탕[sɑ tʰɑŋ](sha tang [ʃea dɑŋ]),수수[su su](shu shu [zjuk ɛjɔ]),사처[sa tsʰə](xia chu [ɣea tɛʰjɔ])”, etc.

Another evidence that some of the inherent Sino-Korean were introduced through spoken language is the phonetic characteristics of the words. It is generally accepted in Korean academia that the Korean Chinese character sounds are mainly Chinese medieval sounds, with some characteristics of medieval sounds. Because of the great difference between the syllabic system and the Korean phonetic system at that time, some changes were made to the Korean phonetic system at that time. For example, the lingual and suprasegmental consonants of the vowels are combined as lingual consonants, the labial accent and labial light consonants are combined as labial consonants, and the dental and orthodontal consonants are combined as dental consonants. In addition, because of the opposition between voiceless and voiced consonants, they were basically treated as voiceless consonants, but some of the subglottals or full turbid consonants were treated as voiced consonants [4]. However, in the words such as 병나발 [pjəŋ na pal] (ping la ba), 보배 [po pɛ] (bao bei), 사발허통 [sa pal hɔ tʰoŋ] (si ba xu tong), the aspirated sound “ba”, “bei”, “ba”, according to the Chinese phonetic rules, are pronounced as unaspirated. In the words 백통[pɛk tʰoŋ tɛ] (bai tong), 백통대[pɛk tʰoŋ tɛ] (bai tong-), 백통전[pɛk tʰoŋ tɛ tsən] (bai tong qian), 토티[tʰo pʰi] (tu pi), 토티집[tʰo pʰi tɛp] (tu pi-) and other words, the sounds “tong”, “pi” that should be pronounced without an airy sound according to Chinese phonetic norms are pronounced with an airy sound. The pronunciation of these Chinese words contradicts the Korean Kanji phonetic norms but matches the Chinese pronunciation [5]. The pronunciation of [o] and [oŋ] in Sino-Korean is [u] and [uŋ], such

as”금자등이[kim tsa tuŋ i] (jin zi tong-), 나무주추[na mu tsu tsʰu] (--zhu chu), 대추[te tsʰu] (da zao), 봉족[poŋ tsuk] (feng zu), 부주[pu tsu] (fu zu), 부줏돈[pu tsut ton] (fu zhu-), 부줏슬[pu tsut sul] (fu zhu-), 부줏일[pu tsut il] (fu zhu-), 쌍등이[ʼsaŋ tuŋ i] (shuang tong-), 약등이[jak tuŋ i] (-tong-), 푸주[pʰu tsu] (pao chu), 후등이[hu tuŋ i] (hou tong-). This phenomenon is also contrary to the norms of Sino-Korean pronunciation, but it is consistent with Chinese pronunciation.

4. Conclusion

There are various reasons for the solidification of the phonological structure of inherent Sino-Korean, and many phenomena are still difficult to verify. Due to the solidification of the phonological structure, it is difficult to identify the etymology of some inherent Sino-Korean. For example, the derogatory name for a soldier in Korean is “군바리 [kun pa ri],” and the 한국어사전 (*Korean Dictionary*) explains its etymology as “warlord”. The origin of the word is most likely “구팔이 [ku pʰal i] (qiu ba [kʰi̯u peat])”. Therefore, the study of inherent Sino-Korean has unique research value for the study of Sino-Korean, the study of foreign transmission of Chinese words, and the study of contact and integration of Sino-Korean and inherent words.

References

- [1] Liu Chen. The language of eastward [M]. Dalian: Liaoning Normal University Press, 2007, pp.98.
- [2] Lu Feng, Ping Wang. Ancient and Modern Interpretation of the source of Sino-Korean [J]. *Lexicographical Studies*, 06, pp.22-24, 2020.
- [3] Dechun Li. Sino-Korean and Chinese-derived words [J]. *Minority Languages of China*, 05, pp.102-103, 2007.
- [4] Huiyan Rong, Jie Zhao. A study on the contact and integration of Sino-Korean and inherent words in Korean language [J]. *Journal of The Beifang University Of Nationalities*, 146 (02), pp.90-91, 2019.
- [5] Aifang Zou. The Development of Chinese character phonetics in Korean in the Middle Ages and its significance for the study of early Chinese official languages [J]. *Minority Translators Journal*, 120 (01), pp.67-69, 2021.