

The etymology of Korean *ssal* ‘uncooked grain’ and *pap* ‘cooked grain’

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Abstract

In this paper, I will provide etymological explanations for the two Korean words for ‘grain’: *ssal* ‘uncooked grain’ and *pap* ‘cooked grain.’ The word *ssal* ‘uncooked grain’ is a loanword from Middle Chinese *bu-sat* ‘Bodhisattva,’ linking the Buddhist holy figure to the type of food that has a sacred status in Korean culture. The support for this claim comes from the fact that (i) grains were sometimes associated with the Buddha’s body in Korea, and (ii) certain dialects of Japanese have also referred to rice — undoubtedly the most favored type of grain — as *bosatsu* ‘Bodhisattva’ or *buppō-sama* ‘Lord Buddha Dharma.’ Moreover, *pap* ‘cooked grain’ is most likely derived from the baby-talk term for ‘food,’ because cross-linguistically, baby-talk terms for ‘food’ or ‘to eat’ tend to be similar to /papa/ or /mama/, some of which shifted into the adult-talk term for food or a common type of food.

Keywords: Korean – etymology – theophagy – baby-talk – sound symbolism – Buddhism – agriculture

Dans cet article, j’offre des explications étymologiques pour les deux mots coréens pour « grain » - *ssal* « grain non cuit » et *pap* « grain cuit ». Le mot *ssal* « grain non cuit » est un mot emprunté du chinois médiéval *bu sat* « Bodhisattva ». Ceci lie la figure sacrée bouddhiste au type de nourriture qui a un statut sacré dans la culture coréenne. Le soutien pour cet argument vient du fait que (i) les grains étaient parfois associés avec le corps de Bouddha en Corée, et (ii) certains dialectes japonais ont eux aussi appelé le riz - indubitablement le grain préféré - *bosatsu* « Bodhisattva » ou *buppō-sama* « seigneur Bouddha Dharma ». En plus, *pap* « grain cuit » est sans doute dérivé du mot signifiant « la nourriture » dans le langage enfantin, car à travers les langues, les mots enfantins pour « la nourriture » ou « manger » ressemblent souvent /papa/ ou /mama/, dont certains se sont déplacés au mot adulte pour la nourriture ou un type commun de la nourriture.

Mots-clés: coréen – étymologie – théophagie – langage enfantin – symbolisme phonétique – bouddhisme – agriculture

1 Introduction

The Korean language has two main terms for ‘grain’: *ssal*¹ 쌀 ‘uncooked grain’ and *pap* 밥 ‘cooked grain.’ Although in Korean today, these two words tend to refer to rice exclusively and not to other cereals, they can still refer to any type of grain: for example, when combined with *poli* 보리 ‘barley,’ these two words can refer to *poli-ssal* 보리쌀 ‘barley grain’ or *poli-pap* 보리밥 ‘cooked barley.’

This paper investigates the etymology of the two Korean words for grain. First, I revisit Ogura’s (1943) observation on the relatedness between Korean *ssal* and Chinese *púsà* 菩薩 ‘Bodhisattva (literally the “enlightened being” in Buddhism).’ Based on his observation, I argue that *ssal* originates from the Middle Chinese (MC) *bu sat* 菩薩 ‘Bodhisattva’ (transcription by Baxter & Sagart 2014). Next, based on cross-linguistic evidence of baby-talk vocabulary, I suggest that *pap* may come from a baby-talk word for ‘food.’

2 Background

The two Korean words *ssal* and *pap* first appear in *Jilín Lèishì* 雞林類事 (JLLS), a modest list of Korean words compiled in the name of the Chinese official Sun Mu 孫穆 during his 39-day visit to Korea in the year 1103. The Korean spoken by this time is called Early Middle Korean (EMK). Since the Korean alphabet Hangul was only invented in the 15th century, after which Korean is classified as Late Middle Korean (LMK), the Korean words in JLLS were transcribed in Chinese characters, making it difficult to approximate what the Korean words may have actually sounded like.

Among the listed Korean words, the one meaning *bái-mǐ* 白米 ‘white grain (= rice)’ was transcribed as *hǎnpwosal*² 漢菩薩. The book also lists *hǎn* 漢 as the word for *bái* 白 ‘white.’ Furthermore, *tyenpwosal* 田菩薩 is listed as the term for *sù* 粟 ‘foxtail millet.’ The first character *tyen* 田 semantically represents ‘field.’ Since foxtail millet is a type of grain grown on fields, this indicates that *pwosal* 菩薩 is equivalent to ‘grain.’

The word for *fàn* 飯 ‘cooked grain; meal’ was transcribed as *pákkě* 朴舉. Jin (2019: 270-272) argues that the second character *kě* 舉 (*jǔ* in Mandarin) is actually the first character of the next entry, *fàn* 飣 (a variant form of *fàn* 飯). This entry, according to Jin, should be interpreted as *jǔ-fàn* 舉飣 ‘to take (=have) a meal,’ whose Korean equivalent was transcribed as *mwocwú* 謨做, which Jin claims to be a precursor of contemporary Korean *mek-ca* 먹자 ‘let’s eat.’ The difference between the common interpretation (1a) and Jin’s interpretation (1b) is shown below.³

- (1) a. 飯 曰 朴舉。飣 曰 謨做
pǎn wál pákkě. pǎn wál mwocwú
meal is.called pákkě. meal is.called mwocwú

¹This paper uses the Yale romanization system for Korean.

²The Chinese transcription of Korean words in JLLS will be romanized as the LMK pronunciation of the corresponding Chinese characters (based on Kwon 2009), whereas the Chinese definitions of those Korean words will be written in Mandarin pinyin. LMK had lexical tones, which are lost in contemporary Seoul Korean. The tone diacritics are: ‘ = high tone; ˘ = rising tone; unmarked = low tone.

³The characters written in JLLS highly vary from one manuscript from another. For example: *thây* 太 in one manuscript was also written as *tây* 大 or *hwă* 火 in other manuscripts erroneously because of their visual similarity. The characters in (1) are what Jin judges to be the original intended characters.

- ‘A meal is called *pákkě*. A meal is [also] called *mwocwú*.’
- b. 飯 曰 朴。舉飴 曰 謨做
pǎn wál pák. kě-pǎn wál mwocwú
 meal is.called *pák*. take-meal is.called *mwocwú*
 ‘A meal is called *pák*. Having a meal is called *mwocwú*.’

Thus, the Korean equivalent of Chinese *fàn* 飯 ‘cooked grain’ would be *pák* 朴, which is the closest transcription of (the EMK equivalent of) LMK *páp*, since Sun Mu’s variety of Chinese had no character whose pronunciation is *páp*.

How were, then, the words transcribed as *pwasál* 菩薩 and *pák* 朴 actually pronounced? The Chinese spoken in Sun Mu’s time and space is Northern Song Chinese (NSC) (Choi 2015). Choi’s NSC reconstruction of these two words are **p^huo-sa?* and **p^hau?*. Should we then assume that these two words sounded similar to their NSC pronunciation?

Kang (2011: Ch. 2) argues that it wasn’t Sun Mu who wrote JLLS, but rather the Korean officials who wrote down their Korean vocabulary in Chinese **according to their Sino-Korean pronunciation of the Chinese characters** and then handed them to Sun Mu, who compiled them in his name. Thus, the Chinese characters in this book must reflect not the Chinese pronunciation but rather the Korean pronunciation (EMK or earlier).

One support for Kang’s claim is that the pronunciation of the Chinese characters better matches the LMK pronunciation than the NSC pronunciation. For example, as Choi (2015: 221) points out, the Korean words that bear the codas *-t(h)* and *-k* in LMK are all written in Chinese characters whose LMK pronunciation ends in *-l* and *-k*, respectively, whereas in NSC, these two codas were merged into **-ʔ*. Table 1 shows some examples.

Table 1: JLLS transcription examples

JLLS	LMK	NSC	LMK equivalent
突 ‘pig’	<i>twól</i>	<i>*t^hui?</i>	<i>twoth</i> 돌 ‘id.’
宰 ‘caldron’	<i>swól</i>	<i>*sui?</i>	<i>swoth</i> 술 ‘id.’
渴 ‘hat’	<i>kál</i>	<i>*k^ha?</i>	<i>kát</i> ·갓 ‘id.’
批勒 ‘flea’	<i>phǐ-lúk</i>	<i>*p^hi-lai?</i>	<i>pyelwók</i> 벼·룩 ‘id.’
捺則 ‘low’	<i>nal?⁽ⁱ⁾-cúk</i>	<i>*naʔ-tsai?</i>	<i>nocok</i> ㄴ·죽 ‘id.’

⁽ⁱ⁾ LMK pronunciation not found in Kwon (2009). The contemporary Korean pronunciation is *nal*.

Kang (2011: Ch. 2) argues that if JLLS was written by Sun Mu according to NSC pronunciation, then we cannot explain why the distinction between EMK codas **-t(h)* and **-k* is reflected in Chinese characters whose LMK pronunciation distinguishes the codas (as *-l* and *-k*) but whose NSC pronunciation does not (both codas merged into **-ʔ*).

Choi (2015: 209), citing several cases where Korean syllables supposedly without coda are transcribed in Chinese characters whose LMK pronunciation ends in *-k*, argues that Sun Mu’s variety of NSC was in the transient stage of the change of **-k > *-ʔ*, which explains why the NSC **-ʔ* corresponds sometimes to LMK *-k* and sometimes to *-∅*. Some of her examples are shown in Table 2.

Table 2: Correspondence among LMK (Sino-Korean) *-k*, NSC **-ʔ*, and *-∅* in LMK equivalent

JLLS	LMK	NSC	LMK equivalent
活索 ‘to shoot an arrow’	<i>hwál-sóyk</i>	<i>*xuaʔ-sauʔ</i>	<i>hwal swó-</i> 활 소- ‘id.’
故作 ‘a clown’s son’	<i>kwó-cák</i>	<i>*kuo-tsauʔ</i>	<i>kwocyá</i> 고·자 ‘eunuch’
得 ‘End of any event’	<i>túk</i>	<i>*taiʔ</i>	<i>tă</i> :다 ‘all’

Kang (2011) interprets the cases shown in Table 2 differently, however. He interprets *sóyk* 索 in 活索 *hwál-sóyk* as a typo of *swǒ* 素 (p. 252). He also points out that another possible pronunciation of *cák* 作 is *ca* (p. 216). As for the case of *túk* 得, he does not interpret this word to be the predecessor of LMK *tă*, but simply as an EMK word that became extinct in LMK.

Another support for the Korean authorship of JLLS is that JLLS lists many “Korean” words that are identical to the Chinese equivalent when there are clearly native Korean words for those terms. For instance, the “Korean” word for Chinese *hǎi* 海 ‘sea’ is written as the identical Chinese character *hǒy* 海, even though there exists the LMK word *palól* 바·를 ‘sea’ which can be traced far back into Sillan **patol* 波珍 (Lee 2001). The reason for this pseudo-translation, according to Kang (2011), was that the Korean officials wanted to show to Sun Mu their affinity to the Chinese culture which they admired.

Kang (2011: 30) also mentions that the Korean word for Chinese *dòu* 豆 ‘bean’ is referred to as *tháy* 太. This is striking evidence supporting his claim, since *tháy* 太 meaning ‘bean’ reflects the Korean tradition of writing *tháy* 太 as a handwritten abbreviation of the Chinese disyllabic word *dà-dòu* 大豆 ‘soy bean’ which, when written vertically, is similar to the shape of *tháy* 太 (Lee 1968: 216). This Korean tradition is attested as early as the 8th century wooden tablet inscriptions of Silla and Baekje (Lee 2017: 124). Thus, the Korean officials wrote the Korean words in Chinese characters not according to their Chinese pronunciation but rather to their Sino-Korean pronunciation.

Lee (1968: 216-217) points out that the Chinese character used to express ‘chicken’ (啄 with two strokes on top) is a variant of a Chinese character that was solely used in Korea. If Sun Mu was the author of JLLS, then why would he have used a Chinese character not used in China? In the appendix of JLLS, it is written (probably by Sun Mu himself) that “[I] searched through a [Chinese] dictionary, but this character did not exist; thus, [it must be] a Korean native word (查字典無此字 乃朝鮮土語).” This clearly shows that the Korean vocabulary was handed to Sun Mu via a written platform. Lee (1968: 218) also notes that the word for *shēng* 升 ‘a unit of liquid volume’ is written as *two* 刀. This also reflects the Korean handwriting tradition of writing 升 as *two* 刀.

As another example, the Korean word for *lǎo* 老 ‘old’ is written as *two-kun* 刀斤. Im (2005) argues that *two* 刀 is actually a typo of *zǐn* 刃 ‘blade,’ which is a semantic writing of the EMK equivalent of LMK *nólh* ·늘·ㅎ ‘blade.’ Thus, *two-kun* 刀斤 should actually be read as *nol-kun* 刀斤, which corresponds to LMK *nulk-ún* 늘·근 ‘old-DET.’ This semantic reading is only made possible by presupposing the Korean authorship of JLLS.

This series of evidence makes it clear that JLLS was written by one or more Korean authors according to Sino-Korean pronunciation of the Chinese characters. This leads us to conclude that the pronunciation of *pwosál* 菩薩 and *pák* 朴 must be more similar to LMK than to NSC. Note that *pák* must have represented *páp*, whose final *-p* could not be directly expressed using Chinese

characters.

These LMK pronunciations are indeed similar to the LMK *psól* ·쌀 and *páp* ·밥, which first appear written in the Korean alphabet Hangul during the 15th century, when it was invented by King Sejong. Example phrases where these words occur are shown as (2-3).

- (2) :니·빠 른 가·르미 흐르논 :뎡 흥·고 ·조·빠 른
*nǐ-**psól**-on kilúm-i hulu-no-n tǒs-ho-kwó cwó-**psól**-on*
 rice-**grain**-TOP grease-NOM flow-PRES-DET as.if-ADJ-and foxtail.millet-**grain**-DET
 ·히니
hóy-ni
 white-thus
 ‘The rice is [greasy] as if it is dripping with oil, and the foxtail millet is white.’ [*Twusi Enhay* 杜詩諺解 3:61b] (Joo 2020: 56)
- (3) ·어·즈러·오·며·답다·라 자·디 :몬 흥거·든 ·밀호·로 ·밥
*écúlew-ómyé tép-tal-á ca-tí mwǒt-ho-ketún mǐlh-ulwó **páp***
 dizzy-and hot-heat.up-INF sleep-NEG unable-do-if wheat-INS **cooked.grain**
 자·더 머그라
ciz-é mek-ula
 make-INF eat-IMP
 ‘If you feel dizzy, feel heated, and cannot sleep, cook some wheat and eat it.’ [*Kwukup Kanipang Enhay* 救急簡易方諺解 1:113a] (Joo 2020: 49)

(2) and (3) show that *psól* and *páp* can be used to refer to not only rice but also other grains, such as millet or wheat. Their Chinese definitions in JLLS were *mǐ* 米 and *fàn* 飯, which can also refer to any type of uncooked or cooked grain, respectively, as shown in examples (4) from the Tang poet Du Fu’s 杜甫 poems.

- (4) a. 稻 米 流 脂 粟 米 白
dào mǐ liú zhī sù mǐ bái
 rice.plant grain flow oil foxtail.millet grain white
 ‘The rice [was greasy as if] flowing with oil, and the foxtail millet was white.’ [*Yixī Èrshǒu* 憶昔二首]
- b. 與 奴 白 飯 馬 青 芻
yǔ nú bái fàn mǎ qīng chú
 give servant white cooked.grain horse blue.green fodder
 ‘[I will] give cooked white grain [= cooked rice] to the servant, and green fodder to the horse.’ [*Dé Guǎngzhōu Zhāng Pànguān Shū Shǐ Huán Yǐ Shī Dàiyì* 得廣州張判官叔卿書使還以詩代意]

In (4a), *mǐ* 米 ‘uncooked grain’ is paired with *dào* 稻 ‘rice plant’ to refer to rice, and with *sù* 粟 ‘foxtail millet’ to refer to foxtail millet. This shows that *mǐ* 米 can refer to any type of grain. Similarly, in (4b), *fàn* 飯 ‘cooked grain’ is specified by the adjective *bái* 白 ‘white’ to refer to cooked rice. This suggests that *fàn* 飯 refers to all types of cooked grain. Since LMK *psól* and *páp* were defined as Chinese *mǐ* 米 and *fàn* 飯 respectively, it is clear that they referred to any type of grain, unlike their contemporary Korean successors *ssal* and *pap*, which tend to refer uniquely to rice.

3 Previous studies

A few scholars have attempted to trace the origin of LMK *psól* ‘uncooked grain.’ But such attempts have several problems, which I will address below.

Vovin (2015), reconstructing LMK *psól* into proto-Korean (pK) **pasar*, argues that it is a loanword from proto-Japonic (pJ) **wasay* ‘early rice.’ Apparently, this cannot explain why the pJ **-y* was borrowed into pK as **-r*. In order to solve this problem, Vovin posits that pJ **wasay* must have been **wasar* in pre-proto-Japonic (pre-pJ). His argument is thus circular: pK **pasar* is a loanword from pre-pJ, because pJ **wasay* was pre-pJ **wasar*, which is because pK **pasar* is a loanword from pre-pJ.

Robbeets (2017) seeks to strengthen Vovin’s hypothesis. She reconstructs Old Japanese (OJ) *wasar*- and *woso₂*, both meaning ‘precocious, early ripening,’ as pJ **wasara~wəsərə* ‘early ripening crop, early ripening rice.’ Her evidence for the final **-ra~-rə* syllable in the pJ reconstruction is the existence of OJ *woso₂ro₂* ‘precocious, early ripening.’ As to why OJ *wasar*- and *woso₂* do not have the final syllable **-rV*, Robbeets explains that “[t]he final syllable may have dropped by way of its reanalysis as pJ **-ra~-rə* as the suffix deriving property nouns from verbal adjectives” (p. 241). She then argues that LMK *psól* is a loanword from pJ **wasara~wəsərə*, which in turn is a loanword from Proto-Austronesian (PAN) **baCaR* ‘broomcorn millet (*Panicum miliaceum*).’

There is no external reason for OJ *woso₂ro₂* to be reconstructed as pJ **wəsərə* which was later reanalyzed as **wəsə-rə* rather than saying it was **wəsə-rə* from the beginning **except for the very hypothesis** that pJ **wasara~wəsərə* is from PAN **baCaR* and is the origin of LMK *psól*. Thus, this hypothesis is also circular. If there is no non-circular reason to reconstruct OJ *woso₂ro₂* as pJ **wəsərə* (rather than simply pJ **wəsə-rə*), there is also no reason to reconstruct OJ *wasar*- as pJ **wasara* and not simply pJ **wasa*.

Francis-Ratte (2017), who specializes on the hypothesis that Korean and Japanese are genealogically related, points out that LMK words denoting different forms of rice, *pyé* ‘rice plant,’ *psól* ‘uncooked rice,’ and *pap*⁴ ‘cooked rice’ all start with *p*-. (Note that *psól* and *páp* actually refer to uncooked/cooked grain rather than rice, as earlier discussed.) Based on this observation, he argues that these words can be reconstructed as compounds consisting of **po* ‘rice’ and other morphemes whose cognates can be found in Old Japanese. For example, *pap* can be reconstructed as pre-LMK **po-ap*, where **ap* ‘(cooked) grain’ is cognate with OJ *apa* ‘millet.’ He further argues that pre-LMK **po* ‘rice’ and OJ *pə* ‘a grain’ can both be reconstructed as proto-Korean-Japanese (pKJ) **pə* ‘a grain.’ His reconstruction is summarized in Table 3.

The problem of the reconstruction of *psól* as **po-sól* is that the hypothetical pre-LMK morpheme **sól* ‘(hulled) grain’ only exists to justify Francis-Ratte’s hypothesis without any internal evidence in Korean or evident cognates in OJ. Francis-Ratte notes himself that this part of his reconstruction is relatively speculative (p. 83).

⁴Francis-Ratte refers to *páp* (high tone) as *pap* (low tone). Even though *páp* does occur as *pap* in some attestations (e. g. *Nungemkyeng Enhay* 楞嚴經諺解 1:33a), *páp* is far more common in 15th century sources, as also shown in (3).

Table 3: Francis-Ratte’s reconstruction of proto-Korean-Japanese rice vocabulary (Francis-Ratte 2017: 84, slightly modified)

LMK	<i>pyé</i> ‘rice plant’	<i>psól</i> ‘uncooked rice’	<i>pap</i> ‘cooked rice’
pre-LMK	* <i>po-yé</i> * <i>yé</i> ‘(rice) plant’	* <i>po-sól</i> * <i>sól</i> ‘(hulled) grain’	* <i>po-ap</i> * <i>ap</i> ‘(cooked) grain’
OJ	<i>po</i> ‘a grain’ <i>yo(ne)</i> ‘rice plant’	?	<i>apa</i> ‘millet’
pKJ	* <i>pə</i> ‘a grain’	?	* <i>apa</i> ‘cereal; millet grain’
	* <i>jə</i> ‘rice, rice plant’		

4 The religious etymology of *ssal*

Ogura (1943) observes that in the Tōtōmi dialect of Japanese, rice was called *bosatsu* ぼさつ, a Japanese loanword from Chinese *púsà* 菩薩 ‘Bodhisattva,’ which was also the two characters used to transcribe ‘rice’ in JLLS. One of the sources for his observation is *Butsurui Shōko* 物類称呼, a dictionary of Japanese dialects published in 1775:

- (5) こめ[よね]○遠江国天竜の川上にて・ぼさつと称す[此所にては米といはずしてぼさつとのみとなふ]
‘*kome* (*yone*) [‘rice’] : In the upper region of the Tenryū River, Tōtōmi [Province], it is referred to as *bosatsu* [‘Bodhisattva’]. (In this place, it is not called as *kome/yone*, but only as *bosatsu*.)’ [*Butsurui Shōko*, v. 3, 1才]

He also reports that in Aichi Prefecture, rice is referred to as *buppō-sama* 仏法さま ‘Lord Buddha Dharma’ when the rice was to be handled with care.

These observations point to a striking parallel between Japan and Korea where grain, either grain in general or a specific type of grain, is referred to as the Buddhist holy figure, within a culture where Buddhism is one of the main religions and grain is the staple food.

Indeed, rice has traditionally had a holy status in Buddhism: it is one of the six offerings in the Buddhist ceremony of the Six Pūjā (Kim 2015), a ritual practiced by Korean Buddhists to this day. In Thailand, “[c]ooked rice, presented in an attractive bowl, is offered to monks every Buddhist holy day (4 times a month), usually by the woman of the household” (van Esterik 1984).

If rice was a holy crop in Buddhism, it is also possible that grains in general enjoyed some degree of holy status as well. Hwang (2003) illustrates that in the Gyeongju province of Korea, grains in general were worshipped as a representation of Buddha’s body:

The ritual aspect of the divine body and the worship of Buddha in the Gyeongju region is as follows. They put grain in a small jar, seal the mouth with traditional Korean paper, and keep in on the shelf of the living room, calling it *Seycon Tanci* [lit. Buddha Jar] and treat it as the body of Buddha. Around October each year, the housewife prepares an offering and holds a ritual ceremony. Keeping a *Seycon Tanci* in the house and offering it ritual ceremonies is believed to bring peace. [p. 105, my translation]

Associating the divine body to food is in fact an anthropologically common phenomenon around the world's cultures, a phenomenon known as *theophagy* (eating god). The Christian ritual of Eucharist, where Christians eat bread (God's flesh) and drink wine (God's blood) every Sunday, is perhaps the best-known example. Smith (1922) illustrates how theophagy is attested in different religions worldwide, in the form of totem-eating in animism, idol-eating in idolatry, cannibalism where the human sacrifice is associated to the divine being, and so on. Thus, it would be no surprise that a similar theophagy has existed in Korean culture, and this has motivated the semantic shift from 'Bodhisattva' to 'grain.'

Ogura himself rejects the idea that LMK *psól* is related to *pwosál* 菩薩, because he was apparently not familiar with the historical reconstruction method and did not realize that there was a vowel between the *p* and *s* of *psól* at an earlier stage. All three scholars cited in the last section, however, agree that there was a vowel in between (whatever that vowel may be), and that it was lost by the time of LMK. Thus, if we look onto Ogura's data in the light of modern reconstructions of pK, it seems evident that Ogura's self-rejected idea may be valid. In other words, JLLS's transcription of 'uncooked grain' as *pwosál* 菩薩 may not be a mere phonetic transcription but actually a faithful reflection of the etymology of *psól* (regardless whether the Korean officials who wrote the book were aware of such etymology).

Thus, if Ogura's idea is correct, LMK *psól* would reflect a semantic change from EMK or earlier Korean word for 'Bodhisattva,' which in turn is a loanword from MC *bu sat* 菩薩. It is thus doublet with LMK *pwosál* 'Bodhisattva,' which must have been borrowed from MC after *psól* shifted its meaning from 'Bodhisattva' to 'uncooked grain.' LMK *psól* must have experienced syncope of the vowel between *p* and *s* between the mid-thirteenth and fifteenth century, like all other LMK Korean words with complex initials (Lee & Ramsey 2011: 89). LMK *pwosál*, however, preserving its meaning of 'Bodhisattva' and perceived to be the pronunciation of the two Chinese characters 菩 and 薩, did not go through the vowel syncope.

How well does MC *bu sat* phonologically correspond to LMK *psól*? First, MC *b-* is reflected as LMK *p-*, since LMK did not have any voiced stops. Next, the correspondence between MC *-t* and LMK *-l* can be explained by the change **-t > -l* in Sino-Korean. It is well known that MC words ending in *-t* correspond to Sino-Korean loanwords ending in *-l*. Some (e. g. Martin 1997) have argued that this is because Sino-Korean loanwords are from an MC dialect whose MC coda *-t* was changed into **-r*. Wei (2012), rejecting such theories, argues that the MC words ending in **-t* was borrowed into Old Korean with an epenthetic vowel (**CVtV*), went through intervocalic lenition (**CVrV*), and then through vowel apocope (**CVr*), which resulted in LMK *CVl*. The intervocalic lenition, argues Wei, happened regularly only in the Sino-Korean lexical stratum. LMK *pwút* 拂 'brush,' which is from Old Chinese **p.[r]ut* (reconstruction by Baxter & Sagart 2014), did not go through this stratum-specific sound change because, I argue, it was borrowed from Chinese at a much earlier stage than other Sino-Korean words and thus was not perceived to be part of the Sino-Korean stratum. This explains how the coda *-t* of MC *bu sat* was changed into *-l* in LMK *psól*. On the other hand, why the vowel *-a-* in MC *bu sat* is reflected as *-o-* /*Λ*/ in LMK *psól* (and not *-a-* /*a*/ like in LMK *pwosál*) is not clear and thus remains a weakness of this theory.

5 The mimetic etymology of *pap*

Cross-linguistically, the word for ‘food’ or ‘to eat’ in baby-talk (=parentese, motherese, infant-directed speech) is very often a reduplicated or semi-reduplicated syllable consisting of a bilabial consonant followed by a low vowel. I claim that the Korean word *pap* was originally a baby-talk term that was later elevated into normal register.

In Table 4, I have listed the baby-talk terms meaning ‘food/to eat’ in 21 languages retrieved from various published sources. I only list the terms which the author specifies or implies to uniquely appear in baby-talk and not in standard register. (Tones and stress not transcribed.) We see that all the words have a bilabial consonant and/or a low vowel and that most of them are, or close to, reduplicated syllables.

Table 4: Baby-talk terms meaning ‘food’ or ‘to eat’

Language	Term	Meaning	Source
Bardi	ɲamɲam	food	Bowern 2012: 63
Bislama	nana	to eat; yummy; food	Crowley 2003: 180
Bulgarian	papa-	to eat	Angelov 2014: 2196
Choctaw	pa:pah	to eat	Broadwell 2006: 349
Gilyak	mama, ɲaɲa	food	Austerlitz 1956: 264
Gurindji	ɲæɲæ	food	Jones & Meakins 2013: 191
Havyaka	a:mu	to eat	Bhat 1967: 34
Hopi	mama	wanting food	Titiev 1946: 90
Japanese	manma	food	Mazuka et al. 2008: 39
Kurdish	ɣæme	food	Abdulaziz 2016: 314
Kusaiean	mɛmɛ	to eat	Lee 1976: 182
Lahu	ma-ma	cooked rice	Matisoff 1988: 965
Louisiana French	n(j)ãmn(j)ãm	to eat	Valdman & Rottet 2009: 415
Marathi	məmməm	food, meal	Kelkar 1964: 52
Miskitu	dam dam	to eat	Minks 2010: 504
Nootka	papaʃ	eat!	Kess & Kess 1986: 205
Romani	pap(k)a, hamham	food; to eat	Kubaník 2020: 494
Sahaptin	papa	food	Weeks 1973: 3
South Estonian	n'æmm'	food; tasty	Pajusalu 2001: 91
Towet Nungon	nana	food	Sarvasy 2017: 48
Walpiri	ɲaɲa	food	Laughren 1984: 81

The association between /mama~papa/ and the concept of food or eating is quite straightforwardly iconic, since opening one’s mouth is the beginning and the most visible part of the eating process. Nurturers often perform the mouth-opening gesture to persuade the infants to eat their food, and that gesture may easily develop into baby-talk words, which in turn may be gradually “standardized” and become part of the adult-talk for ‘(the most common or important type of) food.’

In addition to my small sample of baby-talk words, various studies have also attested this cross-linguistic phenomenon of baby-talk term for ‘food’ resembling /mama~papa/. As we will see, some of these terms may eventually become the normal term for ‘food.’

Weise (1903) argues that German *Pappe*, baby-talk for ‘porridge,’ is not etymologically related to Medieval Latin *pappa*, baby-talk for ‘food,’ but rather has mimetic origin. The support for his claim is the fact that many etymologically unrelated words beginning with *pap-* or *pamp-*

in German and other languages refer to various mouth movements, such as English *pamper* or French *babiller* ‘to chat.’

Ferguson (1964) also observes that throughout the baby-talks of different languages, the terms for food tend to be phonologically similar to each other: *bappa* ‘bread’ in Moroccan Arabic baby-talk, *pappa* ‘food’ in Latin baby-talk, etc. Unlike Weise, Ferguson reasons that this phonological similarity must be due to historical connections, in line with his argument that baby-talks are not universal but culture-specific.

Oswalt (1976) argues against this reasoning, mentioning baby-talk words for ‘food’ with bilabial consonants in several European languages and Pomo languages (a family of languages indigenous to California). He claims that the food words with bilabial consonants in different baby-talks “derive from the shared general tendency for actions and objects associated with the mouth or lips to be designated by sounds articulated by the lips.” (p. 12)

Tsuchida (2009) observes the phenomenon where the baby word for ‘meat’ is elevated to adult-talk in Saaroa, a Formosan language. In Kanakanavu, a closely related language, the adult-talk word for ‘meat’ is /ʔalame/, whereas the baby-talk word for ‘meat’ is /paapa/. In contrast, the adult-talk word ‘meat’ in Saaroa is /papaʔa/, and there is no baby-talk equivalent. He concludes that Saaroa /papaʔa/ is likely to be from a baby-talk word.

Based on the iconicity of the baby-talk term /papa~mama/ for ‘food’ or ‘to eat’ and Tsuchida’s observation that such a baby-talk term may eventually replace its adult-talk equivalent, I claim that Korean *pap* was originally baby-talk and then later “grew up” into the adult-talk word for food in general or the most important type of food in Korean culture, which is cooked grain (rather than ‘cooked rice,’ as explained in Section 2). Interestingly, the baby-talk words for ‘food’ in contemporary Korean are *mamma* 맘마 in Seoul dialect and *ppappa* 뽀빠 in Gyeongsang dialect, which were most likely new words to fill in the missing “slot” of Korean baby-talk after *páp* was elevated to adult-talk.

The high tone of LMK *páp* also adds support to the baby-talk origin hypothesis. Across different languages, it is common for infant-directed speech to be higher in fundamental frequency than adult-directed speech (Fernald et al. 1989). Thus, it is possible that the high tone of *páp* reflects the high pitch of the baby-talk whence it originated.

Lastly, the fact that the LMK *páp* not only meant ‘cooked grain’ but also ‘meal’ (just as contemporary Korean *pap* does) reduces the possibility that it only meant ‘cooked grain’ from the beginning, which would work against the mimetic origin hypothesis (note that all the baby-talk terms listed in Table 4 means ‘to eat’ and/or ‘food,’ except for Lahu *ma-ma* ‘cooked rice’). (6) shows how LMK *páp* could also represent ‘meal.’

- (6) ·질삼·애 ·막숨·물 專^현一·황히 ·헝야 노·롯·과 우·수·물
cilsam-áy mózomm-ól chywen-qílq-hi hó-ya nwol-ós-kwá wuz-wú-m-ul
 weaving-LOC mind-ACC specific-one-ADV do-INF play-NMLZ-COM laugh-VOL-NMLZ-ACC
 ·즐기·디 아·니·헝·며 술·와 ·밥과·를 ·조히 ·헝야 손·을
cúlki-tí aní-ho-myé swul-Gwá páp-kwa-lól cwóh-i hó-ya swon-ól
 enjoy-NEG not-do-and alcohol-COM meal-COM-ACC clean-ADV do-INF guest-ACC
 이·바·도·미 ·이 닐·온 :겨지·브 功·공·이·라
ipăt-wó-m-í í nil-wó-n kyě-cip-úy kwong-í-lá
 serve-VOL-NMLZ-NOM this say-VOL-DET stay-house-GEN deed-COP-DECL

‘Focusing on weaving, not enjoying playing or laughing, and serving guests well with

good drinks and meals, these are the so-called deeds of a woman.' [Nayhwun 內訓 1:15a]
(Joo 2020: 18, slightly modified)

6 Conclusion

In this paper, I have proposed that (i) based on Ogura's suggestion, MC *bu sat* 菩薩 'Bodhisattva' is most likely the origin of Korean *ssal* 'uncooked grain,' and (ii) Korean *pap* 'cooked grain' was originally a baby-talk word for 'food.' These etymologies further suggest that some of the Korean words related to agriculture may not be directly related to the agricultural history of the Korean people but may arise from sociocultural motivations such as religion or sound symbolism.

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