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RESEARCH ARTICLES

KOREAN PUNCTUATION SYSTEMS

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Abstract

현재, 문장 부호의 개념은 국립 국어 연구소는 작가와 독자 사이의 통신을 도와 최소 문장 부호를 포함 조직 것을 표시합니다. 더 전통적인 마크가 없습니다; 대신에, 그들 모두 서양 구두점을 반영한다. 전자는 라이터의 상황을 반영하고 문장 단위로 작동 활성을 읽고 관련된 텍스트 단위 후자 일 동안. 한국 전통 구두점은 텍스트의 이해 결과를 나타낸다. 이것은 한국의 문장 부호 학습과 관련하여 개발 된 것을 의미한다.문장은 한국어 중국어 문자를 허용 할 때 중국어 이해하기 위해 구두점 표시에서, 처음에 개발되었다. 그들은 새로운 편지에 직면 할 때마다 또한, 그들은 마크의 여러 종류를 개발했다. 전통적인 구두점 및 현재 구두점 사이 개념적 틈이 이유이다. 이 연구는 철저하게 한국의 전통 문장 부호를 검사하고 현재의 문장 부호와 같은 범주로 분류 할 수있는 방법을 한국 전통 구두점에 대해 논의 할 것이다.

Keywords:

Povzetek

현재, 문장 부호의 개념은 국립 국어 연구소는 작가와 독자 사이의 통신을 도와 최소 문장 부호를 포함 조직 것을 표시합니다. 더 전통적인 마크가 없습니다; 대신에, 그들 모두 서양 구두점을 반영한다. 전자는 라이터의 상황을 반영하고 문장 단위로 작동 활성을 읽고 관련된 텍스트 단위 후자 일 동안. 한국 전통 구두점은 텍스트의 이해 결과를 나타낸다. 이것은 한국의 문장 부호 학습과 관련하여 개발 된 것을 의미한다.문장은 한국어 중국어 문자를 허용 할 때 중국어 이해하기 위해 구두점 표시에서, 처음에 개발되었다. 그들은 새로운 편지에 직면 할 때마다 또한, 그들은 마크의 여러 종류를 개발했다. 전통적인 구두점 및 현재 구두점 사이 개념적 틈이 이유이다. 이 연구는 철저하게 한국의 전통 문장 부호를 검사하고 현재의 문장 부호와 같은 범주로 분류 할 수있는 방법을 한국 전통 구두점에 대해 논의 할 것이다.

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1. Introduction

Written texts in Korea have 2000 years of history. These texts vary in form, ranging from epigraphs and wooden and stone inscriptions to paper books. Many marks and Chinese characters are used in these texts.

Some marks are still applied in the same form but most of them are not. Traditional Korean writing system underwent drastic changes from the 19th to 20th centuries, in that during this time, along with Chinese characters and Hanguel, Roman alphabets and Japanese Kana letters were used as well. The end of the 19th century in Korea also saw the import of the western writing direction and punctuation marks.

Some magazines and newspapers played significant roles in the influx of the western punctuation marks. Especially, the publication of *Dongnip Sinmun* [*The Independent News*] spurred the burgeoning use of the western punctuation marks, and it contributed to the imported punctuation marks being included in the Draft of Unified Korean Spelling System in 1933. Modern Korean punctuation marks were influenced from Modern Chinese and Japanese punctuation marks. The standardization of the Korean punctuation has been executed several times, and by now it is organized into seven categories of functions with twenty marks, quite similar to the western punctuation.

However, as the standardization process progressed, the traditional Korean punctuation named *Kudujeom* (구두점,句讀點) steadily lost its ground as a punctuation system, and now even its vestige is barely found in the current Korean punctuation. New marks, including <, >, \therefore , \because , ex[e.g.], \times , ^^, have been employed by Koreans in their daily communication, and these marks work as lexical designators or as carriers of the writer's intentions or sentiments, just as many of traditional Korean punctuation marks did so. Therefore, I believe that investigating the old marks and comparing them with these new marks will provide us with the opportunity to reexamine the legacy and efficacy of punctuation systems.

1.1 Korean Punctuation in Ancient Times (~7th century)

Most of Korean texts in ancient times were administrative documents, which consisted of Chinese characters. Even though many documents about history or governance were left on gravestones, these texts show direct physical differences in word spacing and changing the paragraph, but does not show the use of specific marks. Recently, hundreds of wooden documents were excavated and have been studied, which show that some form of marks were used to separate paragraphs or different elements.

Division lines for separating paragraphs, as seen in oracle bone scripts, can be seen in Korean wooden documents. Punctuation marks found in wooden documents were not only Inversions Mark($\sqrt{}$) introduced by Lee (2002) but also topic indicator (,, ', ', text indicator '-, -L' by Lee (2006), item indicator ($\overline{\Box}$) <Picture 1> and ' \circ , \lor , -... \diamondsuit , ‡' by Son (2011). Besides these, Paragraph distinguisher '•' and repetition marker '=' have many examples (Lee (2005):1-17). Such as '•, —, =, √'were used in common throughout the East Asia¹. Among these '—' is a simple line separating different elements (Picture 2). '¬'style or '¬' style of elements indicator (Picture 3) and '0' of deletion and correction marks were used in common throughout the East Asia. The former, which indicates either the overlapped elements or confirmed content, might be used as confirmation marks in administrative documents. '0' was used in Silla village documents to indicate corrections or deletions (Picture 4). These two marks were continued to be used even after the medieval times.



Picture 1-4 (left to right): Punctuation marks in wooden documents.

Like this, all the ancient documents were transcribed and had a basic purpose of reporting. Therefore, it was important to deliver the truth or the fact without any misinterpretation with limited methods. This is a way to increase efficiency of administrative reports and commercial reports under lack of mastery of Chinese characters. The punctuation marks for separating paragraphs or marking different elements were a requirement in this era. Thus, in the ancient documents, marks other than those that represents correction or omission of repetitive letters were not found for several reasons. Above all, there aren't many wooden documents found to be studied. Also, marks that separates texts or distinguishes different elements such as lines or dots are more significant because the text strived for simplicity and clarity.

¹ Marks such as '•, —, =, √' appear in the wooden documents of Qin Dynasty in China. Each of them has its own function: paragraph distinguisher, boundary marker, repetition marker, and Inversions mark.

1.2 Punctuation in the Middle Ages (10~15th century)

As discussed earlier, the number of punctuation marks were not diverse in the early stage of the development of the writing system. It can be assumed that the punctuation marks developed from the unit of a word to the unit of sentences. After the medieval time, punctuation marks take role as an aid for learning as well as the document reporting. Various signs and marks were developed for the purpose of learning and interpretation of the Chinese characters. Great number of punctuation marks appeared regarding sentence structure, separation, and correction as well as supplement marks for translation into Korean.

As Koryeo Dynasty(10~14th century) imposed the public examination system, studying Chinese characters became essential to the ruling class. Koreans invented Kugyeol to understand and study Chinese character texts better. It is one type of borrowed character writing system, which is made to interpret Chinese character text. The place where the Kugyeol is marked is the space between the lines of Chinese character text, and is where punctuation mark is marked.

Currently, Kugyeol is recognized as a letter in Korea. However, Kugyeol, added to Chinese text, worked as punctuation marks. Chinese character was 'Lingua Franka' in East Asia, Kugyeol letters was used merely as interpretative marks to understand Chinese text. Before inventing Hanguel (Korean writing system), the fact that Kugyeol character had never been used independently to write Korean sentences shows that Koreans did not regard Kugyeol as a whole character.

A Korean proper noun of Kugyeol is Ipgyeot, which means 'reading postposition'. Idu, a borrowed character writing system, was used in the administrative documents to write Korean sentences, which means 'formula postposition' and works instead of Chinese character's punctuation marks. Along with Kugyeol, many kinds of punctuation marks have emerged, and interpretative marks (Table 1) were used widely.

YU(1989), Lee(1995), Lee(2002) studied traditional punctuation marks. These punctuation marks can be categorized by functions and editions as in Table1. Punctuation marks working in text unit were widely used regardless of being printed or scripted.

| Unit | Mark | Name | Function | Printed/ Written | Other ways of markin g |
|----------------------|-------|-----------------------------------|---|---------------------|---------------------------------|
| Text | 0 | wongweon 圓圈 | dividingtexts and indicating elements | printed | Chan- ging line |
| | | Eummun 陰文 | dividingtexts, indicating elements, and emphasizing | printed | |
| Unit | o | Kwanju 貫珠(連圈) | Indicating main topic, andemphasizing | written | \$\$ |
| | • | Pi-jeom 批點(連點) | Indicatingsub topic, andemphasizing | written | |
| Sente nce Unit | 0 | Saseong-jeom 四聲點 | Marking intonation (of Chinese characters) | printed, written | |
| | 0 | Korit- jeom 고릿점 | Dividing sentences and phrases | printed, written | |
| | • | Pang-jeom 방점 | Marking intonation (of Korean expression) | printed | |
| | I | Chageodeup- phyo 자거듭표, 疊字符) | Marking the same letters | printed, written | く, 〃 |
| | 1 | Keochim- phyo 거침표(經 由符) | Marking confirmation | written | |
| |) | Mukeum- phyo 묶음표 | Combining different elements | written | |
| | 0 | Kium- phyo 끼움표(挿 入符) | Insertion and correction | written | Δ |
| | 0 | Sakjebu 삭제부 | Deletion | written | □,0 |
| | 0 | Keokjabu 격자 부 | Spacing | written | 8 |
| | space | Kongkyeok 공 격 | Marking honorific | printed, written | 擡頭法 |

| Table 1: The Korean | n traditional | punctuation |
|---------------------|---------------|-------------|
|---------------------|---------------|-------------|

Punctuation marks working in text unit were widely used regardless of being printed or scripted. Correction marks working in sentence unit were mostly reported, and appear in various ways. 'o' (koritjeom) or 'o' (weongweon), which were used frequently, have various functions. 'o' (koritjeom) can be used as phrase or sentence mark based on where it is placed in a sentence, and marking intonation based on which part of Chinese character is marked. Also, 'o' (weongweon) is used to distinguish Chinese text from Eonhe (Korean translation text). It can also be used to separate elements and marking spacing. The tendency to use few marks efficiently triggers several changes in the traditional punctuation marks. However, traditional punctuation marks were used as it was suggested in printed documents because the use of these was normative.

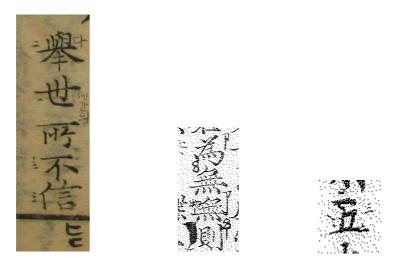
Along with Kugeol, numerous numbers of marks were used to aid Kugeol letters in order to help people understand contents in Kugyeol text more clearly. Generally, Kugyeol is used as a terminology that encompasses all the Chinese character interpretation law. Indeed, several different marking systems are used in Kugeo. Based on these systems, Kugyeol can be grouped into Chinese character Kugyeol, Hangeul Kugyeol, and cheomto (code) Kugyeol. Moreover, genuine marks which cannot be replaced to language immediately are also included in a marking system. Kugeol system that function as a help to understand and interpret sentences. Table 2 shows those interpretative marks in Kugeol text.

| Name | Form | Function | distribution | |
|--------------------------|--------------------|--|-------------------|--|
| Happu 합부 | /, | One word mark | chato, cheomto | |
| Yeokdokjeom 역독점 | • | Interpret order | Chato | |
| Yeokdokseon 역독선 | └ 、 , ∕ , ∣ | Interpret order | cheomto | |
| Chisiseon 지시선 | ∖,∕ | Interpret order | cheomto | |
| Chungbokseon 중복선 | ∖, ∕ | Duplication of code | cheomto | |
| Kyeonggeson 경계선 | ∣,—,¬ | Boundary of character | cheomto | |
| Pochungseon 보충선 | — | Supplement of verb | cheomto | |
| Sulmokkubunseon 술목구분선 | | Boundary indicator of verb and object | cheomto | |
| Pichimseon 삐침선 | ∖,∕ | Interpretation indicatorsuch as'爲' cheomt | | |

 Table 2: The Marks in Kugeol text²

² It can be seen that marks of cheomto-kugyeol appear a lot more than marks of chato-kugyeol among many marks in <table2>. It is why the former-it is code- needs more complementary marks.

Additionally, other various punctuation marks appear in some documents. Reading order marks are commonly known (Table 2). The reading orders of Chinese character were marked as '-, \equiv , \equiv , '. Correction marks are also a common form (Picture 5). Further there is a small Koritjeom located on the upper part of ' Ξ ', and a small \equiv is marked on the right side as a correction (Picture 6). Sometimes, Koritjeom is marked on the right side of the letter being corrected, and corrected letter is written at the margins of a book. Often, people write their own marks instead of ordinary punctuation marks in order to distinguish boundary of sentences (Picture 7). The form of having tail on '8' is written on both upper and lower side of repeated '##'. It is assumed that in order to eliminate a possibility of misinterpreting, they used the mark in addition to an interrogative ending' \Box ' even though a boundary of sentence between '###' can be indicated by using only an interrogative ending' \Box '. It indicated the sentence that the letter belong to by drawing lines on the upper and lower side of '8'.³



Picture 5-7 (left to right): Examples of uncommon punctuation marks.

1.3 From Traditional Punctuation Systems to Modern Ones

The western style of Korean punctuation marks have been expanded through the public education and press media as the western punctuation system was introduced through Japan.

「 친목회회보 Chinmokhwe-hwebo 」 (1896)⁴ and 「 신정심상소학 Sinjeongsimsangsohak」(1896)⁵ are the first instances of using the western punctuation marks, and these are deeply related to Japan.⁶

³ This can be completely different meaning. A mark that looks like 8 is connected is called

Kwanju or Yeongweon. The mark is mostly used to mark a beginning or a topic of a text.

⁴ A social magazine for Korean students who study in Japan.



Picture 8: Western punctuation marks firstly used.

(1) 親睦會序說朴正秀

聖人作易、列同人比二封焉시니、夫比者、天地保合大和之道也一라、萬人 相比、推奪一人而成君國고、萬國相比、各保一國而成世界니、是以各國各 人之相離而不比者、卽失天之和而爲其所不容며、各國各人之相合而同比 者、卽順天地之和而爲其所黙佑나니、(1896,「친목회회보」제1권 1호)

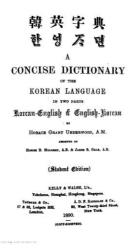
(2) 學校·。사·을教育·야。成就··데니。譬컨·。各樣모종을。기르·모판이요。· 學校·사·의마음을。아·답게··데니。譬컨·。各色물드리·집이오。(1896,「 신정심상소학」제 1 과)

There is possibility that western punctuation marks were used much earlier than in Christian religion related book, 『한영자전 Korean-English Dictionary』 (Picture 9), written by Underwood in 1890) can be found in other documents that have not been studied yet. It is important to know that this is the time when both the traditional punctuation marks and the western punctuation marks were used together because Chinese punctuation marks are printed as they were in our wooden written Taoism

⁵ (Picture 8) A textbook published by the Ministry of Education (Hakbu) of The Great Korean Empire.

⁶ In the introduction, 「신정심상소학 Sinjeongsimsangsohak」 was explained as a text book made by a Japanese editor – actually when two textbooks are compared, the place where punctuation marks were used are almost coincide with each other. (Kim,1980)

scripture, 『남궁계적 Namgunggejeok (1876)』. The use of punctuation marks appear far later in Bible, which was more accessible to the public, than dictionaries.



Picture 9: Korean-English Distionary from year 1890.

(1), (2) were both affected by Japanese printing system which used punctuation marks even before the translated Christian Bible which was influenced by western culture. After that, koritjeom ($_{\circ}$) and mojeom ($_{\circ}$) have been used variously in many newspapers and magazines, and then, the magazine $[3] \times Changjo]$ (1919) (Picture 9) used spacing between words, question marks and exclamation marks. (Won, 2010).

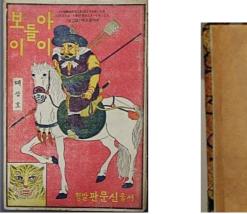


Picture 10: Punctuation marks used in magazines.

```
아날이저믄다、西便하늘에、외로운江물우에、스러져가는분홍빗놀………
아아해가저믈면해가저믈면、날따다살구나무그늘에혼자우는밤이·
오것마는、오늘은四月이라제일날、
큰길을물밀어가는사람소리는듯기만하여도흥성시러운거슬웨나만혼자가
슴에눈물을참을수업는고? (주요한,<불노리>,「창조 Changjo」)
```

38 Jeon Kyung LEE

The punctuation marks used in magazines in this era were based on writers' preferences and writing styles rather than certain rules. Magazines in this era showed completely different aspects based on editors. Also, different writers and different pieces show different use of punctuation marks even in the same magazines. This shows that rules of using punctuation marks were not established at the time. As punctuation marks were used in newspapers and magazines like *Independent News*, people started to recognize punctuation marks. Then, there were attempts to standardize them in textbooks and grammar documents. (Pictures 8~12) show the diversity of layout as well as the usage of the punctuation marks during this time. Finally, punctuation marks had been established as one unified rule in 한글마춤법통일안 (Draft for the Unified Spelling System of Hanguel). Current Korean punctuation marks are based on several editions of western punctuation marks have basically adopted western punctuation marks but overlooked Korean traditional punctuation marks.





Picture 11-12 (left to right): Examples of diversity of punctuation marks.

Current Korean punctuation marks are as below.

| nomo | Contents | vertical writing |
|----------------|-----------------------------------|------------------|
| name | | |
| 마침표 machimpyo | 온점 onjeom(.), | 고리점 koritjeom(。) |
| | 물음표 muleumpyo(?),느낌표 neukimpyo | |
| | (!) | |
| 쉼표 Shwimpyo | 반점 panjeom(,), | 모점 mojeom(、) |
| | 가운뎃점 kaundetjeom(•), | |
| | 쌍점 sangjeom(:), 빗금 pitkeum(/) | |
| 따옴표 taompyo | 큰따옴표 keuntaompyo(""), | 겹낫표 kyeopnatpyo |
| | 작은따옴표 chakeuntaompyo(''), | ([]) |
| | 낫표 natpyo(「」) | |
| 묶음표 mukkeumpyo | 소괄호 sogwalho(()), | |
| | 중괄호 chunhgwalho({ }), | |
| | 대괄호 tegwalho([]) | |
| 이음표 ieumpyo | 줄표 chulpyo(—), 붙임표 putimpyo (-), | |
| | 물결표 mulkyeolpyo(~) | |
| 드러냄표 deureonem | 드러냄표 deureonempyo(', °)3 | |
| руо | | |
| 안드러냄표 andeure | 숨김표 sumgimpyo(× × , ○ ○), | |
| onempyo | 빠짐표 pajimpyo(🗌), | |
| | 줄임표 chulimpyo() | |

The National Institute of The Korean Language constituted minimum punctuation marks that help writers communicate with readers. This shows the tendency of today's Korean academia that does not consider punctuation mark rules seriously.⁷ This is not just for the claims that punctuation marks are necessary for logical writings, but for the ideas regarding punctuation marks as a redundant feature when considering the characteristic of Korean to be pervasive.

Korean studies about punctuation marks, which mostly were one part of the Korean Language Policy, has so far focused on concept analysis supplement and punctuation mark imperfection. Concept of punctuation marks and their differences from general marks were studied by Lee (1996), Cha (1999), Sin (2009), Kim (2011), and specific functions of punctuation marks were suggested closely by Im et al. (2011), Lee (2012).

The different types of existing punctuation marks are not various as the previous figure shows. There are only two names, which are '— pyo 'and '— jeom', and their functions form unnecessary hierarchy. They show that there are dualistic names and

⁷ The koritjeom(°), appeared in vertical writing rule, had been used since the medieval time, the modern punctuation mark rule is directly influenced by modern punctuation marks of Japan and China.

functions. Unifying the punctuation mark rules without categorizing them hierarchically is one of the main arguments about the current rule of punctuation marks. However, Sin (2009) suggests to categorize them into two groups of 'reading-related marks' and 'writing-related marks' in order to make the system more efficient. According to the study, '— jeom' is associated with reading-related marks, and '— pyo' is writing-related. This argument seems to stem from the consideration of traditional punctuation marks, but the categorization makes it hard to embrace the function of interpretative aspect of traditional punctuation marks, which is the role they used to play.

2. Conclusion: Implications of Studying Punctuation Systems

Just like other conditions of literate life, punctuation marks also change as communication modes alter. The current Korean punctuation marks are the minimum marks utilized to assist reading. The reason why it is so has a strong relation to the unique features of Hangeul as a writing system, and it is also because people have put up with the degree of the agreement of speech and writing. However, the current phenomenon where various newly created marks are used in writing indicates that both readers and writers now want more than the normal marks. Nowadays, people expect more than literal meanings from letters and writings. This is why text messages are expected not to end with the conventional period (.) but instead with other signs, such as ^^ and ~, whereby additional information of the writer, for example, how they feel at that moment, is delivered. Advancement in technology has opened new ways to communicate. While these signs are classified as pseudo-language, they should be also discussed in view of punctuation marks, so long as they are employed in sentences and texts. Use of two different languages, Korean and Chinese, in the old days, necessitated the employments of the punctuation marks whose functions and kinds were different from modern-day punctuation marks. The development of 'Kugyeol' can be measured in this vein, and this particular system proposes that punctuation system does not always play supplementary roles in sentences. Examining the history of punctuation systems is of much significance, as it helps to correct and expand the concepts of the current punctuation system.

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READING SÖKTOK KUGYÖL MATERIALS BASED ON ÖNHAE MATERIALS

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Abstract

In this paper, we discussed some advantages of and points of attempt to research how to read Hancha (漢字) with Kugyŏl (口訣) markings based on the premise, that the tradition of Hanmun Hundok (漢文訓讀) in Sŏktok Kugyŏl (釋讀口訣) materials has been succeeded to Ŏnhae (諺解) materials since the mid-15th century, the promulgation of Hunmin Chyŏngŭm (訓民正音), and based on Ŏnhae (諺解) system in these Ŏnhae (諺解) materials. As a result, Hundok (訓讀) systems of Sŏktok Kugyŏl (釋讀口訣) materials had much resemblance to the Non-Buddhist (Confucian) Ŏnhae (諺解) materials since the end of 15th century. Therefore, Non-Buddhist (Confucian) Ŏnhae (諺解) materials occupy an important position to consider the reading methods of Sŏktok Kugyŏl (釋讀口訣) materials.

Keywords: reading method; Sŏktok Kugyŏl (釋讀口訣) materials; Ŏnhae (諺解) materials; Hanmun Hundok (漢文訓讀); Kakikudashibun (書き下し文); Non-Buddhist (Confucian) group; Korean language

Povzetek

In this paper, we discussed some advantages of and points of attempt to research how to read Hancha (漢字) with Kugyŏl (口訣) markings based on the premise, that the tradition of Hanmun Hundok (漢文訓讀) in Sŏktok Kugyŏl (釋讀口訣) materials has been succeeded to Ŏnhae (諺解) materials since the mid-15th century, the promulgation of Hunmin Chyŏngŭm (訓民正音), and based on Ŏnhae(諺解) system in these Ŏnhae(諺解) materials. As a result, Hundok (訓讀) systems of Sŏktok Kugyŏl (釋讀口訣) materials had much resemblance to the Non-Buddhist (Confucian) Ŏnhae (諺解) materials since the end of 15th century. Therefore, Non-Buddhist (Confucian) Ŏnhae (諺解) materials occupy an important position to consider the reading methods of Sŏktok Kugyŏl (釋讀口訣) materials.

Ključne besede: metode branja; Sŏktok Kugyŏl (釋讀口訣) gradiva; Ŏnhae (諺解) gradiva; Hanmun Hundok (漢文訓讀); Kakikudashibun (書き下し文); ne-budistična (konfucijanska) group; korejski jezik

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1. Introduction

There are a lot of various researches to define how to read individual Chinese characters, *Hancha* (漢字) with *Kugyŏl* (口訣) markings in *Koryŏ*-era (高麗時代) *Sŏktok Kugyŏl* (釋讀口訣) materials, that is, to refer to other materials (e.g., ①*Ch'acha P'yogi* (借字表記) materials such as *Hyangga* (鄕歌), *Idu* (吏讀), ②*Hancha* (漢字) dictionaries published since the 16th century, ③Interpretation of *Hancha* (漢字) which is written in the additional annotation of *Ŏnhae* (諺解) texts, etc.). However, it seems that these researches tend to treat these multifarious materials arbitrarily, and only few researches treat the materials systematically on the consistent policy.

In this paper, we will discuss some advantages and points of attempt to research how to read *Hancha* (漢字) with *Kugyŏl* (口訣) markings based on the premise, that the tradition of *Hanmun Hundok* (漢文訓讀) in *Sŏktok Kugyŏl* (釋讀口訣) materials has been succeeded to *Ŏnhae* (諺解) materials since the mid-15th century, the promulgation of *Hunmin Chyŏngŭm* (訓民正音), and based on *Ŏnhae* (諺解) system in these *Ŏnhae* (諺解) materials.

2. Procedure for discussions

In this chapter, we will discuss the following points as the procedure for discussions.

- ① *Hanmun Hundok* (漢文訓讀) is a linguistic activity in wide East Asian region where Chinese characters are used.
- ② Both *Ŭmdok* (音讀) and *Hundok* (訓讀) had been used to read *Hanmun* (漢 文) texts since ancient times in Korea
- ③ In Korea, both *Úmdok* (音讀) and *Hundok* (訓讀) were prerequisites to learn *Hanmun*(漢文) texts.
- ④ The order of reading was always consistent, that is to read *Ŭmdok* (音讀) first, and after that to read *Hundok* (訓讀).
- (5) Han'gŭl Kugyŏlmun (한글 口訣文) and Ŏnhaemun (諺解文) of Ŏnhae (諺解) materials are respectably projections from the Ŭmdok (音讀) and Hundok (訓讀) of Hanmun (漢文) texts' readings since ancient times.
- ⑥ *Ŏnhaemun* (諺解文) of *Ŏnhae* (諺解) materials can be regarded as *Kakikudashibun* (書き下し文), as the results of *Hanmun Hundok* (漢文訓讀).

2.1

There is no need to dwell on the subject no longer¹ that *Hanmun Hundok* (漢文訓 讀) is a linguistic psychology not only in Japan but also in wide East Asian region

¹ Kosukegawa [小助川貞次] (2009, 2010) named *Hanmun Hundok*(漢文訓讀) in wide East Asian region where Chinese characters are used, 'East asian version of globalization'.

where Chinese characters are used. Korea is not an exception, and it has been cleared both in name and in reality. The fact that Hanmun Hundok (漢文訓讀) had once existed in Korea is proved by both the historical sources and existing Sŏktok Kugyŏl (釋讀口訣) materials such as Jiùyì Rénwángjīng (舊譯仁王經).

- (1) 薛聰 字聰智 祖談捺奈麻 父元曉 初爲桑門 淹該佛書 既而返本 自號小性 居士 聰性明鋭 生知道術 以方言讀九經 訓導後生 至今學者宗之 又能屬 文 而世無傳者 但今南地 或有聰所製碑銘 文字缺落不可讀 竟不知其何如 也 (Samguk Sagi [三國史記] 巻46 列伝 薛聰)
- (2) 公主果有娠 生薛聰 聰生而睿敏 博通經史 新羅十賢中一也 以方音通會華 夷方俗物名 訓解六經文學 至今海東業明經者 傳受不絶 (Samguk Yusa [三 國遺事] 巻4 義解 元曉不羈)

These sources of *Samguk Sagi* (三國史記)[1145] and *Samguk Yusa* (三國遺事) [late 13th century] were quite often referred to in the discussions about the development of *Ch'acha P'yogipŏp* (借字表記法) in Korea.²

It is, therefore, that both *Úmdok* (音讀) and *Hundok* (訓讀) had been used to read *Hanmun* (漢文) texts in the past, but afterward "*Hundok* (訓讀) was renounced" (Yoshida [吉田金彦], Tsukisima [築島 裕], Ishizuka [石塚晴通], & Tsukimoto [月本 雅幸] (eds.), 2001, p. 2) in Korea.

2.2

About *Ŭmdok* (音讀) and *Hundok* (訓讀) of *Hanmun*(漢文) texts reading, Nam [南豊鉉] (1988/1999, p. 26) pointed out that *Sŏktok Kugyŏl* (釋讀口訣) arose first and after that *Ŭmdok Kugyŏl* (音讀口訣) advanced in *Koryŏ*-era (高麗時代). It means that only *Ŭmdok* (音讀) existed in the past, and *Hundok* (訓讀) arose in *Koryŏ*-era (高麗時代). But both *Ŭmdok* (音讀) and *Hundok* (訓讀) had been used since ancient times.

In this context, Ogura [小倉進平] (1934/1975, pp. 363-369) once pointed out about the reading of *Hanmun* (漢文) texts initiated to Japan by *Ajikki* (阿直岐) and *Wangin* (王仁), as below.

(3)

- ①*Ajikki* (阿直岐) and *Wangin* (王仁) would have read *Hanmun* (漢文) as *Chiktok Hyŏnt'o* (直讀懸吐), in *Paekche* pronunciation (百済音) or *Wú* pronunciation (呉音) of Chinese characters.
- ②After Chiktok Hyŏnt'o (直讀懸吐), Ajikki (阿直岐) and Wangin (王仁)

² For example, Ogura [小倉進平] (1934/1975, p. 364), Chŏng [鄭寅承] (1957/1997, pp. 120-122), Nakamura [中村 完] (1976/1995, pp. 38-39), Nam [南豊鉉] (1997/1999, p. 40), An [安 秉禧] (2001a/2009b, pp. 21-22, 2001b/2009b, pp. 47-48), and so forth.

would have translated into Korean sentences, with original Korean words and Korean pronunciation of Chinese characters.

- ③Japanese could not have handed down the method of *Chiktok Hyŏnt'o* (直. 讀懸吐).
- ④ Japanese would have invented Japanese Kundoku method (訓読法), on the model of Korean Hundok method (訓讀法).

Of these, it is important that both Umdok (音讀) and Hundok (訓讀) had been used in *Paekche* (百済). Also, it seems important points that he equated the form of *Onhaemun* (諺解文) in *Onhae* (諺解) materials with *Hanmun Hundok* (漢文訓讀), and that "We have to consider that the step *Chiktok Hyont'o* (直讀懸吐) is mandatory, at least once to reach the step of *Hunsok* (訓釋)" (Ogura [小倉進平], 1934/1975, p. 364). It is, therefore, the order that *Umdok* (音讀) arose first and after that *Hundok* (訓 讀) advanced, such as Nam [南豊鉉] (1988/1999, p. 26) is not correct, but the opposite order is correct. Ogura's viewpoint was quite appropriate in his days in spite of the lack of existing materials,³ because *Soktok Kugyol* (釋讀口訣) materials had not been found in those days.

2.3

It is said that both *Ŭmdok* (音讀) and *Hundok* (訓讀) were requisites to learn *Hanmun* (漢文) texts. About this, An [安秉禧] (1976/1992a, pp. 299-230) pointed out in detail the learning method of *Hanmun* (漢文) texts in the educational institution for the King[Here, King *Sŏnjo*(宣祖)] called *Kyŏngyŏn*(經筵), with *Yu Hŭich'un* (柳希春) [1513~1577]'s diaries as below. (An [安秉禧], 1976/1992a, p. 299, Referred with some expressions changed.)

- (4) 上讀前受一次 玉音琅琅 臣以經筵上番 進講大學正心章 自所謂修身在正 其心 至或不能不失其正矣 音讀二度 釋一度 上即音讀一度 釋一度畢 (Miam Sŏnsaengjip [眉巖先生集] 巻15 經筵日記 丁卯[1567年]11月5日)
- (5) 畫講希春與柳濤入侍右承旨朴承任特進官南應雲柳景深同入希春講大 學或問格物致知章上讀音一遍臣誤說補亡章之義上曰時未釋姑停之臣 即伏地侯御釋畢(Miam Sŏnsaengjip [眉巖先生集] 巻16 經筵日記 庚午

³ However, it does not mean that no foundation is found in his argument that Japanese were initiated into the reading of *Hanmun* (漢文) texts by *Ajikki* (阿直岐) and *Wangin* (王仁) as the order (3). Ogura [小倉進平] (1934/1975, pp. 366-367) gives two kinds of indirect evidences, one is a custom of *Onkun Heisho* (音訓並唱) called *Monzen Yomi* (文選読み), and the other is a characteristic of *Okuriji* (送り字) in *Senmyo* (宣命) and *Norito* (祝詞) called *Senmyo Gaki* (宣命書き). Incidentally, Nakada [中田祝夫] (1954/1979, pp. 5-40) argues that *Ŭmdok* (音讀) reading of *Hanmun* (漢文) texts also would have existed in Japan, based on the various sources.

[1570年]7月17日)

This applies to the educational institution for the princes called Sŏyŏn (書筵).

(6) 卯時入書筵講心經東宮具法服西向坐賓客北向坐春坊上下番及余倶東向南上俯伏各展所講章以聽東宮講前受音[前日課讀 謂之前受音]不遠復章畢上番講新受音[當日所講謂之新受音]子絶四[止]固如此也 讀畢東宮又讀一遍 上番遂解釋文義以奏 [講事皆上番主張]下番又畧奏(Sunam Sŏnsaeng Munjip [順菴先生文集] 巻16 雜著 壬辰桂坊日記[1772年] 5月28日)

The order of reading that to read *Ŭmdok* (音讀) at first, and after that to read *Hundok* (訓讀) in these sources, is common to Ogura's viewpoint that "the step *Chiktok Hyŏnt'o*(直讀懸吐) is mandatory, at least once to reach the step of *Hunsŏk* (訓釋)". (Ogura [小倉進平], 1934/1975, p. 368)

The learning style of *Hanmun* (漢文) texts can be seen from the *Kugyŏ l*(口訣) materials in early *Chosŏn*-era (朝鮮時代). (Nam [南豊鉉], & Sim [沈在箕], 1976/1999, p. 78).

Of these, (b)~(d) have two kinds of *Kugyŏl* (口訣) markings, *Úmdok Kugyŏl* (音 讀口訣) and as a kind of *Sŏktok Kugyŏl* (釋讀口訣). It is important that *Úmdok Kugyŏl* (音讀口訣) markings are always on the right side without exception. *Sŏktok Kugyŏl* (釋讀口訣) markings are basically on the left side, but exceptionally on the right side if there is any space. And when the both coincide, *Kugyŏl* (口訣) markings are only on the right side, because *Úmdok Kugyŏl* (音讀口訣) marked previously also serves as two kinds of *Kugyŏl* (口訣) markings. This is the result of the order that is to read *Úmdok* (音讀) first, and after that to read *Hundok* (訓讀), Nam [南豊鉉], & Sim [沈在箕] (1976/1999, p. 78) noted, and this is consistent with the order of *Hanmun* (漢 文) texts learning as mentioned above.⁴

⁴ Incidentally, in example (a), of Wŏn'gakkyŏng Kugyŏl (圓覺經口訣), there are a lot of Sŏktok Kugyŏl (釋讀口訣) marking on the right side. But we will have to pay attention to that this material have different aspects from another (b)~(d) materials. In this material, Han'gŭl Kugyŏl (한글 口訣), that corresponded to Ľmdok (音讀), is already printed in the texts. And according to this, it had been possible to read Ľmdok (音讀). In other words, it have not necessary to dare to mark Ľmdok Kugyŏl (音讀口訣), and so there are any spaces both on the right side and the left side. Then, there are a lot of Sŏktok Kugyŏl (躍讀口訣) markings on the right side. Thus, it seems that this example of Wŏn'gakkyŏng Kugyŏl (圓覺 經口訣), is also the result of the order that is to read Ľmdok (音讀) at first, and after that to read Hundok (訓讀), and is the example to support the order of Hanmun (漢文) texts learning as mentioned above.

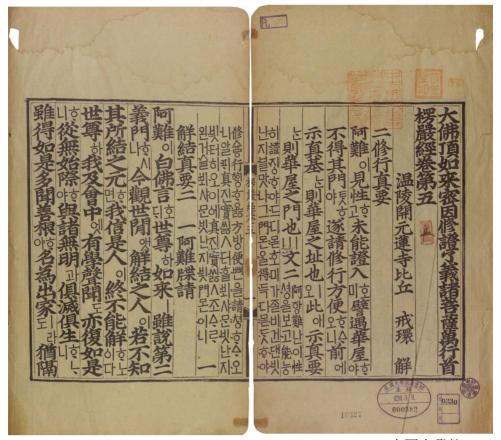
(7)

| | (d) | | (C) | | (b) | | (a) |
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2.4

On the other hand, the typical structure of $\check{O}nhae(ii)$ materials since the mid-15th century, the promulgation of *Hunmin Chyŏngŭm*(訓民正音), at first used *Kugyŏlmun*(口訣文), *Hanmun*(漢文) with *Han'gŭl Kugyŏl*(한글口訣) and after that used $\check{O}nhaemun(ii)$ (ii)

- (8) a. 阿難이 見性□고 未能證入支미
 警遇華屋□야 不得其門□□야 遂請修行方便□□오니 前에 示真基□ 則華屋之址也〕오 此애 示真要□則華屋之門也〕
 - b. 阿難이 性을 보고 能히 證□야 드디 몯호미 가□비건댄 빗난 지블 맛나 그 門□ 得디 몯□□야 修行□□ 方便을 請□□오니 알□ 眞實ㅅ 더흘 뵈샤□ 빗난 지븻 터히오 이□ 眞實ㅅ 조□□왼 거슬 뵈샤□ 빗난 지븻 門이니 (*Nŭngŏmgyŏng Ŏnhae* [楞嚴經諺解] 5:1a-1b_解)



Picture 1: Relevant parts in (8) (Owned by Tongguk University (東國大學校))

In these materials, *Kugyŏlmun* (口訣文), *Hanmun* (漢文) attached with *Han'gŭl Kugyŏl* (한글 口訣), corresponds to *Ŭmdok Kugyŏl* (音讀口訣) which is used before the promulgation of *Hunmin Chyŏngŭm* (訓民正音). On the other hand, it seems that *Ŏnhaemun* (諺解文) also correspond to the result of *Hundok* (訓讀) reading, so to say, it resembles to *Kundokubun* (訓読文), *Yomikudashibun* (読み下し文), or *Kakikudashibun* (書き下し文) of Japanese Kanbun Kundoku (漢文訓読). Therefore, it seems that *Kugyŏlmun* (口訣文) and *Ŏnhaemun* (諺解文) of *Ŏnhae* (諺解) materials are each projections from the *Ŭmdok* (音讀) and *Hundok* (訓讀) of *Hanmun* (漢文) texts reading. It is thought that the order that *Kugyŏlmun* (口訣文) were written at first and after that *Ŏnhaemun* (諺解文) were written, was not unrelated to the order of *Hanmun* (漢文) text's reading since ancient times.⁵

In addition, the order of *Hanmun* (漢文) texts reading corresponds with the process of completing \check{O} *nhaemun* (諺解文) as follows.

- (9) a. 恭惟我主上殿下 天從聖學崇信是經緬思遺囑之重篤念繼述之考 萬機 之暇 特徹乙覽 親加口訣 正其句讀 命工曹參判臣韓繼禧及臣守温 悉 以國語依文而譯 於是親定讎校 質諸信眉等名僧 旋下校書館 隨即模印 始於是年六月至冬十月而事已成矣 (Nǔngǒmgyǒng Ŏnhae [楞嚴經諺 解] 御製跋)
 - b. 辛巳夏 如來舎利分身於檜巖 於大内者現有百餘枚 祥光異端振古所無 一國臣民皆生希有心 上亦劤然 發大誓願 乃於六月十一日 命臣反譯楞 嚴經 召前尚州牧事金守温 於服中 開局於忠順堂之廡下 賜以親定温陵

Kin [金文京] (2010:99-105) pointed out that Kugyŏcha (口訣字) marked in Nŭngŏmgyŏng 5 (楞嚴經) (Owned by Tan'guk University (檀國大學校), Tongyanghak Yǒn'guso (東洋學研 究所)) matches the relevant part of Nungomgyong Onhae (楞嚴經諺解), and that it would be the result of either that Onhae (諺解) was created based on Hundok (訓讀), or that Hundok (訓讀) reading was done based on *Onhae* (諺解). In this case the possibility of latter is higher, he said. However, he added, "Considering the fact that Hundok (訓讀) reading had existed prior to the promulgation of Hunmin Chyŏngŭm (訓民正音), it seems that Han'gŭl Ŏnhae (한글 諺解) was, as a whole, created based on Hundok (訓讀) reading which had existed since before.". (pp. 104-105). On the other hand, Hong [洪允杓] (1994/in press, pp. 171-175) mentioned the manuscript Li Tàibái (李太白)'s poetry collection, seems to be written by posterity, in his possession. It consists of the following three volumes, (1)Original Hannun (漢文) text of Li Tàibái (李太白)'s poetry, 2) Hanmun (漢文) text with Kugyŏl (口訣) and interpretation markings with thin brush, (3)Onhae (is iggin) text. He said that these materials are in the same person's handwriting, and purchased at the same store. Of the three volumes, $Kugy \delta l$ (\Box \vdots) and interpretation markings of (2) are similar to the Kugy \delta l (\Box \vdots) markings of (7). Hong [洪允杓] (1994/in press, pp. 171-175) insisted that the volume of ② shows the preliminary stage of completing *Ŏnhae* (諺解) text such as ③ volume. Even if these materials are in the same person's handwriting, it is not certain that these are copied in the order of $(1) \rightarrow (2) \rightarrow (3)$. If it is true, it would be one of the materials supporting the insistence of this paper, that Onhaemun (諺解文) can be regarded as Kakikudashibun (書き下し文), the results of Hanmun Hundok (漢文訓讀) reading.

要解口訣 臣等謹依口訣譯之 至八月二十二日蒿成 以進 (Nǔngǒmgyǒng Ŏnhae [楞嚴經諺解] 御製跋)

c. 上이 입거□□□샤 慧覺尊者□ 마□와시□ 貞嬪 韓氏等이 唱準□야□ 工曹參判 臣 韓繼禧 前尚州牧事 臣 金守温□ 飜譯□고 議政府 撿詳 臣 朴楗 護軍 臣 尹弼商 世子文學 臣 盧思慎 吏曹佐郎 臣 鄭孝常은 相考□고 永順君 臣 溥□ 例 一定□고 司贍寺尹 臣 曹變安 監察 臣 趙祉□ 國韻 쓰고 慧覺尊者 信眉 入選思智 學悦 學祖□ 飜譯 正□온 後에 御覽□샤 一定커시□ 典言 曹氏 豆大□ 御前에 飜譯 님□오니라 (Nǔngǒmgyǒng Ŏnhae [楞嚴經諺解] 御製跋)

These sources, referred to frequently (Kim [金完鎭], 1960, pp. 73-74), Shibu [志 部昭平], 1983, pp. 7-9, An [安秉禧], 1997/2009, pp. 272-276, etc.), show the process of the completing metal movable-type prints *Nŭngŏmgyŏng Ŏnhae* (楞嚴經諺解) [1461] published by *Kyosŏgwan* (校書館), in advance of the wood block prints *Nŭngŏmgyŏng Ŏnhae* (楞嚴經諺解) [1462] publishing. In short, it means that "King *Sejo* (世祖) punctuated sentences with *Kugyŏl* (口訣) markings at first, and after that, it was translated to Korean along these *Kugyŏl* (口訣) markings " (An [安秉禧], 1985/2009, p. 39).⁶

⁶ As for the process of completing Ŏnhaemun (諺解文), there are similar mentions in another Buddhist Ŏnhae (諺解) materials published by Kan'gyŏngdogam (刊經都監). Following are some examples. (An [安秉禧], 1976/1992a, p. 289, Referred with some expressions changed.)

⁽¹⁾ 今我聖上이 以天從辯慧로 力垂善誘□샤 萬幾之暇애 將使聾瞽로 開明케□샤 於 此禪經에 親印口訣□시고 乃命儒臣□시며 招集緇流□샤 詳加諺釋□야 刊板流通□시니 (Sŏnjong Yŏnggajip [禪宗永嘉集] 信眉 跋)

⁽²⁾ 今我聖上이 夙植勝因□샤 爲世導師□샤 續佛慧明□시며 萬幾之暇애 敦信是經 □샤 深契妙理□샤 親定口訣□시고 命儒臣韓繼禧□샤 譯以國語□시고 (Kǔmganggyǒng Ŏnhae [金剛經諺解] 孝寧大君 跋)

⁽³⁾ 恭惟主上承天體道烈文英武殿下 握符御極 託莂臨朝 丕闡微猷 欽崇至教既 博綜 於群籍獨 深達於竺墳 思廣甘露之門更 布慈雲之廕 煥日新之盛德 發天從之多能 楷定口 訣於契經 發揮心法於了義 (Wŏn'gakkyŏng Ŏnhae [圓覺經諺解] 黄守臣 箋文)

Furthermore, in Kǔmganggyǒng Ŏnhae (金剛經諺解), there are also mentions in Han Kyehǔi (韓繼禧)'s afterword (跋文) and in the additional annotation, that is similar to the process of completing Nǔngǒmgyǒng Ŏnhae (楞嚴經諺解) and the participants.

⁽⁴⁾ 予欲反譯廣布 爾其勉之 於是親定口訣 [貞嬪韓氏 御前書口訣 社堂慧瓊道然戒淵 信志道成覺珠淑儀朴氏書 口訣 兼唱準 永順君臣溥承傳出納] 臣敬依 口訣宣譯孝寧與僧 海超等 更加研究 [禮曺參議臣曺變安書國韻 工曺判書臣金守温 工曺參判臣姜希孟 承政 院都承旨臣盧思慎 參校議政府舎人臣朴楗 工曺正郎臣崔灝 行仁順府判官臣趙祉 考 諸經 典言曺氏 行同判内侍府事臣安忠彦 護軍臣張末同 書飜譯 行司勇臣張治孫 臣 金今音 同承供校尉臣朴成林 唱準] 凡五日告成 即命刊經都監 鏤板印布 (Kǔmganggyǒng Ŏnhae [金剛經諺解] 韓繼禧 跋)

Shibu [志部昭平] (1983, p. 22) pointed out that the process of completing Kunganggyong Ŏnhae(金剛經諺解) in this source is remarkably similar to Nungomgyong Ŏnhae (楞嚴經諺

As stated above, we discussed in detail that *Onhaemun* (諺解文) of *Onhae*(諺解) materials can be regarded as *Kakikudashibun* (書き下し文), the results of *Hanmun Hundok* (漢文訓讀) reading,⁷ and these can be regarded as a kind of *Hanmun Hundok* (漢文訓讀) materials.⁸

In this paper, we will discuss some of the advantages and points of the attempt to research how to read *Sŏktok Kugyŏl* (釋讀口訣) materials based on the *Ŏnhae* (諺解) system of *Hanmun* (漢文) texts in *Ŏnhae* (諺解) materials.

解), and that the difference from Nŭngŏmgyŏng Ŏnhae (楞嚴經諺解) is only in the printing office, Kyosŏgwan (校書館) and Kan'gyŏngdogam (刊經都監).

⁷ Kosukegawa [小助川貞次] (2009:42) pointed out, that such as Shomono (抄物) in Japan, Ŏnhae (諺解) in Korea, and Kunten (訓点) materials in Vietnam, the method to write the results of Hundok (訓讀) reading in various languages exists, instead of the marking to original Hanmun (漢文) texts. That is to say, that Ŏnhaemun (諺解文) is the results of Hanmun Hundok (漢文訓讀). However, he also pointed out that these have been often transmitted with original Hanmun (漢文) texts together.

In addition, there have been a few mentions that Ŏnhaemun (諺解文) of Ŏnhae (諺解) materials "corresponds to Japanese Kanbun Yomikudashibun (漢文読下し文)" (Kanno [菅野 裕臣], 1996, p. 108), "has a similar characteristics with Kakikudashibun (書き下し文)" (O [呉美寧], 2004, p. 33), and so forth. However, we can not find the researches to reconstruct the systems of Hanmun Hundok (漢文訓讀) in these days from such perspectives.

⁸ Tsukishima [築島 裕] (1963:101-102) gave the five materials to research the language use reality and situation of Hanmun Hundok (漢文訓讀) in Heian-era (平安時代).

Kunten (訓点) materials.

Kakikudashibun (書下し文), the results of Hanmun Hundok (漢文訓讀).

The sentences that would be written in the order of Hanmun Hundok (漢文訓讀), even though original Hanmun (漢文) texts are unknown. The kinds of Wakan Konkobun (和漢混 淆文) in a broad sens, the sentence written in a mixture of Japanese and Chinese.

The kinds of Ongi (音義), dictionary.

The materials to show the social background of Hundok (訓読).

Of these, he pointed out, that there are various materials of ② Kakikudashibun (書下し文), the results of Hanmun Hundok (漢文訓讀), such as Kanagaki Hokekyo (仮名書法華経), Bussetsu Amidakyo (仏説阿弥陀経), Kan Muryojukyo (観無量寿経), Kanagaki Rongo (かながきろんご) (These are Hiragana (平仮名) books), and Shakanyorai Nenjuno Shidai (釈迦如来念誦之次第 (This is Katakana(片仮名) book owned by Tenri Library (天理図書館)), and so forth, and that "we can use these materials usefully if only the way of the usage is valid." (p. 102)

It seems that Ŏnhaemun (諺解文) in Korea nearly corresponds to ② materials, and so, these would be valuable materials to research the systems of Hanmun Hundok (漢文訓讀) in these days.

3. The relation of *Sŏktok Kugyŏl* materials and *Ŏnhae* materials

This chapter will deal some examples, and we will discuss some advantages and points. In this paper, incidentally, Ŏnhae (諺解) materials of the 15th century, such as Nŭngŏmgyŏng Ŏnhae (楞嚴經諺解)[1462], Pŏphwagyŏng Ŏnhae (法華經諺解) [1463], Naehun (内訓)[1475], Tusi Ŏnhae (杜詩諺解) [1481], and so forth, will be treated as main sources. We will refer to Hancha (漢字) dictionaries published in the 16th century or other materials when necessary.

3.1'況'

'況' is written as "廣韻云,「矧也。」愚案義轉而益進,則云況也。" in Zhùzì Biànlue (助字辨略). And "As '況' is originally 匹擬也 (Guǎngyùn(廣韻)), the sentences including '況' have the structure that is comparing the sentence above with the sentence below" (Kasuga [春日政治], 1938/1984, p. 346). It is also said that '況' in auxiliary word usage, is used as conjunction (連詞) or adverb.9

The examples of Sŏktok Kugyŏl (釋讀口訣) materials are as follows.

(1) 彼□{之} 功德□ 邊際 無□□□ 稱量□□□□□□□□□□ 不□□ 與□□□□□ 等
 □□□□ 無□□□ <u>何□□ 況□</u> 量 無□ 邊□ 無 劫□□ 具□ 地度□ 修□□□ 諸
 □ 功德□□□□ (*Xīnyì Huáyánjīng* [新譯華嚴經] 14:9_5-6>

(1) is marked '況□'. It seems to transcribe '□□먹' in the 15th century, because '□' is probably Marum Ch'omgi (末音添記) of Hun (訓) of character '況'. In this example, the other hand, original Hanmun (漢文) text is '何況', and Kugyol (口訣) marking there is '何□□ 況□'. There are various theories about the reading '何□□', but that correspond to '엇데 □□먹' of the 15th century, in any way.10

In Ŏnhae (諺解) materials from the 15th century, it is common read as adverb '・ ・ 며' among the materials, except verbal reading '가・비다'.

- (2) a. 當知虚空이 生汝心内호미 猶如片雲이 點太淸裏□니 <u>況</u>諸世界〕
 在虚空耶〕□
 - b. 반□기 알라 虛空이 네 □□ 안해 나미 片雲이 大淸 안해 點혼 □□니 <u>□□며</u> 한 世界 虛空애 이쇼미□녀 (*Nŭngŏmgyŏng Ŏnhae* [楞嚴經諺解] 9:44a-44b_本)

⁹ However, it is difficult to distinguish between these two. In addition, Kasuga [春日政治] (1938/1984) called 'イハムヤ', of Japanese Kanbun Kundoku (漢文訓読) materials, 'conjunctive adverb (接続的副詞)'.

¹⁰However, '何況' in original Hanmun(漢文) texts was not always read as '엇데 □□먹', but there are a lot of examples to be read as '□□먹' alone. See (5)~(6). Incidentally, '何況' was written as '用反問的語氣表達更進一層的意思。' in Hànyǔ Dàcídiǎn (漢語大詞典).

- (3) a. 炎宵惡明燭 <u>況</u>乃懷舊丘
 - b. 더운 바□ □□ 燭ㅅ 브를 아쳗노니 <u>□□며</u> 녯 □□ □□호미□녀 (*Tusi Ŏnhae* [杜詩諺解] 10:21b)
- (4) a. 至於犬馬□야도 盡然이어니 而<u>況</u>於人乎
 - b. 가히 □□게 니르러도 다 그리 홀디어니 <u>□□며</u> 사□미□녀 (*Naehun* [内訓] 1:44b)
- (5) a. 若是施主 | 但施衆生의게 一切樂具□야도 功德이 無量커□ 何況令得阿羅漢果 | □ 凵 □ 가
 - b. □다가 이 施主 | 오직 衆生의게 一切 즐거운 거슬 주어도 功德이 그지업거늘 <u>□□며</u> 阿羅漢果□ 得게 호미□니□가 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 6:9a_本)
- (6) a. 舎利弗아十方世界中에 尚無二乘커니 <u>何況</u>有三이리오
 - b. 舎利弗아 十方世界中에 오히려 두 乘이 업거니 <u>엇데 □□며</u> 세히 이시리오 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 1:186b_本)

'況' did not exist in *Hancha* (漢字) dictionaries of the 16th century, but '□□먹' is common in *Söktok Kugyöl* (釋讀口訣) materials in *Koryŏ*-era (高麗時代) and *Ŏnhae* (諺解) materials of the 15th century. Accordingly, it seems that '□□먹' had been fixed as *Hun* (訓) of character '況'.

3.2'當'

"當' have two kinds of tones, even tone (平声) and going tone (去声), but we will treat even tone (平声) here. Two kinds also appear in *Zhùzì Biànlue* (助字辨略), but there are a lot of mentions, such as "應也, 合也", "語助, 猶云將也", "猶云方也", and so forth, for even tone (平声), while only one mention "當日, 即日也" for going tone (去声).

In Sŏktok Kugyŏl (釋讀口訣) materials, '當' is marked '□' without exception.

- (1) 大王□<u>當□</u>知□□□□(*Xīnyì Huáyánjīngshū*[新譯華嚴經疏] 35:10_17-18)
- (2) 廣□ 説□□□ <u>當□</u> 知□□ 二十種 有□□□ 菩薩地□□ 當□ 説□□□ 如
 □□□□□ (Yúqiéshīdìlùn [瑜伽師地論] 20:4_9-10)
- (3) 今□□ 我□ 亦□□ <u>當□</u> {於}往昔□□ 同□□□ 而□ 其 命□ 捨□□□□□□
 (Xīnyì Huáyánjīngshū [新譯華嚴經疏] 35:10_10-11>)
- (4) 謂□ 我□ <u>當□</u> {於}无戯論涅槃□□ 心□□ 退轉□□ 无□ (Yúqiéshīdìlùn [瑜 伽師地論] 20:8_17-18>

In these examples, '當' was treated as adverb, and marking '□' was probably *Marŭm Ch'ŏmgi* (末音添記) of *Hun* (訓) of character '當'. Thus it seems to transcribe '반□기' or '반□'.

In *Ŏnhae* (諺解) materials of the 15th century, most of '當' characters are also read as '반□기', except verbal reading '當□다'.

- (5) a. 如是等人이□則能信解□리니 汝<u>當</u>爲説 妙法華經□라
 - b. 이러□ □ 사□□□ 能히 信解□리니 네 <u>반□기</u> 妙法華經을 爲□야 니□라 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 2:173b_本)
- (6) a. 阿難이 白佛言호□ 世尊하 <u>當</u>於結心에 解□면 即分散□리□다
 b. 阿難이 부텨□ □오□ 世尊하 반□기 □가온□ 그르면 곧 갈아디리□다
 - (Nǔngǒmgyǒng Ŏnhae [楞嚴經諺解] 5:24b_本)
- (7) a. 人이 無父母 |) 어든 生日에 <u>當</u>倍悲痛이니 更安忍置酒張樂□ 야 以爲樂이리오
 - b. 사□미 父母 | 업거든 난 나래 <u>반□기</u> 倍히 슬허 홀디니 가□야 엇디 술 버리고 音樂□야 □ 즐교□ □리오 (*Naehun* [内訓] 1:58b)
- (8) a. 明明領處分 ——<u>當</u>剖析
 - b. □기 긔걸호□ 아라셔 一一히 <u>반□기</u> 剖析호라 (*Tusi Ŏnhae* [杜詩諺解] 17:14a)¹¹

Furthermore, the examples of *Hancha* (漢字) dictionaries in the 16th century are as follows.

- (9) 當 반□ 당 (*Kwangju Ch'ŏnjamun* [光州千字文] 11b)
- (10) 반□ 당 當 (*Paengnyŏn Ch'ohae* [百聯抄解] 12b)
- (11) 반□ 당 當 (*Paengnyŏn Ch'ohae* [百聯抄解] 13b)
- (12) 當 맛당 당 又 平聲 (Sinjŭng Yuhap [新增類合] 下:9b)¹²
- (13) 當 맛□ 당 (Sŏkpong Ch'ŏnjamun [石峯千字文] 11b)

There are two different kinds of *Hun* (訓), one is '반□' as (9)~(11), and the other is

(1) a. 負米晚爲身 每食臉必泫

b. □ 쥬믈 늘거셔 모□ 爲□니 □□ 밥 머글 제 □□ 반□시 □므를 흘리더라 (Tusi Ŏnhae [杜詩諺解] 24:32a)

(2) a. 文彩承殊渥 流傳必絶倫

¹¹ Incidentally, it is well known that, in Tusi Ŏnhae (杜詩諺解), not only '반□기' as adverb but also '반□시', the '¬~∧' changed form, appears for the first time, and actually, four examples were found. However, all of those are the examples of '必' character's reading such as follows, so that there were no example of '當' character's reading.

b. 빗□ □조로 님□ 殊異□ 恩渥□ 닙□오니 流傳□야 가□ 반□시 等倫에 그츠리로다 (Tusi Ŏnhae [杜詩諺解] 16:5a-5b)

¹² In this example, a circle(圈點) is added to the upper right hand side of '當' character, meaning the character going tone(去声), and it is written as '又 平聲' under the Hun(訓) '맛당 당'.

"맛당(맛□)' as (12)~(13). In there, '반□' appears in *Kwangju Ch'ŏnjamun* (光州千字 文) which is said to have included the old *Hun* (古訓) especially, and it is the common to *Ŏnhae* (諺解) materials of the 15th century and *Sŏktok Kugyŏl* (釋讀口訣) materials.

Thus, it seems to have some difficulties, but at least, '반ロ기(반ロ)' had been fixed as *Hun* (訓) of character '當', until the end of the 15th century.

3.3'亦'

In *Zhùzì Biànlue* (助字辨略), '亦' is written as "總也" quoted from *Guǎngyùn* (廣韻). And '亦' of auxiliary word usage, is used as adverb in general, as with several meanings such as "(1)也;也是。(2)又。(3)尚;猶。(4)已;已經。(5)僅僅;只是。(6)皆。" in *Hànyǔ Dàcídiǎn* (漢語大詞典).¹³

In Söktok Kugyöl (釋讀口訣) materials, there were two kinds of Kugyöl (口訣) markings in character '亦'.

- (1) 衆生□形相□各□不□同□□行業□音聲□□□ 亦□ 量□ 無□□ (Xīnyì Huáyánjīng [新譯華嚴經] 14:15_1)
- (2) 減□□ 無□ 增□□ 無□ <u>亦□□</u> 盡□ 無□ 如□ 菩薩□ 功德聚 亦□ 然□□□□
 (*Xīnyì Huáyánjīng* [新譯華嚴經] 14:14_14)

(1) is marked '□'. Nam [南豊鉉] (2007) treated it with Chŏnhuncha(全訓字) of particle '-도', but it is also possible to treat with Marŭm Ch'ŏmgi(末音添記) of adverb '□'. Example (2), '亦' of the earlier part, was marked '□□', and it seems that '亦□□' was read as '□□'. In any way. there is no doubt that '□' had been considered Hun(訓) of character '亦'.

The examples of Onhae (諺解) materials in the 15th century are as follows.

- (3) a. 諸菩薩衆이<u>亦</u>得是三昧와及陀羅尼□시니라
 - b. 諸菩薩衆이 <u>○</u> 이 三昧와 陀羅尼○ 得□시니라 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 6:184a_解)
- (4) a. 佛亦如是□야出現於世호미 譬如大雲이 普覆一切□□니라
 - b. <u>부텨도</u> 이 □□야 世間애 나 現호미 가□비건댄 큰 구루미 一切예 너비 둡□□니라 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 3:37b-38a_本)
- (5) a. 我等도 <u>亦</u>佛子] 라
 b. <u>우리도 □</u> 佛子] 라 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 2:11b_本)

¹³ However, in Hànyǔ Dàcídiǎn(漢語大詞典), character '亦' in auxiliary word usage was written as '連詞。假如,如果。', '助詞, 無義。', besides the various meanings of adverb.

(3)~(4) were read as adverb '□' and particle '-도' each other. And in (5), both two forms were read in concord as '-도 □', which is similar to 'Momata (モ亦)' of Japanese Kanbun Kundoku (漢文訓読).14 However, it is more often to be read as only adverb '□' such as (3) without particle '-도'.

The examples of Hancha (漢字) dictionaries in the 16th century are as follows.

- (6) 亦 □ 역 (*Kwangju Ch'ŏnjamun* [光州千字文] 21a)
- (7) 亦 □ 역 (Sŏkpong Ch'ŏnjamun [石峯千字文] 21a)
- (8) 亦도역 (Sinjŭng Yuhap [新增類合] 上:14b)

Example (8), of Sinjung Yuhap (新增類合), is written as '도 역', and so, particle '-도' might be treated as Hun (訓) of character '亦', unless it is misspelling. Otherwise, adverb ' \Box ' is treated as Hun (訓) of it. Anyway, there is no doubt that Hun (訓) of character '亦' was primarily adverb '•'.

Thus, '亦' is also the example that the reading method was common to Sŏktok Kugyŏl (釋讀口訣) materials, Ŏnhae (諺解) materials, and Hancha (漢字) dictionaries in the 16th century.

The above three characters are that the reading method was common to Sŏktok Kugyŏl (釋讀口訣) materials, Ŏnhae (諺解) materials, and Hancha (漢字) dictionaries in the 16th century.['況' as '□□먹', '當' as '반□기(반□)', and '亦' as '□'.] Therefore, we can verify that Hun (訓) of these characters had been fixed and persisted.

In other words, these are good examples that we can research how to read Sŏktok Kugyŏl (釋讀口訣) materials based on Ŏnhae (諺解) system of Hanmun (漢文) texts in these Ŏnhae (諺解) materials.

However, we have to pay attention to the situations that the persistences mentioned above are not always verified with all characters. Below are the examples.

3.4'與'

'與' have some kinds of tones. Even tone (平声) is used to the end of a sentence in auxiliary word usage, that means a question, a rhetorical question, or an exclamation. However, we will treat rising tone (上声) here. Auxiliary word '與' as rising tone (上声) can be largely divided into two types, preposition (介詞) or conjunction (連詞). The meaning of '與' is similar to '亦' or '及', and in Zhùzì Biànlue (助字辨略), '與' is written as "與, 及也" quoted from Lùnyǔ (論語).

¹⁴ See Kasuga [春日政治] (1942/1985, p. 279).

The examples of Sŏktok Kugyŏl (釋讀口訣) materials are as follows.

 唯□佛□<u>與□</u>佛□□□□乃□{斯}□事□知□□□□(*Jiùyì Rénwángjīng* [舊 譯仁王經]上:11_24)

In (1), '與' was read as adverb, and '□' was probably Marŭm Ch'ŏmgi (末音添記) of the word. Thus, it seems to transcribe '다□' of Chŏngŭm (正音) materials in later ages.

In Onhae (諺解) materials, on the other hand, the reading method of character '與' shows different trend by each materials.

- (2) a. 此諸物象과 <u>與</u>此見精이 元是何物이완□
 - b. 이 모□ <u>物象과</u> 이 見精이 本來 이 엇던 物이완□ ((*Nǔngŏmgyŏng Ďnhae* [楞嚴經諺解] 2:56a-56b_本)
- (3) a. 爾時예 釋提桓因이 與其眷屬二萬天子와 俱□며
 - b. 그 □ 釋提桓因이 <u>眷屬二萬天子와</u> □□ 와시며 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 1:45a_本)
- (4) a. 及退□ 야 而自櫽栝日之所行과 <u>與</u>凡所言□ 니
 - b. 믈러나 날로 行홀 바와 <u>다□</u> 믈읫 닐온 바□ 穩栝□야 보니 (*Naehun* [内訓] 1:16b)
- (5) a. 可憐忠<u>與</u>孝兩美畫麒麟
 - b. 可히 □온 忠과 <u>다□</u> 孝□ 두 아□다오□ 麒麟閣애 그리리로다 (*Tusi Ŏnhae* [杜詩諺解] 24:4b)

(2)~(3) were read as particle '-와/과', but (2) was read as connective particle, and (3) as adverbial particle. Most of '與' characters were read as particle '-와/과' in the Buddhist *Ŏnhae* (諺解) materials in the mid-15th century.

Meanwhile, (4)~(5) were read as adverb '다□', like (1) of *Sŏktok Kugyŏl* (釋讀口 訣) materials. The word '다□' as the reading of '與' increases rapidly since the end of the 15th century, more precisely, since *Naehun* (内訓)[1475], *Tusi Ŏnhae* (杜詩諺解) [1481].

The examples of Hancha (漢字) dictionaries in the 16th century are as follows.

- (6) 與 다 □ 여 (*Kwangju Ch'ŏnjamun* [光州千字文] 11a)
- (7) 與다□여 (*Sinjŭng Yuhap* [新增類合]下:63a)
- (8) 與더블여 (Sŏkpong Ch'ŏnjamun [石峯千字文] 11a)

(6)~(7) were written adverb '다□', that is common to '與□' of Sŏktok Kugyŏl (釋 讀口訣) materials or Naehun (內訓)[1475], Tusi Ŏnhae (杜詩諺解), except verb '더블다' such as (8) of Sŏkpong Ch'ŏnjamun (石峯千字文).

Thus, character '與' was read as particle '-와/과' in Ŏnhae (諺解) materials in the mid-15th century. However around the period adverb '다□' had been fixed as Hun (訓) of the character firmly. Furthermore, '다□' itself is not appear at all in the Chŏngŭm (正音) materials since the mid-15th century, the promulgation of Hunmin Chyŏngŭm (訓民正音), to Naehun (内訓)[1475].

3.5'及'

'及' is used as verb that means 'reach, arrive', and in auxiliary word usage, it is used as preposition (介詞) or conjunction (連詞). It seems that the former is written as '至也, 逮也', and the latter as '連及之辭也' in Zhùzì Biànlue (助字辨略), quoted from Guǎngyùn (廣韻).

However, we will treat only conjunction (連詞) usage here, because it is difficult to distinguish between verbal usage and preposition (介詞) usage.15

The examples of Sŏktok Kugyŏl (釋讀口訣) materials are as follows.

- (1) 謂□ 有餘依涅槃界□ <u>及□</u> 無餘依涅槃界□□ 依止□□□□ (*Yúqiéshīdìlùn* [瑜伽師地論] 20:4_20-21)
- (2) 五欲□ <u>及□</u> 王位□ 富饒□ 自樂□ 大名稱□□□□ 求□□□□□□ 不□□
 (Xīnyì Huáyánjīng [新譯華嚴經] 14:9_12)
- (3) 佛□<u>及□</u>衆生□□□□一□□而□二 無□□□ (Jiùyì Rénwángjīng [舊譯仁 王經] 上:15_12)
- (4) 五者一切諸佛□不共法等□□□□ 及□ 一切 智智□□□□ 灌頂智 能 具足
 □□□□□□□□ (*Hébù Jīnguāngmíngjīng* [合部金光明經] 3:5_6-7)

These examples show different trend by each materials. That is, one is marked '□' such as (1)~(2) of Yúqiéshīdilùn (瑜伽師地論) and Xīnyì Huáyánjīng (新譯華嚴經), and the other is marked '□' such as (3)~(4) of Jiùyì Rénwángjīng (舊譯仁王經) and

¹⁵ For example, example (1) can be judged as verbal usage, however, example (2) is difficult to judge whether it is verbal usage or preposition (介詞) usage.

⁽¹⁾ a. 相及□야□ 乃有畔□□니 畔義不成□니 非非和也] 로다

b. 서르 미처□ □□ 잇□니 □ □디 이디 아니□니 아니 和혼 디 아니로다 (Nŭngŏmgyŏng Ŏnhae [楞嚴經諺解] 2:102b_解)

⁽²⁾ a. 從其室門□ 야 後及庭際□ 리니

b. 그 집 門□ 조차 後에 □ □□ 미츠리니 (Nŭngŏmgyŏng Ŏnhae [楞嚴經諺解] 1:53a_本)

Hébù Jīnguāngmíngjīng (合部金光明經). The reading method of the latter examples is unknown, but the former examples marked '□' are probably Marŭm Ch'ŏmgi (末音添記) of character '及'. Thus, it seems to transcribe adverb '只', Hun (訓) of character '及'.

In Ŏnhae (諺解) materials, it is also extremely complicated.

- (5) a. 諸天龍夜叉와 及阿修羅等이 皆以恭敬心으로 而共來聽法□리니
 - b. 諸天龍夜叉와 □ 阿修羅□히 다 恭敬 □□□로 모다 와 法 드르리니
 (Pŏphwagyŏng Ŏnhae [法華經諺解] 6:56a_本)
- (6) a. 若本戒師] 어나 及同會中에 一不淸淨 □ 면 如是道場 이 終不成就 라 □ 시 니 라
 - b. □다가 믿 <u>戒師] 어나 □</u> □ 會中에 □나히나 淸淨 몯□면 이 □티 道場이 내□내 이디 몯□□니라 □시니라 (*Pŏphwagyŏng Ŏnhae* [法華經諺解] 7:173a_解)
- (7) a. 身心이 滅盡者□無色蘊과 及麁識也] 라
 - b. 身心이 滅□야 다오□ <u>色蘊과</u> 麁□ 識이 업수미라 ((*Nǔngǒmgyǒng Ďnhae* [楞嚴經諺解] 9:32a_解)
- (8) a. 阿難아 若此比丘의 本受戒師] 어나 <u>及</u>同會中十比丘等이 其中에 有一不淸淨者] 면 如是道場이 多不成就□리라
 - b. 阿難아 □다가 이 比丘의 本來 受戒□ <u>스스□어나</u> 同會中엣 열 比丘□히그 中에 □나히나 淸淨티 아니□니 이시면 이 □티 道場이 해 이디 몯 □리라 (*Nŭngŏmgyŏng Ŏnhae* [楞嚴經諺解] 7:25a_本)

In (5)~(6), '及' was read as adverb '□' which is in concord with the preceding auxiliary word such as particle '-斗/斗', conjunctive ending '-거나', and so forth. However, in (7)~(8) were read as only these auxiliary word without adverb '□' appearing. In Nǔngǒmgyǒng Ŏnhae (楞嚴經諺解), there are many examples to read ' \mathcal{D} ' as both adverb '□' and the auxiliary words equally, while in Pǒphwagyǒng Ŏnhae (法華經諺解), most of examples are read as these auxiliary words alone, except only one exception that is read as adverb '□'. This suggests that there are differences of Ŏnhae (諺解) system between Nǔngǒmgyǒng Ŏnhae (楞嚴經諺解) and Pǒphwagyǒng Ŏnhae (法華經諺解).16

¹⁶ As for the details of completing *Ŏnhae* (諺解) of each materials, in *Nŭngŏmgyŏng Ŏnhae* (楞 嚴經諺解), there are some descriptions in the afterword (跋文) that King *Sejo* (世祖) marked *Kugyŏl* (口訣) directly at first, and after that *Kim Suon* (金守温) and *Han Kyehŭi* (韓繼禧) translated. However, in *Pŏphwagyŏng Ŏnhae* (法華經諺解), there are no description as described above, so that it is estimated from several situations, that the same persons would have involved in compiling the materials (An [安秉禧], 1998/2009a, pp. 68-69), etc.). And this has been generally accepted. But considering to the subtle difference of *Ŏnhae* (諺解) system between two materials mentioned above, it might be necessary to re-consider the estimate of the persons compiling *Pŏphwagyŏng Ŏnhae* (法華經諺解) more carefully.

- (9) a. 又如舊擧將과 及嘗爲舊任按察官者를 後에 己官이 雖在上이나 前輩 | 皆辭避□ 야 坐下坐□ 더니
 - b. □ 녜 쳔거 □ 던 <u>사 □ 과 밋</u> 일즉 녜 검찰 □ □ 벼슬 □ 엿던 관원을 후에 내 벼슬이 비록 우 □ 이시나 녯 사 □ 미 다 □ □ □ 며 피 □ 야 아래 좌애 안 □ 니 (*Pŏnyŏk Sohak* [翻譯小學] 7:46b-47a)
- (10) a. 慶<u>及</u>諸子 | 入里門□야 趨至家□더라
 - b. <u>慶과 및</u> 모□ 아□이 里門의 들어 □조 걸어 집의 닐으더라 (Sohak *Ŏnhae* [小學諺解] 6:80b)

(9)~(10), on the other hand, are examples of *Pŏnyŏk Sohak* (翻譯小學) [1518] and *Sohak Ŏnhae* (小學諺解) [1588]. These are read as '밋', that is common to *Sŏktok Kugyŏl* (釋讀口訣) materials. The word '밋' itself is very few in the 15th century, but in the 16th century, it increase significantly as reading '及' character. In this respect, it is similar to '與' character above.

The examples of Hancha (漢字) dictionaries in the 16th century are as follows.

- (11) 及 只 급 (*Kwangju Ch'ŏnjamun* [光州千字文] 7a)
- (12) 及 □□ 급 (Sŏkpong Ch'ŏnjamun [石峯千字文] 7a)
- (13) 及 미 · Ginjung Yuhap [新增類合] 下:42a)

(11) of *Kwangju Ch'ŏnjamun* (光州千字文), was written '밋', that is common to *Sŏktok Kugyŏl* (釋讀口訣) materials or *Ŏnhae* (諺解) materials in the 16th century such as (9)~(10). In other respects, (12) of *Sŏkpong Ch'ŏnjamun* (石峯千字文), and (13) of *Sinjŭng Yuhap* (新增類合), was written as verb '및다'.

As shown above, reading method of character '及' was extremely complicated. There are examples to be read as adverb '只' in *Sŏktok Kugyŏl* (釋讀口訣) materials, *Ŏnhae* (諺解) materials in the 16th century, and *Hancha* (漢字) dictionaries in the 16th century, so that, it seems that '只' had been fixed as *Hun* (訓) of character '及'. However, of *Ŏnhae* (諺解) materials in the mid-15th century, it was read as adverb ' · ' or auxiliary word such as particle '-와/과', conjunctive ending '-거나', and so forth. Not only that, the word '밋' itself is very few in the 15th century.¹⁷

As discussed above, there is a similarity between '與' and '及' each other. That is, the reading methods of these characters are common between Sŏktok Kugyŏl (釋讀口 訣) materials and Ŏnhae (諺解) materials since the end of 15th century or the 16th

¹⁷ Incidentally, the word '只' as adverb is very few in the 15th century, however, the same form in verbal usage '只다' appears frequently, and it had also been used as the reading of character '及' in verbal usage. Then, we may not be able to assert that '只' have disappeared at all in the 15th century.

century[與 as 다 \Box , and '及' as '밋'.]. While the other reading method existed in Ŏnhae (諺解) materials in the mid-15th century.

It is not easy to provide an explanation for this, but one thing that we would like to stress that, most of materials in the mid-15th century were Buddhist materials, while Non-Buddhist (Confucian) materials had increased since the end of 15th century. In other words, variations in language use, in more detail, the variations in Hanmun Hundok (漢文訓讀) traditions among Buddhist and Non-Buddhist group, appeared in different periods.18

From the above, we will reach a strange conclusion, that the tradition of Hanmun Hundok (漢文訓讀) in Sŏktok Kugyŏl (釋讀口訣) materials had been succeeded to Non-Buddhist(Confucian) group, and another tradition had existed separately among Buddhist group in the mid-15th century. Or it might be better to consider that the tradition of Hanmun Hundok (漢文訓讀) in Korea was basically consistent. However, the tradition among Buddhist group in the mid-15th century were quite peculiar.

Certainly, there are also examples such as ' \mathcal{R} ', ' $\dot{\mathbb{B}}$ ', ' $\dot{\mathbb{T}}$ ', ' \dot

In any case, it should be stressed that Non-Buddhist (Confucian) Onhae (諺解) materials occupy an important position to consider the reading methods of Sŏktok Kugyŏl (釋讀口訣) materials.

¹⁸ For the various forms in the materials written in different days, there is a research such as Ch'oe [崔明玉] (2002) treating past tense suffix formation. He did not regard these forms as the historical chronically successive, but payed attention to the characteristics of the materials, and concluded that these distinct forms have been used in different regional and social dialects, and have been reflected in written text separately. However, there are few detailed research on his argument, that language use among the groups (Buddhist and Non-Buddhist group) had been different each other, except a verbal evidence by Kwŏn Odon (權五惇)[A Chinese scholar, 1901~1984] that language use were different for each alley in P'alp'an-dong (八判洞), Chongno-gu (鐘路區), Seoul, in the early 1940s. It seems that there is a gap in his argument, however, for future research about the history of Korean language, such viewpoints might be necessary, in any case.

¹⁹ For example, '各□□, 各□□'(제여곰, 제곰), '更□'(가□야, 가□여), '共□'(다□), 「幷□」(아오로), and so forth.

4. Closing Remarks

As stated above, we have discussed some of the advantages and points of the attempt to research how to read *Sŏktok Kugyŏl* (釋讀口訣) materials based on *Ŏnhae* (諺解) materials, with each examples. As a result, *Hundok* (訓讀) systems of *Sŏktok Kugyŏl* (釋讀口訣) materials had much resemblance to the Non-Buddhist (Confucian) *Ŏnhae* (諺解) materials since the end of 15th century.

Recently, as studies of *Sŏktok Kugyŏl* (釋讀口訣) materials advanced, it has been often pointed out that it is important to classify the group of the materials, such as *Huáyánjīng* (華嚴經) group, *Yúqiéshīdìlùn* (瑜伽師地論) group, and so forth. Furthermore, these classifications have been positively applied to the deciphering of Cypher (角筆) materials.

However, as for the groups, it seems that the relation with $\check{O}nhae$ (諺解) materials should be also considered. In that respect, it seems that $\check{S}\check{o}ktok Kugy\check{o}l$ (釋讀 口訣) materials and Non-Buddhist (Confucian) $\check{O}nhae$ (諺解) materials have deep connection. In future study, various examples should be treated in detail. This paper, which treated a few examples, is nothing more than a preface of the future research.

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REVISITING MANNER/RESULT COMPLEMENTARITY: WITH EVIDENCE FROM JAPANESE AND CHINESE VERB COMPOUNDS

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Abstract

This paper brings data of verb compounds (V-Vs) from Japanese and Chinese, in an effort to uncover two issues: (a) whether the lexicalisation constraint (i.e. manner/result complementarity) applies to the languages that contain compound verbs; (b) how complex it can be to build compound verb. The finding reveals that manner and result are well encoded in most Japanese verb compounds, which gives rise to the assumption that the complementary constraint is not applicable to Japanese. In Chinese, the application of manner/result complementarity varies according to the types of V-V. In pair relation V-V, only manner meaning is conveyed. In predicate-complement V-V, both manner and result are lexicalised, with V1 encoding the manner and V2 denoting the result. Modifier-predicate V-V appears to only convey the manner. The conclusion emerging from the differing applications in the languages is that the manner/result complementary constraint does not apply to the languages that extensively employ verb compounds.

Keywords: lexicalisation; manner/result complementarity; verb compound; Japanese; Chinese

Povzetek

This paper brings data of verb compounds (V-Vs) from Japanese and Chinese, in an effort to uncover two issues: (a) whether the lexicalisation constraint (i.e. manner/result complementarity) applies to the languages that contain compound verbs; (b) how complex it can be to build compound verb. The finding reveals that manner and result are well encoded in most Japanese verb compounds, which gives rise to the assumption that the complementary constraint is not applicable to Japanese. In Chinese, the application of manner/result complementarity varies according to the types of V-V. In pair relation V-V, only manner meaning is conveyed. In predicate-complement V-V, both manner and result are lexicalised, with V1 encoding the manner and V2 denoting the result. Modifier-predicate V-V appears to only convey the manner. The conclusion emerging from the differing applications in the languages is that the manner/result complementary constraint does not apply to the languages that extensively employ verb compounds.

Ključne besede: leksikalizacija; dopolnjevanje načina in rezultata; glagolske sestavljanke; japonski jezik; kitajski jezik

1. Introduction

Rappaport Hovav and Levin (2010) propose a verb may only lexicalise one type of change, giving rise to manner/result in complementary distribution: a verb may encode manner (1a), or encode result (1b).

(1) a. Verbs encoding a manner

e.g. cry, hit, run, shout, smear, sweep, swim, rub

b. Verbs encoding a result

e.g. arrive, clean, come, open, die, empty, fill

Assuming language can lexicalise only one of the manner or result in the verb, a two category typology is the logical outcome for sentences with one verb explaining the appeal of Talmy's dichotomous typology of lexicalsiation (2000), which relies on whether the core schema of a motion event is conflated with the main verb or the satellite to the main verb. In his view, languages are of two types, i.e. satellite-framed languages (most of the Indo-European languages, the Finno-Ugric families, Chinese, Ojibwa, and Warlpiri) and verb-framed languages (Romance, Semitic, Japanese, Tamil, Polynesian, Bantu, Mayan, Nez Perce, and Caddo languages, Japanese, among others).

Intriguingly, the manner/result complementarity is most manifested in two domains: change of state verbs and motion verbs (Rappaport Hovav & Levin 2010). In each domain, there are change-of-state verbs, which denote a change of state, as in (2a), or motion in a specified direction, as in (2b).

(2) a. break, crack, fill, empty, melt, open, shatter

b. arrive, come, enter, exit, fall, go, rise

Rappaport Hovav & Levin (2010)

Crucially, change-of-state verbs (see 2a) denotes events of scalar change, in directed motion verbs (see 2b), the contiguous points making up the path of motion constitute a scale. Given this, manner/result complementarity can be tackled as the lexicalisation of a scalar change being in complementary distribution with the lexicalisation of a non-scalar change.

The theory of manner/result complementarity appears quite pervasiveness and has been welcomed among linguists, who study Indo-European languages. On the other hand, many scholars from different camps have voiced their concerns with this hypothesis (Cifuentes Ferez 2007:122; Goldberg 2010:48-49; Beavers and Koontz-Garboden 2012, Kubota 2011). They argue that manner/result complementarity perhaps is not the consequence of a lexicalisation constraint, but merely a tendency regarding verb meanings. An immediate counterexample that springs to mind is the English motion verb *swim*, which appears to lexicalise both manner and change of location. Moreover, verb *break* also serves as a putative counterexample, c.f. (3).

(3) a. Terry broke the record.

b. *The record broke.

The ungrammaticality of (3) indicates that in the context of 'record break', an explicit manner component of agency is involved.

The limitations in RH&L's hypothesis further extend to East Asian Languages, whereby verb compounds (V-Vs) are extensively employed. V-V compounds can be composed by scalar change with a non-scalar change and crucially, manner/result seem to manifest itself in compounds, as in (4).

(4) Shuzhi chui-duan /zhe-duan le. Branch blow-break/snap-break PERF 'The branch was blown/snapped.'

In Chinese, most words are morphologically simple as there is no developed notion of a stem. As a result, manner/result manifests itself in compounds. Here V-V *zhe-duan* 'snap-break' entails both manner and result. V1 bears semantic elements expressing manner and indicates a concrete action. But such action verb does not imply an accomplishment or an achievement; hence, an addition of complement representing the perfect is employed, as V2. Hence, V1 and V2 are not in complementary distribution; rather, they are assigned to an equal status. Furthermore, a variety of V2 are allowed, and generally, V2s are born by a resultative complement such as *hao*'good', *man* 'full', *guang*, 'over'. Further examples are like *kao-hao* 'bake-over'.

Given this, it seems necessary to revisit the issue by bringing the verb compounding data from Japanese and Chinese.

The purpose of this paper is two-fold. First, it explores how complex it can be to build a motion V-V or a change-of-state V-V in Japanese and Chinese. Second, it exams whether the manner/result in complementary constraint applies to the languages in focus.

This paper is mapped out as follows: Section 2 provides an insight into the framework: scale-base approach. Section 3 explores the lexical siation constraint in Japanese and enumerates the possibilities of verb compounding. Section 4 is devoted to lexical siation constraint in Chinese. Section 5 discusses the results and provides a conclusion to this paper.

2. Scale-based approach to manner/result complementarity

This paper follows the scalar structure in an effort to explore lexicalisation constraint on verb compounding in Japanese and Chinese. The data for Chinese is adopted from the corpus of Modern Chinese constructed by the Center for Chinese Linguistics at Beijing University. The data for Japanese is from the corpus of Balanced Corpus of Modern Written Japanese by National Institute for Japanese language and linguistics. This paper also uses hand-made examples. And native speakers check all the hand-made examples. According to Kennedy (2001) and Kennedy and McNally (2005), a scale is constituted by a set of degrees (points or intervals indicating measurement values) on a particular dimension (e.g. cost, depth, height, temperature), with an ordering relation. The dimension represents an attribute of an entity, with the degrees indicating the possible values of this attribute. Incorporating this, Levin (2010) notes that a scalar change in an entity involves a change in the value of one of its scalar-valued attributes in a particular direction on the relevant scale. Consequently, verbs that lexically specify a scale are called scalar change verbs, as in (5a). Verbs that do not lexicalise a scale are referred to as nonscalar change verbs, as in (5b):

(5) a. scalar change verbs: *warm, cool, freeze, fall, rise...*b. nonscalar change verbs: *roll, exercise, scream, laugh, jog...*

There are two types of attributes, which give rise to two types of scalar change verbs:

(6) a. change-of-sate verbs (COS): *warm, cool, freeze, stretch...*b. Inherently directed motion verbs (IDM): *arrive, fall, rise, approach...*

In the COS domain, the relation to the standard correlates with the direction of change, i.e. with an increase or decrease in value of the attribute, such as 'We froze the ice cream solid' (Rappaport Hovav & Levin 2010: 29). In the domain of motion, as Rappaport Hovav and Levin (2010) note, a scale can be understood in regard to the dimension of distance, i.e. the distance of the moving object with respect to the reference object (Rappaport Hovav & Levin 2010: 29). For example, the points in the scale of *arrive* are ordered in a direction stretching from the reference object, i.e. the starting point of the departure and the event we are heading towards.

3. Lexicalisation constraint in Japanese

In Japanese, there are about five ways of building a lexical compound verb (c.f. Yumoto 1996, 2005, 2008). Essentially, manner uses as well as the result components co-exist, as illustrated in (7).

(7) a. Pair relation

kake-meguru 'run about'; hashiri-mawaru 'run about'

b. Means

tuki-otosu 'push-cause.fall'; naki-otosu 'cry-cause.fall'

c. Cause-effect

naki-harasu 'cry-cause.swell'; *obore-shinu* 'drown die'; *yake-shinu* 'burnt die' d. Accompanying state/manner

hai-yoru 'crawl towards'; koroge-otiru 'tumble-fall'

e. Complement relation

mi-nogasu 'overlook'; kaki-otosu 'forget to write'

The pair relation V-V is generally composed of [transitive V + unergative V]. This type of V-V comes to justify the manner/result complementary constraint. There are two ways of building the V-V, (a) V-V is composed by two components that denote a manner. *kakemeguru* 'run about' is an illustration of this type. The two morphemes *kakeru* 'run' and V2 *meguru* 'run' are non-scalar change morphemes and both are not bound, apparently receiving an equal semantic status. (b) V-V is composed by two components that denote a result, e.g. *warikiru* 'break-cut', *warisaku* 'break-split'. Crucially, in the two formations, V1 and V2 both function as the head (cf. Kageyama 1993, Fukushima 2005).

Means V-V is very productive and it contains three argument structure variations, as shown in Table 1. It appears that the compound is headed by V2. The first constituents express the means of the change of location or change of state carried out by V2s.

| Argument structure ¹ | Composition | Example |
|---|--|---|
| 1. tran.V + unacc.V | change of state + change of location | wake-iru, kiri-iru |
| 2. tran.V + unacc.V 3. tran.V + tran.V | action + change of location action + change of location | fuki-agaru, uchi-agaru oshi-susumeru, |
| 4. tran.V + tran.V | action + change of state | oshi-modosu naguri-korosu, oshi-tsubusu |

Table 1. Variation of argument structure and composition in Means V-V

Cause-effect V-V is considered the least productive type among lexical V-Vs. It contains the following different argument structure and composition methods:

| Table 2. Different argument | structures and | compositions in | n Cause-effect V-V |
|-----------------------------|----------------|-----------------|--------------------|
| | | | |

| Argument structure | Composition | Example |
|----------------------|---|------------------------------------|
| 1. unerg.V + unacc.V | action + change of state | naki-tsukareru, aruki-tsukareru |
| 2. unacc.V + unacc.V | change of location + change of location | koroge-ochiru, suberi-ochiru |
| 3. unacc.V + unacc.V | change of state + change of state | yase-kokeru, oshi-yoseru |
| 4. unacc.V + unacc.V | change of state + change of location | koori-tsuku, yake-ochiru |

¹ tran: transitive, unacc: unaccusative, unerg: unergative

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As seen from Table 2, V1 denotes the cause or designates the path of motion/COS and can be conveyed by either an agentive or a non-agentive verb, e.g. *aruku* 'walk', *korogeru* 'tumble'. V2s contribute to the change of location or change of state and usually entail a destination of a motion or an endpoint of a motion or COS event, e.g. *ochiru* 'fall', *tsuku* 'stick to', which, in light of scalar structure, would be regarded as closed-scale morphemes.

The accompanying state/manner V-V contains the following argument structure:

| Argument structure | Composition | Example |
|--------------------|--------------------------------------|-------------------------|
| uner.V + uner.V | agentive motion + change of location | tobi-agaru, tachi-agaru |

| Table 3. | Variation of a | gument structure a | nd composition | n in Manner V-V |
|----------|----------------|--------------------|----------------|-----------------|
|----------|----------------|--------------------|----------------|-----------------|

V1s entail a figurative sense, describing how quick the action *agaru* 'ascend' or *noboru* 'climb' is. In this sense, V1s behave like modifiers and the motion paths are lexicalised into the second constituents, which should be considered the head.

Complement relation V-Vs, as Yumoto (1996) and Matsumoto (1996) argue, are composed by a cause component with a result component. The second constituent, which indicates the change of state, is usually denoted by a transitive verb or an accusative verb. Moreover, V2s seem to have received affixation. Thus, the whole compound is related to a metaphorical reading, e.g. *mi-nogasu* 'overlook', *hohoemi-kaesu* 'smile back', *seme-kakeru* 'attack'. In addition, apart from the accusative case, complement relation V-Vs are also likely to take a dative case, as can be seen from *kare ni hohoemi-kaesu* 'smile back at him' and *teki ni seme-kakeru* 'attack the enemy'.

With this in place, we can pause and draw a preliminary conclusion: the manner/result in complementary constraint does not seem to apply to Japanese. In most verb compounds, both manner and result are pretty well encoded. Verb compounds along with the lexicalisation constraint are given in Table 4.

| Verb compounds | Encoding component | Lexical | isation Constraint | |
|-----------------------|------------------------|-----------|--------------------|--|
| 1. Means V-V | | | | |
| (a). tran.V + unacc.V | both manner an | nd result | not applied | |
| (b). tran.V + unacc.V | both manner an | nd result | not applied | |
| (c). tran.V + tran.V | both manner and result | lt | not applied | |
| (d). tran.V + tran.V | both manner an | nd result | not applied | |

Table 4. Verb compounds along with the lexicalisation constraint

| 2. Cause-effect V-V | | |
|------------------------|------------------------|-------------|
| (a). unerg.V + unacc.V | both manner and result | not applied |
| (b). unacc.V + unacc.V | both manner and result | not applied |
| (c). unacc.V + unacc.V | both manner and result | not applied |
| (d). unacc.V + unacc.V | both manner and result | not applied |
| 3. Manner V-V | | |
| uner.V + uner.V | manner | applied |
| | | |

4. Lexicalisation constraint in Chinese

As touched upon in Section 1, manner/result appear to manifest itself in compounds in Chinese. In order to answer the question of whether the manner/result complementary constraint applies to Chinese, this section first looks into the types of verb compounds and then moves on to the distribution of the two components of V-Vs.

4.1 Types of verb compounds in Chinese

According to Kageyama (1996), verbs are divided into two types: transitive and intransitive. Intransitive verbs can be further classified into unergative verbs, which represent an act or action, and ergative verbs or unaccusative verbs, which represent [change + resultative state]. From a semantic viewpoint, an ergative verb is a kind of verb that represents the change of an object in terms of its own property. With the change of the causer, it can also be used as a transitive verb. On the other hand, an unaccusative verb is not affected by external force, but instead represents events or states that occur naturally and, hence, it is acceptable as a transitive verb. The argument structures of these verbs are described in (8):

| (8) | a. Transitive verb: (x, y) | (external argument, internal argument) |
|-----|------------------------------|--|
| | b. unergative verb: (x) | (external argument) |
| | c. ergative verb: (y) | (internal argument) |
| | d. unaccusative verb: (y) | (internal argument) |
| | | Kageyama (1996) |
| | | |

In light of this argument structure, this paper suggests that Chinese verb compounds fall into two groups, i.e. lexical V-V and syntactic V-V. The lexical class includes pair relations and predicate-object types. The syntactic class has the following subtypes: predicate-complement V-V, modifier-predicate V-V and subject-predicate V-V. The classifications are illustrated in (9) and (10):

```
(9) Lexically-formed group

a. Pair relation V-V
[unergative + unergative]
bēn-păo 'run-run'
b. Predicate-Object V-V
[transitive + N ]
chōng-diàn 'charge'
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(10) Syntacticly-derived group

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a. Predicate-Complement V-V
(i) [transitive + unergative] (subject-oriented)
kàn-lèi 'watch-tired'
(ii) [unergative + unaccusative] (object-oriented)
kū-shī 'cry-wet'
(iii) [transitive + unacsusative] (object-oriented)
tuī-kaī 'push-open'
(iv) [unergative + unaccusative] (subject-oriented)
kū-lèi 'cry-tired'
b. Modifier-Predicate V-V
hé-chàng 'together-sing'
c. Subject-Predicate V-V
tóu-téng 'head-pain'
```

The lexical V-Vs class seems to add a syllabic filter to the derivation, as most of them entail bisyllables. Moreover, lexical V-Vs appear to be highly lexicalised and hence probably requires a certain idiomatic reading. On the other hand, it occurs that the syntactic V-V class has fewer phonological restrictions.

4.2 Lexicalisation in Chinese verb compounds

In light of the classification of verb compounds, we are now in a position to find out whether manner/result compementarity applies to Chinese. (9a), i.e. Pair relation V-V, and (10a), i.e. Predicate-Complement V-V and (10b), i.e. Modifier-Predicate V-V will be the primary focus; (9b), i.e. Predicate-Object V-V and (10c), i.e. Subject-Predicate V-V will not be tackled.

Our starting point is the lexical compound, which is represented by pair relation and is illustrated in $b\bar{e}n$ -pǎo 'run-run', as in (11):

(11) Zhāng sān zài bēn păo.Zhāng sān PROG run-run'Zhāng sān is running.'

The pair relation type of compound is composed by two non-scalar change motion morphemes, i.e. V1 *ben* 'run' and V2 *păo* 'run'. The two morphemes have the same meaning and scalar properties. They are considered to be a synonymous lexicon. The events represented by V1 and V2 are classified as the same categories (i.e. both of them are motion events). Moreover, phonologically, such compounds usually appear to be bisyllabic words. Therefore, syntactically, semantically and phonologically, the two motion morphemes are equipollent. Given this, we consider the 'Non-scalar change motion morphemes' pattern of motion events perform equipollent framing. Other examples displaying this strategy include *fei-xiáng* 'fly-fly'.

Moving on to syntactic compounds. We begin with the predicate-complement V-V. This type of V-V is composed of a resultative complement to a verb V1. Two ways of building are found: (i) [unergative V + adjective] (12a); and (ii) [transitive V + unaccusative V] (12b):

(12) a. [unergative V + Adjective] kū-shī 'cry-wet'
b. [transitive V + Adj]

dă-pò 'hit-broken'

The action verb, i.e. V1 does not imply an accomplishment or an achievement. The second constituents play the role of resultative complements, expressing a state or the result of an action. To note, the category of the complements is debatable; Li and Thompson et al. (1981) regard them as adjectives but, for Palmer (2005), they are argued to be stative verbs. Despite such debate, there is no doubt that this verbal weakening is a typical manifestation of grammaticalisation and, hence, these complements should be considered to be satellites rather than substantive verbs.

This is backed up by the 'scalar structure' perspective. V2s can be open-scale adjective predicates (APs) (e.g. $h \check{a} o$ 'good') or closed-scale APs ($m \check{a} n$ 'full'; $g u \bar{a} n g$, 'over'). A variety of such V2s are allowed by V1 and crucially these Vs are not able to occur by themselves. In this regard, we can assume that it is the first constituent that determines the transitivity of the whole and thus it should be viewed as the head. The resultative (V2) should be considered as being framed outside the verb roots.

Now, we come to modifier-head type. This type of V-V is headed by V2. The former event represented by V1 plays roles of explanation, description and restriction on the latter event represented by V2, as illustrated in (13):

(13) Zhāngsān bèi Lĭsì zhuī shā. Zhāngsān PASS Lĭsì chase-kill ' Zhāngsān is chased by Lĭsì and Lĭsì intends to kill him.'

The compound exhibits two events, i.e. a motion event denoted by the former constituent and a change-of-state event rendered by the latter constituent. The two morphemes are not bound and both are atelic. Essentially, this type of V-Vs only lexicalise manner. As seen in (13), the result meaning drops out, as V1 *zhuī*, 'chase' is a modifier, describing the manner of the action, carried by V2 *shā*, 'kill'. Other examples include *hé-chàng* 'together-sing', etc.

To sum up briefly, the Chinese verb compounds obviously can serve as counterexamples to the 'manner/result complementary constraint'. However, the application of the constraint varies according to the types of V-Vs. In pair relation V-V, the two constituents are assigned to an equal syntactic, morphological and semantic status; essentially only manner meaning is conveyed. In this sense, the lexicalisation constraint appears to apply to pair relation V-V. In predicate-complement V-V, both manner and result are lexicalised, i.e. V1 encodes the manner and V2 denotes the result. As a result, the lexicalisation constraint fails to apply. Finally modifier-predicate V-V seems to only encode the manner meaning, which comes to justify the lexicalisation constraint. Verb compounds along with the lexicalisation constraint are given in Table 5.

| Verb compounds | Encoding component | Lexicalisation Constraint |
|-----------------------------------|------------------------|---------------------------|
| 1. Pair relation V-V | manner | applied |
| 2. Predicate-Complement V-V | | |
| (i) [transitive + unergative] | both manner and result | not applied |
| (ii) [unergative + unaccusative] | both manner and result | not applied |
| (iii) [transitive + unacsusative] | both manner and result | not applied |
| (iv) [unergative + unaccusative] | both manner and result | not applied |
| 3. Modifier-Predicate V-V | manner | applied |

| Table 5. Verb co | mpounds along | with the | lexicalisation | constraint |
|------------------|---------------|----------|----------------|------------|
| | | | | |

5. Conclusion

This paper brings data of verb compounds (V-Vs) from Japanese and Chinese, in an effort to uncover two issues: (a) whether the manner/result in complementary constraint applies to the languages that contain compound verbs; (b) how complex it can be to build compound verb. The finding reveals that manner and result are well encoded in most Japanese verb compounds, which gives rise to the assumption that the complementary constraint is not applicable to Japanese. In Chinese, the application of manner/result complementarity varies according to the types of V-V. In pair relation V-V, only manner meaning is conveyed. In predicate-complement V-V, both manner and result are lexicalised, with V1 encoding the manner and V2 denoting the result. Modifier-predicate V-V appears to only convey the manner. The conclusion emerging from the differing applications in the languages is that the manner/result complementary constraint does not apply to the languages that extensively employ verb compounds.

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SURVEY ARTICLES

THE SPREAD OF 'HEAVENLY WRITING'

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Abstract

Cuneiform is the name of various writing systems in use throughout the Middle East from the end of the fourth millennium BCE until the late first century CE. The wedge-shaped writing was used to write ten to fifteen languages from various language families: Sumerian, Elamite, Eblaite, Old Assyrian, Old Babylonian and other Akkadian dialects, Proto-Hattic, Hittite, Luwian, Palaic, Hurrian, Urartian, Ugaritic, Old Persian etc. Over the centuries it evolved from a pictographic to a syllabographic writing system and eventually became an alphabetic script, but most languages used a 'mixed orthography' which combined ideographic and phonetic elements, and required a rebus principle of reading.

Keywords: cuneiform; writing; history of writing; writing in Mesopotamia

Povzetek

Izraz klinopis se uporablja za poimenovanje različnih načinov pisanja, ki so se uporabljali v Mezopotamiji in na Bližnjem vzhodu od konca četrtega tisočletja pr. n. š. do druge polovice prvega stoletja n. š. Pisava, katere osnovni element po obliki spominja na klin, je služila za zapisovanje do petnajst jezikov iz različnih jezikovnih družin: sumerščine, elamščine, eblanščine, stare asirščine, stare babilonščine in drugih akadijskih dialektov, protohatijščine, hetitščine, luvijščine, palajščine, huritščine, urartijščine, ugaritščine, stare perzijščine itd. V teku stoletij se je iz podobopisa razvila v zlogovno in nazadnje v glasovno pisavo, vendar jo je večina jezikov uporabljala tako, da so se v njej izmenoma pojavljali ideografski in fonetičnimi elementi. Branje take pisave je bilo podobno reševanju rebusov.

Keywords: klinopis; pisava; vrste pisav; razvoj pisave; pisava v Mezopotamiji

1. Introduction

Cuneiform—or 'Heavenly Writing' as this writing system is also called—represents one of the earliest and most influential writing systems of the world. Today, it is generally assumed that it was created by the Sumerians, but since the most archaic tablets written in so-called 'proto-cuneiform' are not yet deciphered, we may eventually need to revise our views about its origin.

According to the Mesopotamian mythology the origin of cuneiform writing is related to divination. The goddess of writing and knowledge Nisaba, a lady 'coloured like the stars of heaven' was given a lapis-lazuli tablet by Enki, the god of wisdom and magic. The holy tablet was marked with the stars of heaven and Nisaba was to consult the cosmic constellations just as scholars from her House of Wisdom, i.e. the scribal school, were to consult the clay tablets written with star-shaped signs. A starry sky indeed does resemble a cuneiform tablet as shown by Fig. 1 and 2. Some scribes in Mesopotamia were skilled in reading prophetic signs in the heaven, therefore the name 'Heavenly Writing' for cuneiform is not without any justification.



Figure 1: An Old Persian foundation plaque (http://tiny.cc/ihvtgx)



Figure 2: The star (MUL) sign

The word 'cuneiform' literally means 'wedge-shaped', since the wedge (Latin *cuneus*) is one of the two basic elements combined into complex signs (Fig. 3); the other element being the so-called 'Winkelhaken' (Fig. 4) which lacks an adequate English translation.

| Figure 3: A horizontal w | edge |
|--------------------------|------|
| | |
| | |

Figure 4: A 'Winkelhaken'

Cuneiform signs could be carved into stone and metal, or impressed with a reed stylus into soft clay or the waxed surface of a writing board; there is even some evidence that they were written on parchment and leather (Radner & Robson, 2011, p. 2). Some signs were relatively simple, while others required dozens of impressions as shown by Fig. 5, 6 and 7:

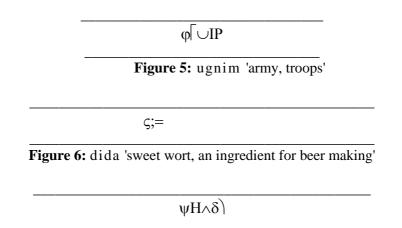


Figure 7: ĝizzal 'wisdom; understanding; ear; hearing'

Cuneiform was in use throughout the Middle East from the end of the fourth millennium BCE until the late first century CE. It served to write the various languages and dialects listed in Table 1. The table also indicates the language family for each language, the geographical region in which it was spoken, and the approximate period of its attestation:

Table 1: List of languages using cuneiform

| Language | Language family | Geographical area | Period of attestation |
|--------------|---------------------|-------------------------------|-----------------------------|
| Sumerian | language isolate | Mesopotamia | 4th millennium BCE-? |
| Elamite | language isolate | western, southwestern Iran | 23rd-4th centuries BCE |
| Eblaite | Semitic | northern Syria | 25th- 23rd centuries BCE |
| Old Akkadian | Semitic | Syria, Mesoptamia, Iran | 24th-20th centuries BCE |

| Old, Middle, Neo-Assyrian | Semitic | Anatolia, northern Mesopotamia, <i>lingua franca</i> | 20th-7th centuries BCE |
|---|--------------------|---|----------------------------------|
| Old, Middle, Neo-, Late- Babylonian | Semitic | Anatolia, Syria, central and southern Mesopotamia, Egypt, <i>lingua franca</i> | 20th c. BCE-1st c. AD |
| Ugaritic | Semitic | northern Syria | 14th–12th centuries BCE |
| Hattic | unclassified | Anatolia | 2nd millennium BCE |
| Hurrian | Hurro- Urartian | Anatolia, northern Syria, Mesopotamia, Egypt | late 3rd-late 2nd millennium BCE |
| Urartian | Hurro- Urartian | northern Mesopotamia | 9th-6th centuries BCE |
| Hittite | Indo- European | Anatolia | 2nd millennium BCE |
| Luwian | Indo- European | Anatolia | 2nd millennium BCE |
| Palaic | Indo- European | Anatolia | 2nd millennium BCE |
| Old Persian | Indo- European | north-, southwestern Iran | 6th-4th centuries BCE |

Cuneiform was used as either the only, or one of a number of writing systems for the languages listed above. In addition, there exist some cuneiform inscriptions containing names and technical terms in languages that did not regularly use cuneiform, such as Gutian, Amorite, and Kassite. The cuneiform systems used for individual languages vary considerably and do not always continue the original Mesopotamian cuneiform tradition as will be discussed in more detail below.

2. Early stages

In Mesopotamia, the earliest stage in the development of writing is represented by clay accounting tokens (Fig. 8).



Figure 8: Clay tokens (http://tiny.cc/ihvtgx)

Clay tokens were followed by an archaic script called 'proto-cuneiform'. This script had no direct relation to language. It consisted of about 1500 pictograms (Damerow, 1999, p. 11) which served to record objects and quantities as shown in Fig. 9. The deep impressions which can be seen in this figure represent numerical signs. At this stage in the development of cuneiform, the non-numerical signs were not yet impressed, instead they were incised into the soft clay, therefore they are less clearly visible than the numerical signs. They could also be curvilinear in shape as shown by Fig. 10.



Figure 9: A proto-cuneiform tablet (http://tiny.cc/ihvtgx)

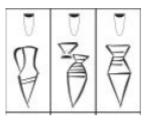


Figure 10: Some proto-cuneiform vessel signs (adapted from http://tiny.cc/eovtgx)

In the course of time, impressing replaced incising and both the straight and the curved lines turned into wedges. The script started to flow horizontally from left to right instead of being written inside boxes as in the earliest written records, and the orientation of signs rotated 90 degrees counter clockwise. As a consequence, cuneiform lost its pictographic character and the signs became abstract in appearance as shown by Fig. 11:

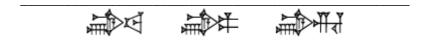


Figure 11: Some types of vessels (^{dug}ba, ^{dug}banmin, ^{dug}dal)

Sometime around 3000 BCE Sumerian scribes adapted cuneiform to also write grammatical elements, names, and notions that could not be represented by pictures, i.e. they started to use the available logographic signs to represent the sounds—both syllables and phonemes—associated with them on the basis of acrophony. The signs which at this stage might already have had more than one logographic value, became polyvalent in yet another sense of the word: they could be used as either ideograms or as phonetic signs, and when used as phonetic signs, they could represent several different syllables. The syllabaries of individual languages usually included hundreds of signs. The fact that most signs had several values is illustrated below in Fig. 12 by a sign taken from the Hittite syllabary which has 22 or—including the different meanings of its Sumerian readings—26 values. Making sense out of a text written in cuneiform could therefore hardly be considered a trivial matter.

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Hittite *pát*, *pád*, *pít*, *píd*, *pé*, *pì*, (*mút*, *múd*), Akkadian also *bad*, *bat*, *baţ*, *be*, *bi*₄, *mid*, *mit*, *miţ*, Sumerian BAD 'when, as', 'master, lord', 'to depart,' BE 'master, lord', SUMUN 'old', SUN 'old', TIL 'complete', 'to close, to run out', ÙŠ 'to die', 'death, plague, annihilation'

Figure 12: Polyvalency of cuneiform signs.

As a consequence of the polyvalency of cuneiform signs, most cuneiform languages used a kind of 'mixed orthography'. This kind of orthography requires a rebus principle of reading which turned the decipherment of cuneiform in the middle of the nineteenth century into an adventure story (Friedrich, 1957, pp. 29-86). This orthography combines the ideographic and phonetic values of signs, therefore the reader is constantly expected to make selections among various values of a sign to adapt its reading to the context. Transliterated texts which use this orthography look awkward due to the fact that the value of a sign is indicated by the selection of a character style. The following Hittite sentence is for instance composed of a phonetically written Hittite and Akkadian word (Hittite *a-ki* 'he/she dies', 'Akkadian' *I-NA* 'in'), two numerals (one representing the number 16 and one serving as a symbol of the Moon-god (XXX), a logogram (UD 'day'), a Sumerian suffix (KAM), a determinative or semantic classifier preceding the names of the deity (^d), and a phonetic complement specifying the case (*-aš*):

I-NA UD.16.KAM dXXX-aš a-ki

'on the 16th day the moon dies'

In this transliteration, lower case letters represent Hittite, italic capitals represent Akkadian, and plain capitals represent Sumerian elements.¹ Writing above the normal line indicates that a logogram is used as a determinative. The Hittites probably read the entire sentence in Hittite, even if parts of it were written in Akkadian and parts in Sumerian.

In Mesopotamia, Sumerian was in contact with Akkadian from at least the end of the 4th millennium BCE. The earliest cuneiform texts in Semitic found in the vicinity of the ancient Nippur in southern Mesopotamia go back to the mid-3rd millennium BCE. From there, cuneiform spread to Semitic and Hurrian language areas in the north-west of Mesopotamia and soon reached Ebla and the Khabur region in northern Syria. In the east, cuneiform was adopted by the non-Semitic Elamites and reached as far as the Zagros mountains in the modern-day Iran (Walker, 1990, pp. 50-58; Cooper, 2010, p. 328). Early in the 2nd millennium BCE Old Assyrian traders brought cuneiform to Anatolia, but the writing system which was attested a few centuries later in the Hittite state archives at Hattuša (central Anatolia) is not that of the Old Assyrian colonies. The question of exactly when and how cuneiform was adopted by the Hittites needs further investigation, but there is a good evidence that various neighbouring cultures had a strong hold on the scribal practice in Hattuša, and that changes in

¹ In Hittite, a Sumerian ideogram can combine with an Akkadian and a Hittite phonetic sign even within the confines of a single word, for instance DINGIR-LIM-ni 'for the god'.

paleography were motivated by changes in ideology (Weeden, 2011, p. 603; Waal, 2012; Gordin, 2014).

In the process of adapting cuneiform to write languages for which it was not originally designed, the number of signs gradually reduced.² Scribes were forced to make selections from extant signs and change their form and phonetic value. The sign shapes usually underwent simplifications as shown by Fig. 13. However, there were also periods of deliberate archaizing when scribes tended to return to earlier sign forms even if they were more complicated to write and read (Walker, 1990, p. 30), and there were puzzling changes suggesting that politics, administration, and orthography were already linked with each other in the Stone Age, as recently pointed out by Veldhuis (2012).



Figure 13: Gradual simplification of the sign TAG₄/TAK₄ in the Hittite syllabary ³

Old Persian and Ugaritic cuneiform scripts did not continue the Mesopotamian tradition, but were cuneiform in appearance. The Old Persian syllabary had no more than 36 phonetic signs, 8 logograms and 23 numerals which were—apart from a single sign—unrelated to any other cuneiform system (Schmitt, 1993). The cuneiform texts from Ugarit were written in a Semitic-style consonantal alphabet (Dietrich & Loretz, 1999).

The spread of cuneiform writing went hand in hand with the spread of cuneiform culture and religion. In scribal schools Sumerian remained the language of instruction long after it dropped out of use as a spoken language. The standard cuneiform copy books used for scribal education in Mesopotamia included old Sumerian and later on Akkadian compositions which served as models for royal inscriptions, legal and administrative documents, official correspondance, omen compendia, myths, rituals, literary compositions, scholarly texts and other genres known to us from ancient Middle Eastern archives. However, towards the middle of the 1st millennium BCE Akkadian cultural dominance over the Middle East started to decline. The use of cuneiform became more and more restricted, but it survived as long as Babylonian temples remained in use in Babylonia (Geller, 2009). In the State Archives in Assyria, there is a letter of king Sargon II to one of his magnates named Sîn-iddina of Ur who

² Inventories of cuneiform signs usually include a few hundred signs. Old Assyrian used only about 130 signs.

³ Rüster & Neu 1989: 206, No 227.

asked the king to let him write in Aramaic. Sargon's response to this question reads as follows:

'Why can you not write a letter to me in Akkadian style? Be sure that the document you write is like this one [i.e. in cuneiform]. It is the custom. Let it remain so!' (George, 2007, p. 59)

This letter is dated to the late 8th century BCE. About a century later, king Ashurbanipal who made history by the amazing wealth of his library prided himself on being able to read complicated cuneiform texts, 'whose Sumerian is obscure and whose Akkadian is hard to figure out' (Cooper, 2010, pp. 327f.), but other kings in the ancient Middle East were less prone to tradition and let the consonantal Aramaic script eventually replace the old-fashioned cuneiform. 'The last wedge'⁴ was presumably written in 75 AD.

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⁴ This was the title of the inaugural lecture and a paper of M. J. Geller discussing the survival of cuneiform up until the 3rd century AD (Geller 2009).

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