Binomials and Multinomials in Two Recent English Versions of the *Lotus Sutra* and their Chinese Source Text

Inaugural-Dissertation
zur Erlangung des Doktorgrades der Philosophie
der Ludwig-Maximilians-Universität München

vorgelegt von

Qian Zhao

aus

Hebei, China

2025

Referentin: Prof. Dr. Ursula Lenker

Korreferent: Prof. Dr. Hans van Ess

Tag der mündlichen Prüfung: 12.02.2025

Preface

The journey of this study dates back to 14th February 2019, when I received an email from the late Prof. Dr. Hans Sauer. It was the first time we discussed the topic of binomials and multinomials. Shortly afterwards, we met in person at my alma mater, Beijing Language and Culture University, where he was on a brief academic visit with his wife.

Then came the pandemic. Despite the uncertainties of those times, we remained in close contact through emails and posts until my eventual arrival in Munich in July 2021. Prof. Sauer's care never faltered; he guided my dissertation with dedication and assisted me to adjust to a new life in Germany, supporting me with great warmth until the final days before his deeply saddening passing in May 2022. He is the one who changed the course of my life, and for that, I owe him my profound and lasting gratitude. May he take pride in the completion of this work, wherever he may now rest in peace.

My equally heartfelt thanks go to Prof. Dr. Ursula Lenker, who graciously took me under her wing following Prof. Sauer's sudden passing. She kindly welcomed me into the department's Research Colloquium and has since provided unwavering patience, academic rigour, and consistently thoughtful guidance. Her clear, constructive and inspiring feedback on my writings and in response to my questions greatly deepened my understanding of the topic at every stage. This dissertation would not be what it is without her strong and enduring support.

I am also sincerely grateful to my second supervisor, Prof. Dr. Hans van Ess, for his consistently prompt and generous responses to my questions and requests. My thanks extend as well to Prof. Dr. Gabriele Waxenberger, who first introduced me to Prof. Sauer and, almost exactly six years later, attended my oral examination with incisive suggestions.

I am especially thankful to my dearest cousin Liu Qi, for her steadfast belief in me, her abiding love, and her constant presence during my vulnerable moments; to Zhang Shujiao and Tong Jinqi, whose friendship I was fortunate to gain in Munich, and which remains a treasure I will always cherish; and to Scott

Smith, who has stood by me since we first met in Baoding, and who proofread the draft of this dissertation with careful attention and professionalism.

Warmest appreciation also goes to Mrs. Gabriele Sauer, who has continued to offer me the same kindness and encouragement that Prof. Sauer once gave; to Melanie Sprau, who shared the many ups and downs of dissertation writing and accompanied me until its completion; to Song Yichen, who encouraged me to embrace new possibilities in life; and to Xu Haochen, whose steady friendship has been a constant support for over a decade.

I also wish to thank Prof. Du Biao, who saw potential in me and encouraged me to pursue an academic path since my undergraduate years; and to my parents, who always love me even when they do not understand all of my decisions.

The many days and nights spent with binomials and multinomials have been marked by tears and laughter; through it all, I thank myself for holding on.

Hereby, I submit this dissertation to Ludwig-Maximilians-Universität München.

Table of Contents

Abbreviations

Corpora and Dictionaries	
BNC	British National Corpus
CBETA	Chinese Buddhist Electronic Text Association
COCA	Corpus of Contemporary American English
COHA	Corpus of Historical American English
OED	Oxford English Dictionary
Terminologies	
AdvP	Adverb Phrase
AlSoE	SoE aligned with the ST
AP	Adjective Phrase
MWE	Multi-Word Expression
NP	Noun Phrase
PP	Prepositional Phrase
RevSoE	SoE reversed from the ST
SL	Source Language
ST	Source Text
SoE	Sequence of Elements
TL	Target Language
TT	Target Text
TTR	Type-Token Ratio
VP	Verb Phrase

Chapter 1 Introduction

In many languages, coordinated constructions formed with pairs of words can be found, such as *day and night* in English, *ab und zu* 'now and then' in German, and 天地 (*tiān dì* 'sky [and] earth') in Chinese. Linguists study these constructions using various terminologies and definitions, including 'word pairs', 'coordinates', and 'freezes'. Malkiel (1959) first introduced the term 'binomials'[1], drawing upon mathematical terminology, as an inclusive name for such structures, and 'multinomials' for those with three or more components. The term 'binomial' is included in the *Oxford English Dictionary* (OED) with the definition in the field of Philology as "An expression consisting of two words of the same form-class" (s.v. "binomial, n.3" *OED online*. 02 April 2024).

Throughout history, many scholars have noted the use of binomials as a stylistic device in English. For example, Koskenniemi highlights the "rich and varied use of this device, both in poetry and prose" during the Late Old English and Early Middle English periods (1968: 11–12). Mueller suggests that 'word pairs' are particularly "pervasive" in fourteenth- and fifteenth-century prose (1984: 147), and Katami observes that Middle English mystic writers employed binomials to "convey theological and philosophical complexities with clarity and emphasis" (2009: 188). Numerous studies have examined binomials in the works of medieval authors', with Chaucer and his use of binomials being a subject of intense academic interest.

In the case of Modern English, a diachronic study by Mollin (2017) on the frequency of English binomials in written American English, using data from the Corpus of Historical American English (COHA), reveals a decline from seventy-two tokens per 10,000 words in the 1810s to seventy tokens per 10,000 words in the 2000s (2017: 283). However, using data from Google Books n-grams, Mollin finds a highly significant increase in the use of binomials from the early

[1] Note the distinction between the terms 'binomial' and 'binominal'. The latter is used in contexts of 'Binominal Noun Phrases', which involve two nominals in a Subject-Predicate relationship linked by the preposition 'of', such as *a hell of a day* and *a wonder of a day* (see research by Aarts 1998, Masini 2015, Wolde 2023, etc.).

seventeenth century to the present day (2017: 284). Furthermore, a search for constructions of binomials using the four search strings 'NOUN and NOUN', 'ADJ and ADJ', 'VERB and VERB', and 'ADV and ADV'[2] in the Corpus of Contemporary American English (COCA) (Davies 2008–) indicates a total frequency of 1,574 per million words. This frequency is considerably higher than what previous researchers, such as Buerki (2016: 22), defined as 'frequent' expressions, which are those occurring at least twice per million words, suggesting that binomials remain a notable phenomenon in Modern English, warranting further investigation.

However, research involving binomials as well as multinomials still faces imbalances. Firstly, unlike the descriptive studies in historical linguistics, research on binomials in modern English primarily focuses primarily on the sequencing of the two words in these constructions, and other linguistic features of binomials are not extensively described, resulting in a lack of comprehensive analysis. Secondly, multinomials have been largely overlooked compared to the comprehensive findings on binomials throughout English language history. Some scholars regard multinomials as "extended versions of binomials" (Kopaczyk 2013: 75), but studies on them are confined to certain registers, particularly legal documents, necessitating more investigation in other text types. Thirdly, previous studies on binomials and multinomials have usually been conducted within a single language system. Given their existence across different languages, a comparative study using a bilingual parallel database of binomials and multinomials could provide further insight into their universal traits and, in particular, their distinct characteristics in English.

In light of this, the current study endeavours to mend these imbalances by providing a comprehensive linguistic description of both binomials and multinomials used in two English translation works, gaining insights into their

[2] It is questionable whether binomials equate to the sum of the four groups; this issue will be discussed in detail within the topic of definition in Chapter 4. However, for now, it is reasonable to assume a significant overlap, and the results can thus be considered valid. Mollin uses the same search strings in her aforementioned research as well (2017: 283).

characteristics through a comparative study with another language system. To achieve this aim, a Modern English text containing a large number of binomials and multinomials, with references from another language, is required. Based on these criteria, the Modern English translations of a Chinese Buddhist classic the *Lotus Sutra* are chosen as the texts under analysis[3]. This study, then, aspires to contribute to the understanding of binomials and multinomials in Modern English, particularly within the context of translated religious texts, and to offer insights that may inform future studies in both English linguistics and translation studies.

[3] The research value in linguistic studies of English translations of the *Lotus Sutra*, particularly regarding the richness in the use of binomials, was first highlighted by Sauer (2017c). Sauer's initial research, which focused on binomials collected from the first chapter, have provided significant inspiration for the present study.

Chapter 2 Aims, works under study, methodology and structure

2.1 Aims, approaches and research areas

As mentioned in the introductory chapter, the primary aim of this study is to investigate the linguistic characteristics of binomials and multinomials used in the selected texts – the English translations of the *Lotus Sutra* from Chinese. Specifically, this study conducts a comparative analysis in the variation in usage from three dimensions: within a single translation, between different translations, and between the source text and target text.

For the description of the binomials and multinomials in English, a structuralist approach is utilised to examine their linguistic features, in accordance with the analytical framework provided by Sauer (2017c). It also explores the intra-translator and inter-translator variation and identifies the translation techniques employed to render these constructions from Chinese into English. To examine the motivations influencing the use of English binomials and multinomials, statistical measures are used to quantify the influence on the formation of these phrasal constructions. The major approach in this study is frequency-based, drawing qualitative conclusions from quantitative results, particularly the frequency of occurrences of the binomials and multinomials in the works under study.

This study focuses on phraseology in English linguistics, specifically the multi-word lexical expressions of binomials and multinomials. It also extends to translation studies through comparative analysis between source and target texts. Instead of examining the grammatical features of binomials and multinomials in Chinese, this study uses them solely as semantic references to highlight the distinctive features of their English translations. In other words, this study does not encompass a detailed investigation into the field of Chinese linguistics.

Although this dissertation intends to provide a comprehensive linguistic study of binomials and multinomials in the selected works, it does not seek to represent these constructs in Modern English comprehensively. Instead, it is confined to a specific genre – works of translation – and a specific context –

Buddhist religious texts. By maintaining this focus, the study attempts to contribute to the understanding of binomials and multinomials in Modern English, particularly within the context of translated religious texts, and to offer insights that may inform future studies in both English linguistics and translation studies.

2.2 Works under study

2.2.1 The *Lotus Sutra* and its Chinese translations

The *Saddharmapuṇḍarīkasūtra* 'Sutra of the White Lotus of the True Dharma', commonly referred to in English as the *Lotus Sutra*, is one of the most influential scriptures in Mahayana Buddhism and is highly revered among Buddhists. The sutra is said to encapsulate the final teachings of Buddha and "satisfies both the simple soul of piety as well as the profound reflections of the philosopher" (Lai 1987: 84). It has inspired a range of devotional practices in Buddhism and has become the source of several new Buddhist schools in East Asia, such as the *Tiantai* School in China. After spreading to Japan, it became the foundation for the central doctrines of the *Tendaishu* (the Japanese form of *Tiantai* School), the *Taimitsu* (the tantric form of *Tendai*), as well as the *Nichiren* schools (s.v. "Saddharmapundarīka" *The Princeton Dictionary of Buddhism*, p.730). Its influence and following remain strong even today.

The *Lotus Sutra* is believed to be "had been transmitted originally, if not in pure Middle Indie, in a Middle Indic-cum-Sanskrit which contained many Middle Indie forms including those of an Eastern dialect" (Karashima 2001b: 223). Apart from a few fragments, the earliest surviving Sanskrit manuscripts date back only to the 5th century, with most originating after the 11th century (Karashima 2016: 14). In contrast, as Mahayana Buddhism spread across East Asia, the *Lotus Sutra* began to be translated into Chinese by various translators as early as the 3rd century. These Chinese translations have been highly esteemed since their initial publication and have been continually copied and reprinted throughout history, thereby ensuring their preservation to the present day. This longevity and

transmission history make the Chinese translations of the *Lotus Sutra* exceptionally valuable for both philological and Buddhist studies.

There are three existing Chinese translations of the *Lotus Sutra*, all included in the Chinese Buddhist canon *Taishō Tripiṭaka* in Volume T09a, *Fa Hua Bu*, as listed in the following table in chronological order of their completion.

Title	*Taisho* No.	Translator(s)	Year of completion
正法華經 (*zhèng fǎ huá jīng* 'Proper Lotus Sutra')	T.0263	Dharmarakṣa 竺法護	286 CE
妙法蓮華經 (*miào fǎ lián huá jīng* 'Wonderful Dharma Lotus Sutra')	T.0262	Kumārajīva 鳩摩羅什	406 CE
添品妙法蓮華經 (*tiān pǐn miào fǎ lián huá jīng* 'Supplemented Wonderful Dharma Lotus Sutra')	T.0264	Jñānagupta 闍那崛多 and Dharmagupta 達摩岌多	601 CE

Table 2.2.1 Existing Chinese translations of the *Lotus Sutra*

Among the three translations, the version by Kumārajīva garnered the most recognition and popularity.

Kumārajīva was not only a distinguished Buddhist monk, but was also one of the foremost translators of Buddhist scriptures into Chinese. He completed enduring Chinese renditions of approximately seventy-four Buddhist texts, covering 384 rolls and including various sutras, such as the *Vájracchedikāprajñāpāramitāsūtra* 'The Diamond Sutra', and important *śāstras* such as *Mūlamadhyamakakārikā* 'Fundamental Verses on the Middle Way' (s.v. "Kumārajīva" *The Princeton Dictionary of Buddhism*, p. 452). Due to his deep understanding of Buddhist doctrines and linguistic expertise, Kumārajīva's translation of the *Lotus Sutra* remained faithful to the source texts and was readily understandable in Chinese, elevating his version to a preeminent position, a status it has maintained ever since his own time. For example, during the *Tang* Dynasty

(618 – 907 CE), *Shi Dao Xuan* commented in his preface to Kumārajīva's version of the *Lotus Sutra* during a reprint stating, "The prevailing version widely revered was by Master *Qin*"[4] (CBETA 2024.R1, T09, no. 262, p. 1b23). In another reprint in the year 1420, the preface reaffirmed the esteemed status of Kumārajīva's translation: "Although the texts of the three sutras are repetitive and overlapping, only the Tripitaka Master has truly grasped their essence"[5] (CBETA 2024.R2, T09, no. 262, p. 1a16–17)

Compared to other Buddhist scriptures at the time, early Mahayana sutras such as the *Lotus Sutra* exhibit significantly enhanced literary qualities (Chen and Lu 2004: 3). Instead of conveying Buddhist ideas through abstract terminology and theoretical approaches, the *Lotus Sutra* is particularly renowned for its abundant use of similes and parables, which are illustrative stories that vividly demonstrate Buddhist teachings as expounded by the Buddha. Kumārajīva's translation epitomizes these literary features to the fullest extent, characterized by his rhythmic language, orderly sentence structure, and an elegant yet accessible vocabulary, making it both enjoyable to read and easy to disseminate (He 2008: 116).

Regarding its language, Kumārajīva's translation belongs to Middle Chinese or Medieval Chinese, referring to the language used between approximately the 4th to 12th century (Wang [1957] 2013: 35). Kumārajīva, like other Buddhist translators at the time, frequently employed combinations of two or more coordinating words to meet syllabic and rhyme requirements (Zhu 1992a: 226). Examples include phrases such as 因果 (*yīn guǒ* 'cause [and] result') and 圓滿 (*yuán mǎn* 'complete [and] perfect'), which fit the definition of binomials in the current study. As for multinomials, the sutra serves as a major reference for a range of collective concepts in Buddhism. Examples include 'the four group': 比丘、比丘尼、優婆塞、優婆夷 (*bǐ qiū bǐ qiū ní yōu pó sāi yōu pó yí* 'monks,

[4] Translated into English by the writer of this study from the original text: "時所宗尚，皆弘秦本". The title 'Master Qin' refers to Kumārajīva, derived from the dynasty in which he lived.
[5] Translated into English by the writer of this study from the original text: "雖三經文理重沓互陳，而惟三藏法師獨得其旨". The term 'Tripitaka Master' is an alternative title for Kumārajīva.

nuns, laymen, laywomen'), 'the seven jewels': 砗磲、瑪瑙、金、銀、琉璃、珍珠、玫瑰 (*chē qú mǎ nǎo jīn yín liú lí zhēn zhū méi guī* 'shells, agate, gold, silver, lapis lazuli, pearls, rose quartz'), among others. The abundance of both binomials and multinomials in the text provides ample research material for further analysis, making the *Lotus Sutra* an ideal source text for linguistics studies.

2.2.2 English translations of the *Lotus Sutra*

Compared with the early introduction of Buddhist sutras in China, the translation of these texts into Western languages began only in the late 19th century. The *Lotus Sutra* was among the first translated into English, and the first complete English translation is by Hendrik Kern in 1884, was based on a Sanskrit version. Until 2024, there have been 12 full translations, as shown in the following table (in chronological order), plus many translations of excerpts.

No.	Title	Translator(s)	Year of first publication	Source language	Translator(s)'s native language
1	*Saddharma-Puṇḍárīka or the Lotus of the True Law*	Kern, Hendrik	1884	Sanskrit	Dutch
2	*The Lotus of the Wonderful Law or the Lotus Gospel*	Soothill, William Edward	1930	Chinese	(British) English
3	*Myōhō-Renge-Kyō: The Sutra of the Lotus Flower of the Wonderful Law*	Kato, Bunno	1971	Chinese	Japanese
4	*The Sutra of the Lotus Flower of the Wonderful Dharma*	Murano, Senchu	1974	Chinese	Japanese
5	*Scripture of the Lotus Blossom of the Fine Dharma*	Hurvitz, Leon	1976	Chinese	(American) English

6	*The Wonderful Dharma Lotus Flower Sutra*	Buddhist Text Translation Society	1977 – 1999	Chinese	n/a[6]
7	*The Lotus Sutra (BDK English Tripiṭaka Series)*	Kubo, Tsugunari & Yuyuma Akira	1991	Chinese	Japanese
8	*The Lotus Sutra*	Watson, Burton	1993	Chinese	(American) English
9	*The Lotus Sutra: A Contemporary Translation of a Buddhist Classic*	Reeves, Gene	2008	Chinese	(American) English
10	*The Lotus Sutra of Wondrous Dharma: Annotated Bilingual-Juxtaposed Edition*	Ven. Cheng Kuan	2014	Chinese	Chinese
11	*The Lotus Sutra and its Opening and Closing Sutras: A Beautiful Translation with Deep Love from a Lay Buddhist Practitioner*	Lee, Minerva T.Y.	2015	Chinese	(American) English
12	*The White Lotus of the Good Dharma*	Roberts, Peter Alan	2018	Tibetan	(American) English

Table 2.2.2 Full English translations of the *Lotus Sutra* until 2024

Of the 12 translations, ten are based on the Chinese version, all of which are translated by Kumārajīva. The backgrounds of the translators demonstrate a number of similarities and differences. Aside from work No. 6, which was produced by a translation society, and No. 7, which was a collaborative work by two translators, the rest were completed by individual translators independently. The native languages of the translators include Chinese, Dutch, Japanese, and

[6] The Buddhist Text Translation Society is an association comprising translators from various backgrounds; therefore, it is challenging to ascertain the native languages of its members.

British and American English, with American translators comprising a plurality, accounting for 5 out of the 12 translations.

The selection of works for the present study is narrowed down to work No. 5, No. 8, No. 9 and No. 11, which exhibit similarities and differences in their target readers and the literary style used. Hurvitz (1976), while primarily using Kumārajīva's Chinese version, prefers not to disregard the existence of Sanskrit version. He uses it as major reference in his translation of Kumārajīva's Chinese and adds Sanskrit words or phrases either in parentheses or notes for the benefit of "Sanskrit-oriented readers" (Hurvitz 1976: x). Lee (2015) is a self-published work. The translator, a devout Buddhist, incorporates a notation system in her translation similar to that used in the Bible and places significant emphasis on the use of literary devices in her translation (Lee 2015: viii). In contrast to Hurvitz (1976) and Lee (2015), the translations by Watson (1993) and Reeves (2008) are aimed at a similar audience – people with little or no background in Buddhism. Both translators seek to make their translations easily readable in modern English, thereby making them accessible to a wider audience, as indicated in their prefaces:

> "The present translation, [...] is designed for readers who have no special background in Buddhist studies or Asian literature. [...] The translation is intended to be in straightforward modern English. No attempt has been made, as in some translations of Buddhist scriptures, to impart a 'religious' tone by employing an archaic or biblical-sounding style." (Watson 1993: xxiii–xxiv)

> "My intention is to provide a highly readable English version of this important text. I want to make this text accessible to ordinary readers with little or no familiarity with technical Buddhist vocabulary. [...] I became even more convinced that a version for ordinary English language readers was needed, one that avoided Buddhist jargon and Sanskrit terms as much as possible." (Reeves 2008: vii–viii)

Furthermore, both Burton Watson and Gene Reeves have close connections to Japanese Buddhism and have used the Japanese translations of the sutra as a major reference when translating Kumārajīva, also as stated in their prefaces:

> "The translation was prepared with the assistance of the Nichiren Shoshu International Center in Tokyo, which is connected with Soka Gakkai International. The translation is based on the Chinese text and Japanese *yomikudashi* found in the *Myōhō Renge Kyō narabi ni kai*

ketsu, compiled and edited by the Soka Gakkai and published in Tokyo in 1961." (Watson 1993: xxvi)

"I have consulted various versions of Kumarajiva's translation into Chinese along with two frequently used Japanese versions of his translation. But the main reference text for this translation has been the three-volume version published by Iwanami Shoten with translations and extensive notes by Yukio Sakamoto and Yutaka Iwamoto." (Reeves 2008: x–xi)

A similar choice of translation aims as well as source editions provides a solid foundation for comparative analysis in their linguistic characteristics. Therefore, in light of the above considerations, Watson (1993) and Reeves (2008) have been chosen as the objects of the present study, with a focus on their use of binomials and multinomials.

Despite the similarities, notable differences exist between the two translations. Regarding the translators' backgrounds, Burton Watson is a sinologist and translator of numerous Chinese literary, historical, and philosophical classics, including *Chuang Tzu* (1964), *Su Tung-p'o: Selections from a Sung Dynasty Poet* (1965), *The Tso Chuan: Selections from China's Oldest Narrative History* (1989), *Vimalakirti Sutra* (1996) and *Analects of Confucius* (2007). In contrast, Gene Reeves is a Buddhist scholar and practitioner with a specific expertise in the *Lotus Sutra*. His other works, such as *The Stories of the Lotus Sutra* (2010) and *The Illustrated Lotus Sutra* (2019), also focus on this same sutra.

With regard to the publishers, Watson (1993) is published by Columbia University Press, as part of the "Translations from the Asian Classics" series. After receiving positive feedback by reviewers for being "remarkable both for the fidelity to the original text and the lucidity of the style" (De Jong 1995: 303), it was reprinted in 2009 with only minor revisions to align with a new edition of the previous mentioned *Myōhō-renge-kyō narabi ni kaiketsu*, the text on which the translation is based.[7] On the other hand, Reeves (2008) is published by Wisdom Publications, a publisher specializing in books on Buddhist meditation and

[7] Upon comparing the first edition which is published in 1993, with the reprinted version, no changes in binomials or multinomials are observed.

philosophy. To date, no reviews of Reeves's translation have been published. These similarities and differences in the approaches and backgrounds of Burton Watson and Gene Reeves provide a solid context when comparing the usage of binomials and multinomials in their works.

2.3 Methodology and study procedures

To achieve the objective of investigating the usage of binomials and multinomials in the prescribed works under study, specifically Watson's (1993) and Reeves's (2008) translations of the *Lotus Sutra*, a comprehensive methodology is employed. For the editions utilised in this study, Kumārajīva's Chinese translation is sourced from Chinese Buddhist Electronic Text Association (CBETA) online, the Chinese Electronic Tripiṭaka Collection, Version June 2016. Reeves's 2008 edition, the only available version of the translation, has been used. Since there is no revision regarding the use of binomials and multinomials, the first edition of Watson's English translation, published in 1993, has been employed instead of the revised 2009 edition, in order to maintain consistency with Reeves, as both selected works are their respective first editions.

This study commences by establishing clear working definitions for binomials and multinomials, alongside the criteria for inclusions and exclusions. This is essential for setting a precise boundary to ensure consistency and accuracy during the data collection process.

The collection of binomials and multinomials from the two works is conducted manually through a meticulous examination of the texts. Each identified English binomial or multinomial, as well as the corresponding instance in the source texts, is systematically stored in Microsoft Excel worksheets, thus forming two bilingual databases. Each instance is labelled with an index number, page reference, as well as the chapter and section it locates at, facilitating a detailed comparative analysis across the translations.

The linguistic features of the collected binomials and multinomials are then subjected to detailed manual annotation, focusing on their structural

characteristics, connectors, and the formal, phonological, etymological, and semantic features of the elements. Utilising PivotTables, the features are categorised by filtering their annotations, enabling a quantitative analysis that generates descriptive statistics regarding their numbers and percentages in each text. The visualisation of quantitative findings is accomplished through PivotCharts, enhancing the clarity and interpretability of the results. This analysis highlights similarities and differences between the two works, thereby informing qualitative conclusions.

Regarding the formulaic use of binomials and multinomials, this study employs the corpus analysis tool Sketch Engine to compare the translations of Watson and Reeves with other English translations. Reference corpora, including the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA) also serve as benchmarks for assessing the formulaic use of binomials and multinomials in Modern English.

To examine the relationship between the source and target texts, the binomials and multinomials in the Chinese source texts serve as the basis for comparison, including those transformed in the translations. The translation strategies employed by the two translators are identified and categorised to compare their differing approaches. This analysis contributes to a deeper understanding of how binomials and multinomials are managed in textual rendition between different languages.

The formation process of binomials and multinomials focuses on those derived from their original texts, based on the findings from the previous section. For binomials, the sequence of the two elements is investigated and the roles of various constraints influencing this sequence are discussed and compared. For multinomials, the analysis extends to exploring the cognitive motivations behind their length and structural composition.

Using this methodological framework, a comprehensive exploration of binomials and multinomials in Watson's (1993) and Reeves' (2008) translations of the *Lotus Sutra* is conducted by combining manual extraction, meticulous

annotation, quantitative analysis, and comparative examination across translations.

2.4 Structure of the study

Consisting of a total of 10 chapters, Chapter 1 and Chapter 2 serve as the introductory sections, delineating the background and objectives of the current study. Chapter 3 provides a comprehensive literature review, synthesising previous research relevant to the topic. Chapter 4 clarifies the classification and semantic features of binomials and multinomials, establishing the foundational terminology and working definitions employed in this study. Chapter 5 presents an overview of binomials and multinomials used in Watson (1993) and Reeves (2008), analysing their tokens, types, and general distributions within the text. Chapter 6 examines the grammatical features in the two translations, delving into the structure, connectors and elements in the collected binomials and multinomials, providing a detailed comparative analysis between the two works. Chapter 7 juxtaposes the source text with the target texts, highlights the strategies and methodologies utilised in the translation activities. Chapter 8 addresses the formulaic binomials and multinomials by comparing them with those found in other translations and English corpora. Chapter 9 further investigates the formations of binomials and multinomials, particularly those that deviate from the source texts, identifying the linguistic and cognitive constraints that influence this formation process. Chapter 10 concludes the study, summarising the major findings and suggesting areas for future research. In the appendices, the binomials and multinomials identified in Watson (1993) and Reeves (2008) are documented in worksheets, along with their corresponding source texts and the labels used for quantitative and qualitative analysis in this study. These worksheets are available in Excel format and can be accessed via the Google Drive using the following hyperlink:

https://drive.google.com/drive/folders/1VrsFxNqF589qX1pMXT0tdPQWrbE4Lyci?usp=share_link

Chapter 3 Literature review

This chapter aims to provide a comprehensive overview of relevant previous research on various aspects of binomials and multinomials, including those with different terminology but cover the same connotation. Binomials have been examined from both descriptive and analytical perspectives. The former encompasses the usage of English binomials across different historical periods, while the latter concentrates on the sequencing of elements within a binomial. In addition to English, the use of binomials in other languages also garners significant interest. In contrast, multinomials have received comparatively less scholarly attention, with only a few studies focusing on specific aspects of their features. These preceding research lays the theoretical groundwork for a more detailed discussion on the definitions of binomials and multinomials in the subsequent chapter as well as to the present study.

3.1 Previous research on binomials

Binomials have garnered significant interest from numerous researchers, primarily due to their repetitive characteristics and rhetoric features. As early as 18th century, Campbell discusses phrases such as *plain and evident* in his chapter on 'tautology' in his work *The Philosophy of Rhetoric*. He defines tautology as the repetition of the same sense, highlighting the redundant nature of such expressions ([1776] 1818: 365–368). Scott examines the arrangement of words in specific 'paired phrases' to explore their rhythmic and idiomatic qualities. He analyses 276 phrases, including *bag and baggage*, which are deemed equally effective in terms of idiomatic and rhythmic appeal (1913: 239). Similarly, Royster argues that the frequency of 'hybrid double expressions' in Middle English may be attributed to stylistic habits rather than solely to the need for clarification. His methodology involves analysing examples from Middle English texts to support the argument that the use of French-English word pairs was a common stylistic practice rather than merely an instructional tool (1919: 165–166).

Binomials have become a focal point in linguistic studies, particularly following Malkiel's seminal article in 1959. In this work, he examines the

prevalence of irreversible binomials in language, highlighting their structural and semantic characteristics. He identifies the distinction between reversible and irreversible binomials, and the semantic relationships between the components of a binomial pair and also explores the concept of 'idioms' and cautions against conflating binomials with phraseological formulas or clichés (1959: 115–120).

Building on Malkiel's research, Makkai focuses on the 'irreversible binomial idioms'. He states that irreversibility is a co-feature of all set patterns, including idioms. Makkai further explains that a morphotactically reversible binomial can occur in reverse order, but this reversal changes the meaning or reduces it to isolated items, except when the reversal has a special idiomatic meaning (1972: 157–159). Hudson also argues for the inclusion of binomials "in any typology of fixed expressions that claims to be comprehensive" (1998: 32), given their frequent use in English. In addition, Gabrovšek delves into the fixed binomials in English phraseology and explores the structural, semantic, and functional diversity of multiword items, arguing that 'opaque binomials', resembling idioms or compounds, should always be listed and defined in dictionaries (2011: 28).

Nevertheless, a growing number of recent researchers have started to adopt broader and more inclusive scope in the study of binomials. Knappe questions the usefulness of restricting the definition of phraseological binomials by their irreversibility. He suggests that this narrow definition may overlook the variation and creativity present in binomials, which can exhibit a wide range of compositional and non-compositional meanings (2004: 500–509). Solano (2010) further explores the variation and creativity within English non-compositional binomials, which are phraseological units that exhibit a degree of fixedness yet allow for lexical variation, revealing the dynamic interplay between convention and creativity in the use of binomials. Furthermore, Kopaczyk and Sauer identify binomials as a type of phrasal unit motivated by repetition and coordination needs. They discuss the typical features of a 'core' binomial, such as its (relative) irreversibility and formulaic behaviour, while adopting a broad definition that includes constructions overlapping with 'core' binomials on structural and

semantic grounds (2017: 16–17). On a related note, Sauer and Schwan observe that while some binomials are fixed and formulaic, many are created spontaneously. They note that binomials are not always repetitive or tautological, nor are they always formulaic or frozen. Binomials, whether formulaic or newly created, serve various functions: in oral society, they aid memory; in literary society, they follow stylistic and rhetorical traditions; and in legal and theological language, they are used to make arguments comprehensive, all-inclusive, and unambiguous (2017: 86).

Along with the shift in research focus, linguistic studies have approached binomials from a range of perspectives, including historical linguistics and cognitive linguistics, with particular emphasis on the sequencing of elements in English binomials. Moreover, scholarly interest in binomials has extended beyond the English language, with cross-linguistic and translational perspectives receiving growing attention in recent years.

3.1.1 Binomials in the history of English

Throughout the history of English literary traditions, plenty of studies have concentrated on the use of binomials and their stylistic significance in conveying nuanced meanings and enhancing textual richness. In particular, Middle English writers such as Chaucer have been the most extensively studied.

Koskenniemi (1968) examines the 'repetitive word pairs' in several Old and Early Middle English prose texts, analysing the major linguistic and stylistic features of these pairs, which was typically characterised by the second lexical item in the pair echoes the meaning of the first, either fully or by defining or extending its meaning in some way. Potter (1972) explores Chaucer's use of 'untransposable binomials' – pairs of words inseparable in meaning and challenging to translate effectively into other languages. Examples such as *joy and bliss* and *lord and lady* were highlighted, emphasising their unique linguistic and cultural significance in Chaucer's works. Tani (2010) studies Chaucer's prose work, *Tales of Melibee*, focusing on his use of word pairs. This study examined

Chaucer's prose style in *Melibee* through variant readings of 'word pairs' found in six manuscripts and Caxton's first edition of the *Canterbury Tales*. Mattison (2021) analyses the 'universalising doublets' in Chaucer's the *Book of the Duchess*, focusing on the frequency and distribution of doublets, particularly in the *Knight's Tale*. By examining doublets in both Chaucer's works and the *Auchinleck Manuscript*, Mattison reveals how these linguistic devices contribute to the structure and thematic depth of Middle English verse.

Other notable works on Middle English prose include Kohonen (1979), who investigates the syntactic characteristics of binomials in Late Old English and Early Middle English with analysis of 11th- and 12th-century texts. The results showed that binomials were commonly used to convey new information towards the end of clauses, contributing to the principle of 'end-weight'. Tani (2008) studies the 'word pairs' in utilitarian Middle English prose, such as the *Paston Letters and Papers*. This research demonstrates that text type and gender influenced the frequency and etymology of word pairs. Miwa and Li (2003) analyse Caxton's frequent use of 'repetitive synonymous word pairs' and foreign elements, questioning whether he significantly contributed to the extension of the English vocabulary. Katami (2017) examines 'word pairs' in Middle English mystic prose, highlighting their frequency, parts of speech, semantic relationships, and etymology. This study reveals how word pairs reflected individual writers' styles and thematic concerns, such as revelations and the grace of God.

In addition to Middle English, Early Modern English has also been studied for its use of binomials, notably in Shakespeare's works. Nash (1958) explores the use of 'paired words' in *Othello*, noting that Shakespeare employed them to characterise Othello's and, to a lesser extent, Iago's speech. Klégr and Čermák (2008) examine binomials in *Hamlet*, comparing their characteristics in English and Czech and highlighting differences in aesthetic effects, collocational nature, and semantic relations.

Beyond literary works, the study of binomials extends to various registers, including:

(a.) Legal documents, where Gustafsson (1984) focuses on the syntactic features of binomials in legal English, revealing that binomials are more prevalent in legal language and serve as distinct style markers. Bhatia (1993) discusses how binomial and multinomial expressions serve as useful tools for making legislative statements all-inclusive. Kopaczyk (2013) analyses the grammatical properties and semantic motivations of binomials in Early Legal Scots, finding that they play an important role in legal and administrative texts.

(b.) Ritual speeches, where Gaenszle et al. (2011) study the binomials and the noun-to-verb ratio in Puma Rai ritual speech and found a higher proportion of nouns in shamanic speech compared to priestly incantations, indicating a more 'nouny' nature in ritual performances.

(c.) Medical reports, where Crawford et al. (1999) find that binomials, such as *anxious and depressed* or *support and counselling*, are significant features in the nursing reports analysed. These binomials reflect a structured and systematic approach to describing and addressing mental health issues.

(d.) Administrative reports, where Bugaj (2006) studies the etymological properties of binomials in Middle Scots administrative records, showing that binomials play a significant role in the lexical characteristics of legal discourse.

(e.) Online texts, where Koevering et al. (2020) explore binomial orderings in online texts, focusing on frozen and non-frozen binomials. By analysing data from the internet forum Reddit, they challenged traditional theories and revealed insights into cultural phenomena embedded in word orderings across different online communities.

In addition, in 2017, the monograph *Binomials in the History of English: Fixed and Flexible*, edited by Kopaczyk and Sauer, has compiled recent findings on binomials, spanning from Old English to Modern English. This volume, comprising 17 articles, aims to lay the foundation for a comprehensive understanding of binomials in English literature, addressing their definition, usage motivations, and structural evolution. The contributions include five articles dedicated to Old English, three to Middle English, five to Early Modern English,

and three to Modern English, elucidating the diachronic trajectory of binomial usage. These studies collectively offer insights into the linguistic and stylistic significance of binomials across different historical periods and text types.

It should be noted here that one of the editors of this volume, Hans Sauer, conducted a series of independent studies from 2014 to 2020, examining a wide range of English works from Late Middle English to Early Modern English. Notable works include *The Historye of the Patriarks*, Caxton's *Ovid*, Pecock's *Donet* (2014), *The Wise Book of Philosophy and Astronomy* (2017a), Milton's *Samson Agonistes* (2017b), Lydgate's *The Troy Book* (2019a, 2019b), Boccaccio's *De Mulieribus Claris* (2018), as well as the romance *Richard Coer de Lyon* (2020). His approach meticulously examines binomials, addressing various linguistic aspects such as word class, connectors, structure, and morphological and etymological properties. He also explores the formulaic and flexible use of binomials within these texts, offering insights into their functional roles and stylistic implications across different literary works.

These synchronic studies introduced in this section collectively provide a diachronic understanding of the use and evolution of binomials in the history of English, offering insights into their linguistic and stylistic significance across different historical periods and text types. However, it can be seen that previous researchers have focused extensively on the use of binomials in historical contexts, particularly in Middle and Early Modern English[8], whereas the use of binomials in Modern English has received less attention, an imbalance this present study intends to address.

3.1.2 Binomials from a cognitive linguistic perspective

From a cognitive linguistic perspective, binomials are regarded as multi-word expressions (MWEs), a topic which is to be examined in greater depth in Chapter

[8] Upon completion of this study, a forthcoming monograph by Tani (2025), *Binomials in Late Middle English to Early Modern English*, has been noted. This work will focus on the development of style and lexicon in the English language from Late Middle English through to Early Modern English, analysing binomials across a wide range of texts and genres. It is expected to make a significant contribution to the study of binomials in historical English.

4. This approach emphasises the cognitive processes involved in the processing and producing of such expressions by language users.

Siyanova-Chanturia et al. (2011) initiate a strand of psycholinguistic investigation into the processing of binomials by both native and proficient non-native speakers. Using eye-tracking techniques, they propose that binomials, like other formulaic expressions, are processed more rapidly, a phenomenon attributed to frequency-driven conventionalisation and strong semantic associations between constituent elements. Further extending this work, Siyanova-Chanturia et al. (2017), using event-related potentials (ERP) methodologies to explore the neural correlates of binomial processing, reveal that highly conventional and predictable binomials elicit reduced processing loads and facilitate semantic integration. These results support the notion that these expressions are stored as pre-activated templates, readily accessible during comprehension. In a production-oriented investigation, Siyanova-Chanturia and Janssen (2018) examine the role of phrase frequency in articulation among L1 and L2 speakers. While an articulation delay mitigates some differences between canonical and reversed forms, phrase frequency continues to exert a significant influence, particularly during real-time speech planning. These findings suggest that stored phrase templates facilitate not only comprehension but also spoken language production.

Arcara et al. (2012) provide the first neuropsychological examination of irreversible binomials in individuals with neglect dyslexia. Their findings indicate that such expressions are stored and retrieved holistically within the mental lexicon, with the length of constituent word influencing reading accuracy. This study underscores the cognitive rigidity and unitary status of binomials in mental processing. Conklin and Schmitt (2012) further reinforce the view that idioms, binomials, and other MWEs are stored in long-term memory and accessed with reduced cognitive load, bypassing online compositional processing. Their comprehensive review offers compelling evidence for the processing advantage these sequences afford native speakers, thus reaffirming the perspective that they are stored and retrieved as unified lexical entries.

In a comparative study, Carrol and Conklin (2020) underscore the influence of semantic expectancy and pattern recognition in the processing of binomials and their analysis further confirms that frequency, familiarity, and configurational fixedness all contribute to the cognitive ease with which these expressions are processed. Chantavarin et al. (2022) also synthesis evidence across idioms, collocations, and binomials, arguing for a general processing advantage associated with MWEs. They emphasis the morphological and syntactic rigidity of binomials as further evidence of their entrenched status in the mental lexicon.

Focusing on second language acquisition, Sonbul et al. (2023) investigate how Arabic L1 speakers acquire English binomials through repeated exposure in narrative contexts, and their findings reveal enhanced sensitivity to co-occurrence patterns and progressively reduced reading times, indicating a growing entrenchment of these expressions in learners' mental representations.

Across these studies, there is compelling evidence that binomials are not merely frequent collocations but cognitively salient, formulaic constructions. Their processing advantages stem from repeated exposure, semantic predictability, and structural fixedness, features which have reshaped contemporary cognitive linguistic conceptions of the mental lexicon.

3.1.3 The sequence of elements in binomials

The sequence of the two elements in a binomial has been a key focus in the studies related to binomials. Researchers employ different methodologies to identify patterns and understand the functionality of constraints. These include case studies and corpus-based approaches that rely on quantitative findings, as well as experimental methods informed by sociolinguistic, psycholinguistic, and neurolinguistic theories.

Along with his introduction of the term 'binomial', Malkiel highlights the feature of its 'reversibility', which concerns whether the sequence of the two elements in a binomial can be reversed or not (1959: 116–120). He then identified

'six forces' that influence the sequence, namely "chronological priority of A[9]", "priorities inherent in the structure of a society", "precedence of the stronger of two polarized traits", "patterns of formal preferences", "precedence of A due to internal diffusion" and "transmission of sequences through loan translation" (1959: 142–155). Building on this, Cooper and Ross (1975) highlight the interaction between semantic and phonological constraints in determining ordering relations for conjoined elements. Benor and Levy (2006) further identify semantic and metrical constraints influencing the sequence of elements, challenging traditional beliefs about the dominance of phonological factors. Lohmann investigates the ordering patterns in reversible and irreversible binomials, highlighting that "all ordering constraints yielded more pronounced effects in the sample of irreversibles" (2012: 48). Building on this, Lohmann examines the constituent order in copulative compounds, noun binomials, and complex noun phrases within a superordinate NP, concluding that semantic and pragmatic ordering constraints, including 'conceptual accessibility' and 'iconicity of sequence', are relevant to coordinate constructions more broadly (2014: 194). Continuing this line of research, Mollin analyses over 500 high-frequency binomials collected from the British National Corpus (BNC), revealing a hierarchy of ordering constraints, with semantic factors playing a prominent role followed by metrical and phonological considerations (2012: 101). In her subsequent monograph, Mollin conducts a more extensive investigation into the (ir)reversibility of binomials and their ordering constraints using corpus data, incorporating synchronic and diachronic analyses of (ir)reversibility, the interplay between reversibility and ordering constraints, as well as the cognitive representation of binomial (ir)reversibility. Particularly, her findings demonstrate the primacy of semantic constraints, followed by metrical constraints, word frequency and a few phonological constraints in affecting the elements' sequence (2014: 61–107).

[9] Malkiel designates A to represent the first element in a binomial and B to represent the second (1959: 114).

In addition, using an experimental approach, Wright et al. (2005) focuses on binomials formed with names and investigated the influence of phonology, frequency, and gender bias on the ordering of male and female name pairs, finding that phonological factors, such as consonant clusters, played a significant role in name ordering preferences. Similarly, George (2020) examines the influence of semantic and phonological constraints on the formation of novel binomial pairs, showing a preference for prioritising phonological constraints over semantic constraints.

In addition to studies exploring the interaction between multiple constraints, many researchers have focused on individual constraints and conducted in-depth studies. These constraints include phonological, semantic, frequency, and markedness, among others.

Phonological or phonetic constraints have been the subject of extensive research since the early stages of linguistic study. Jespersen observes that "in combinations of a monosyllable and a disyllable by means of *and* the short word is in many set phrases placed first." ([1905] 1952: 220). Most early researchers based their findings on case studies and detailed analysis. For instance, Abraham (1950) analyses patterns in the arrangement of coordinated words in English and Spanish, focusing on rhythm, semantic categories, and word stress. Following this, Bolinger (1962) emphasizes the importance of syllable prominence, suggesting that prominent syllables are typically flanked by subdued ones to enhance linguistic prominence. Similarly, Gustafsson (1974) investigates the phonetic length of binomial components in English, finding a tendency for the first member to be shorter than the second.

Recent studies on phonological constraints show a strong preference for using experimental research methods to measure and quantify the effects of these constraints with empirical data. For example, Cutler and Cooper (1978) examine how phonetic constraints on ordering affect listeners' reaction times during phoneme monitoring tasks, focusing on sequences such as monosyllable-bisyllable and high-low vowel combinations. In contrast, Pinker and Birdsong

(1979) investigate speakers' sensitivity to rules of frozen word order in English, revealing that speakers generally adhere to universal rules like Panini's Law and Vowel Quality, while language-specific rules like Vowel Length and Initial Consonant Obstruency are followed mainly by native speakers. Oden and Lopes (1981) explore preferences for order in freezes by manipulating consonant and vowel sequences, finding a preference for the [i]-[a] order and noting how congruent and opposed rules interact. Additionally, Oakeshott-Taylor (1984) studies how phonetic factors influence word order preferences in binomials across English, German, and Afrikaans, emphasizing the role of vowel characteristics and prosodic structure. Furthermore, Green and Birdsong (2018) conduct a psycholinguistic investigation using nonsense expressions to test native and non-native speakers' sensitivity to phonological constraints, finding greater sensitivity among native English speakers. Ryan (2019) highlights the intricate relationship between stress patterns and weight distribution in binomials and indicates that stressed syllables play a significant role in determining the weight distribution within binomial pairs.

Studies focusing on semantic constraints have explored various factors. Allan (1987) examines hierarchies such as animacy and familiarity in the ordering of left conjuncts in English noun phrases. McDonald et al. (1993) demonstrate the impact of animacy on word order in language production, showing that animate constituents are commonly produced before inanimate. Building on these findings, Iliev and Smirnova (2016) find that word order preferences can predict speaker characteristics like political affiliation, religious beliefs, nationality, and consumer preferences. Additional constraints studied include frequency and markedness. Fenk-Oczlon (1989) investigates the relationship between word frequency and order in freezes, finding that high-frequency words typically precede low-frequency ones, with exceptions where iconic principles override frequency tendencies. Further, Sobkowiak (1993) proposes that unmarked elements tend to precede marked elements in coordinate freezes, suggesting a freezing order that reflects cognitive processing efficiency.

3.1.4 Binomials in multilingual and translation contexts

Beyond English, research on binomials has garnered scholarly attention across various languages, extending further into the field of translation studies. Regarding other Germanic languages, Lambrecht (1984) examines the non-compositional nature of certain binomial expressions in German using frame semantics and pragmatics, revealing how these convey meanings within discourse contexts, while Müller (1997) identifies constraints such as word accent and salience, demonstrating the preference for ordering salient elements first in German binomials. Southern (2000) explores the linguistic phenomenon of formulaic binomials in West Germanic languages, noting their iconic forms through phonetic, syllabic, and prosodic echoes, which convey a sense of unity and collectively. In Swedish, Volk and Graën (2022) use corpus linguistic approach to revisit binomials, comparing contemporary usage with historical data to track diachronic developments.

As for Romance languages, Masini (2006) explores Italian binomial constructions, uncovering structural regularities and idiomatic properties through a constructionist approach. In Spanish, Sánchez (2013) employs corpus linguistics methods to analyse the frequency and specialisation of binomials, highlighting the role of mutual information and frequency in identifying fixed pairs. Green and Birdsong (2024) compare the phonological patterns of French binomials with those in English, revealing preferences for different rhyme structures across languages.

With regard to other language families, Pordány (1986) explores irreversible binomials in Hungarian, comparing their phonological and semantic features with other languages. In Badini Kurdish, Saaed (2017) identifies a preference for shorter vowels preceding longer vowels in binomial phrases, indicating phonological constraints on word order. Lohmann and Takada (2014) and Akita and Murasugi (2022) investigate the ordering and productivity of Japanese binomial structures in spoken and colloquial language contexts respectively. McManus (2020) explores the cultural and linguistic significance of binomial

phrases in Early Middle Irish. Additionally, Kikiopoulou and Topintzi (2022) examine prosodic and phonological influences on binomial order in Greek, observing patterns related to syllable count and vowel quality, while Alzaidi (2022) confirms the Short-Before-Long phonological ordering constraint in Qassimi Arabic binomial phrases, aligning with findings in other languages regarding phonological influences on word order.

Chinese-English comparisons form a significant subdomain in binomial research. Zhang (2000) compares English and Chinese coordinate compounds, analysing their word formation, phonetics, syntax, and semantics, highlighting potential interference in language learning due to these differences. Cao (2004) explores semantic, syntactic, and cultural differences in 'paired words' between Chinese and English, underscoring the importance of considering these factors in translation and language acquisition. Deng (2005, 2006) and Deng and Chu (2005) conduct typological studies on coordinate phrases in English and Chinese. Liu (2013), adopting a corpus-based methodology, identifies the differences in ordering constraints between Chinese and English binomials, highlighting that semantic factors are pivotal in Chinese, while phonological factors dominate in English. Later, Chen (2017) systematically compares binary and multiple coordination structures in both languages, underscoring the differences in the grammaticalization of connectors and emphasising the role of iconicity in determining coordination order.

These multilingual insights have informed research in translation studies, where binomials often pose specific challenges when working with texts related to English and researchers are particularly keen on understanding the nuanced strategies translators utilise to navigate linguistic and cultural differences. When English serves as the source language, studies such as Hussein and Lingwood (2011) identify strategies used by Jodanian students when translating English binomials into Arabic, which include 'Incomplete Translation', 'Literal Translation', 'Semantic Approximation', 'Contextualised Guessing', and 'Avoidance'. Similarly, Hejazi and Dastjerdi (2015) find that Persian translators,

when handling English binomials in hard news contexts, often rely on strategies of ‘literal translation’ ‘modulation’, ‘transposition’, ‘loan translation’, and ‘calque’, with cultural and gender-related factors often influencing strategic choices.

Conversely, in contexts where English is the target language, Khatibzadeh and Sameri (2013) explore translations of Persian political speeches into English, noting the predominance of ‘literal translation’ methods and the importance of maintaining naturalness for effective political communication. Fazildinova (2020) studies Uzbek-English translations in literary texts, classifying the binomials by rhyming, alliteration, and different linking words, and emphasising the fixedness of Uzbek binomials, which might lead to mistranslation when the conventional orders are not respected.

Of particular relevance to the current study, Sauer (2017c) conducts preliminary research on binomials in Watson (1993)’s and Reeves (2008)’s English translations of the *Lotus Sutra*, specifically the first chapter. He focuses on the formal, etymological, and semantic features of the English binomials, as well as their formulaicity and flexibility. However, his study does not adequately address the translation strategies employed by the two translators in the translation process, a topic which the present study aims to delve deeper into.

3.2 Previous research on multinomials

In comparison to binomials, multinomials have received far less scholarly attention. Malkiel conducts a preliminary study on multinomials, particularly trinomials, and argues that multinomials often appear in fixed sequences, such as formal addresses (e.g. *Ladies, Lords, and Gentlemen*), reflecting a blend of formality and cultural convention. He also proposes that societal changes, such as advancements in technology, can transform binomials into trinomials (1959: 120–121). Gustafsson defines a multinomial as “an enumerative sequence [which] may contain several members according to the varying situation in the topic we’re

talking about", noting that the binomial is the most common form of enumerative sequence (1975: 17).

Kopaczyk regards multinomials as extensions of binomials, evolving through the addition of coordinated elements as necessitated by context. Similar to binomials, the selection of lexical items for this expansion is influenced by semantic and phonological considerations. The length of multinomials may vary depending on their referential function and discourse characteristics, especially in specialised communication contexts (2013: 75). Kopaczyk and Sauer further observe that binomials can be extended into trinomials and further into multinomials by incorporating additional coordinated elements and emphasized the importance of the central binomial within these expanded sequences (2017: 3). Moreover, Sauer and Schwan observe that multinomials are comparatively less frequent than binomials. They argue that while a multinomial theoretically has no length limit, practical constraints are often likely to apply. They also note that Middle English texts, including those by Chaucer, contain multinomials of considerable length, with trinomials being the most prevalent (2017: 85–86).

More studies on multinomials focus on specific registers or contexts, such as rituals or legal documents. Pharr mentions the phrase *by bell, book, and candle* that derived from the ceremony of Anathema in the Catholic Church (1945: 147). Kopaczyk further suggests that, along with binomials, multinomials features of legal language that enhance the effectiveness of oral ritual language, which is later documented in writing (2013: 66–76). Tiersma lists several "conjoined phrases and lists of words" as typical of English legal discourse in the medieval period, such as *give, devise, and bequeath*, suggesting that the use of multinomials remains prevalent in legal language, aiming for comprehensiveness and emphasis (1999: 61–65). In addition, Frade explores the function of a special element termed as 'vague tags' in multinomials within legal texts, as the component *other like* in multinomial *patent, trademark, copyright or other like*. Such components serve a specific purpose in legal multinomials by acting as cues for interpreting the preceding particulars as illustrative examples of a more general notion and

they help relate specific examples to an underlying general concept, thereby providing a framework for interpretation (2005: 151–152). A more recent study by Więcławska examines how multinomials serve as authorship-based style markers in legal communication. The study compares the use of multinomials by legal professionals and laypeople in the context of company registration proceedings, concluding that while multinomials are typically associated with professional legal communication, they are also prevalent in lay communication. Both groups employ them for distinct stylistic and pragmatic purposes, underscoring the role of multinomials in conveying formality and authority in legal discourse (2023: 1711).

Chapter 4 Definition, inclusions and exclusions

As outlined in Chapter 3, scholarly attention on binomials and multinomials, particularly the former, has experienced a shift over time. Early studies, such as those by Scott (1913) and Royster (1919), primarily focused on the stylistic aspects and repetitive structures of these expressions. Subsequent research, however, began to investigate their irreversible or formulaic behaviours, which Kopaczyk and Sauer (2017: 16–17) refer to as 'core binomials'. More recent approaches, especially within the fields of corpus linguistics and quantitative linguistics, have adopted a broader scope, extending their analyses to encompass ad hoc and less frequent formations that had previously received limited attention. In light of these developments, it is necessary to establish a working definition of binomials and multinomials and to delineate the analytical scope of the present study before proceeding to more detailed examination.

4.1 Binomials and multinomials as multi-word expressions

Following the introduction of Sinclair's 'idiom principle', which asserts that "a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analyzable into segments" (1991: 110), scholarly interest in multi-word expressions (MWEs) has grown considerably. A range of definitions has emerged across the literature, reflecting diverse theoretical orientations. Sag et al. define MWEs as "idiosyncratic interpretations that cross word boundaries" (2002: 2), which "can be further broken down into fixed expressions, semi-fixed expressions and syntactically-flexible expressions, in roughly decreasing order of lexical rigidity" (2002: 3). Gries describes MWEs as "co-occurrence phenomena at the syntax–lexis interface" (2008: 8), while Carpuat and Diabdefine them as "multiword units or collocations of words that co-occur together statistically more than chance" (2010: 242). Baldwin and Kim provide a broader characterisation, defining MWEs as "lexical items that: (a) can be decomposed into multiple lexemes; and (b) display lexical, syntactic, semantic, pragmatic and/or statistical idiomaticity" (2010: 269). Collectively, these definitions highlight the

idiosyncratic, often conventionalised nature of MWEs, many of which are characterised by a high degree of recurrence and structural cohesion.

Nevertheless, while recurrence is a characteristic often associated with MWEs, it should not be regarded as a defining criterion. Although frequent and formulaic expressions are common within the category, many MWEs are coined ad hoc and used only once. Such expressions may still qualify as MWEs if they meet other essential criteria. Siyanova-Chanturia and Martinez, for instance, provide a comprehensive overview of MWEs as (semi-)fixed, recurrent phrases, including structures such as collocations (e.g. *strong tea*), binomials (e.g. *black and white*), idioms (e.g. *spill the beans*), and speech formulae (e.g. *What's up*) (2015: 549). Their emphasis on recurrence should be balanced against other defining features that offer greater explanatory power. Finkbeiner and Schlücker present a more refined framework, identifying three primary criteria for MWE classification: syntactic, semantic, and frequency-based. Syntactically, MWEs range from rigidly fixed to fully flexible constructions; and semantically, they function as single units, often equivalent to a word or morpheme. With respect to frequency, it is considered a correlational rather than defining factor: while a high observed frequency of co-occurrence typically signals entrenchment in the mental lexicon, low-frequency or even unique expressions may still qualify as MWEs if they exhibit other defining traits. As they point out, "many constructions are invented on the spur of the moment and yet fit (at least some of) the criteria for recognising MWEs" (2019: 65). Likewise, idiomaticity, though present in many MWEs, is not obligatory. While some MWEs are semantically opaque or idiomatic, others remain fully compositional. Thus, although frequency facilitates the process of lexicalisation, it is not a prerequisite for MWE status. What emerges as more fundamental is the extent to which these expressions function as unified units and processed holistically, as Constant et al. (2017: 838), echoing Baldwin and Kim (2010), observe that the concept of a 'word' becomes increasingly complex when taking MWEs into account, which often comprise multiple orthographic words yet function as single lexical or grammatical entities.

This perspective is also supported by Biber et al., who define MWEs as expressions that "function as a structural or semantic unit" (2021: 980).

Building upon this conceptual foundation, and in light of the evidence from cognitive linguistics (see Section 3.1.3), which demonstrates that both binomials and multinomials are processed and produced holistically in the mental lexicon, it becomes plausible to classify these structures as MWEs. Accordingly, this classification encompasses not only irreversible or conventionalised expressions, but also context-specific and ad hoc formations, irrespective of their frequency of occurrence. This broader view is consistent with several accounts, including those of Knappe (2004) and Kopaczyk and Sauer (2017), who emphasise the cognitive and structural integrity of binomials over their frequency alone. Likewise, Sauer and Schwan (2017) highlight the role of mental storage and retrieval mechanisms, noting that holistic cognitive access promotes faster and more automatic processing, which is applicable equally to fixed and novel constructions. Given that multinomials constitute an extension of binomial expressions (Kopaczyk 2013), they likewise meet the essential criteria for MWE classification. In short, both binomials and multinomials exhibit comparable syntactic coordination, semantic cohesion, and cognitive unity, which support their inclusion within the broader category of MWE.

Recent studies in Construction Grammar further offers a robust theoretical framework for analysing binomials and multinomials as MWEs. Rooted in usage-based and cognitive linguistic traditions, Construction Grammar posits that all linguistic knowledge consists of form–meaning pairings, or 'constructions', which may range from abstract, schematic patterns to fully lexically specified expressions (Bybee, 2006; Goldberg, 1995, 2006). From this perspective, binomials and multinomials qualify as constructions insofar as they instantiate specific, often entrenched, pairings of form and meaning. Binomials, in particular, comprise lexically fixed or semi-fixed sequences that typically display morphosyntactic cohesion between coordinated elements and convey either compositional or idiomatic meanings. These properties support their capacity for

analogical extension, enabling language users to generate novel pairings within familiar structural patterns, a feature equally applicable to multinomials. This view is reinforced by Sailer and Markantonatou (2018), who also argue that MWEs are subsumed within the larger inventory of constructions recognised in Construction Grammar. In their view, these include lexically motivated and syntactically constrained types, such as irreversible binomials (Malkiel, 1959) and central to this classification is not semantic opacity or idiomaticity, but structural properties, as evidenced by Müller's (1997) analysis of German binomial constructions, noting that idiosyncratic lexical pairings often conform to broader distributional principles such as the 'law of growing members', which support their constructional status. In applied research, Masini provides a comprehensive account of Italian binomials from a constructionist perspective. In her 2006 study, she introduces the notion of the 'binomial construction', characterised by coordinated syntactic form, which frequently exhibiting fixed word order, idiomatic nuance, or conventional usage. She argues that such constructions are "peculiar objects with a syntactic structure and a near-lexical morphosyntactic behaviour" (2006: 221). In her later work, Masini underscores the central assumption of Construction Grammar: that 'binomial coordinate constructions', typically realised in the 'X + CONJ + X' pattern, function as 'phrasal lexemes' (2009: 268). This view effectively dissolves traditional distinctions between the lexicon and syntax, viewing both as populated by constructions of varying schematicity.

To summarise, Construction Grammar provides a unified framework capable of accounting for both the schematic regularity and idiomatic variability of binomials and multinomials. It explains their cognitive representation, diachronic evolution, and syntactic behaviour by treating them as constructions, which are stored, retrieved, and manipulated as holistic form–meaning pairings. Under this model, if designating the two components of a binomial as 'Element 1' and 'Element 2' respectively, and the coordinative link as a 'connector', the form of a binomial can thus be represented as 'Element 1 + connector + Element 2'. The

positions occupied by Element 1 and Element 2 can be termed ‘Slot 1’ and ‘Slot 2’, respectively. In accordance with its coordinative nature, the connector typically functions as coordinators, such as *and*, or, or correlative coordinators, such as *both... and* or *either... or*. A multinomial extends the structure of a binomial to include three or more elements, thus its form can similarly be represented as ‘Element 1 + Element 2 + ... + connector + Element N’, where N denotes the total number of the elements. Each element thus occupies a designated slot, ranging from Slot 1 to Slot N. The constituent elements of binomials and multinomials may loosely consist of individual words or full phrases and are typically linked through syntactic coordination. The fact that these constructions are processed holistically may imply that their constituent elements operate as unified semantic units. However, this assumption requires closer examination. Problems and discussions concerning their holistic interpretation are to be further addressed in the subsequent section.

4.2 The issue of holistic meaning

Tracing back to the initial introduction of the term ‘binomial’ into linguistic discourse, Malkiel defines it as “the sequence of two words pertaining to the same form-class, placed on an identical level of syntactic hierarchy, and ordinarily connected by some kind of lexical link” (1959: 113). This definition encapsulates the formal structure of a binomial: a coordinated phrasal construction composed of two words linked by a lexical connector. Building upon the concept of binomials, Malkiel subsequently introduces the term ‘multinomial’, which extends the structure of a binomial to include three or more elements (1959: 120).

Following the definition of the forms, Malkiel also discusses the semantic domains of binomials stating that “on the semantic level F[10] may quite adequately represent the exact sum of its constituents” (1959: 115). He provides examples including the phrases:

(1) “husband and wife” (the sum being a couple),

[10] Malkiel (1959) designates F to represent “the entire formula”, i.e. the complete binomial construction. (Malkiel 1959: 114)

(2) “knife and fork” (the sum being a set of Western cutleries),

and (3) “hammer and tongs” (the sum being tools)

Essentially, Malkiel posits that a typical binomial consists of two hyponyms, with the implied meaning representing the hypernym they share.

However, Malkiel’s definition is problematic. The three provided binomials are displaced from their co-texts, which could potentially complicate matters and may deviate from Malkiel's conception of a prototypical binomial. Take, for instance, the phrase *husband and wife* of Example (1) in the following sentences, both sourced from COCA:

(4) “The **husband and wife** escaped to a mountain until the flood receded.” (COCA, 2012, WEB, http://www.talkorigins.org/faqs/flood-myths.html)

(5) “The **husband and wife** were not on good terms. They quarreled frequently.” (COCA, 2012, WEB, http://digital.library.upenn.edu/women/rinehart/brice/brice.html)

In both sentences, the phrase *husband and wife* serves as the subject and is preceded by the definite article *the*. However, while in (4) it aligns with Malkiel’s description of a binomial representing the couple as a sum, in (5) it diverges from the typical example, as its co-text underscores the distinct individuality of the husband and the wife. Malkiel’s categorization is, therefore, heavily reliant on the co-text without which, cases like (5) cannot be correctly excluded.

Kopaczyk and Sauer tackle this issue with examples in (6) – (8), seen in the following sentences (2017: 2):

(6) “They were having **fish and chips**.”

(7) “They trade in **fish and poultry**.”

(8) “They saw **fish and salt** on the table.”

They argue that the binomial *fish and chips* in (6) is an instance that aligns perfectly with Malkiel’s definition and it stands out as the most ‘formulaic’ (2017: 2), evidenced by its frequency of occurrences with 0.28 per million in COCA (Davies 2008–). Similarly, the instance in (7) also conforms to Malkiel’s definition by representing the sum of its constituents (in this case, the meat

industry). However, Example (8), while it could be seen as comprising hyponyms under the same hypernym of 'food', places emphasis on the individuality of each element in the given the co-text. Consequently, it may not align with Malkiel's identification of binomials. Nonetheless, this does not detract from the fact that it exhibits the characteristics typical of coordinative word pairs, namely binomials.

Acknowledging this, Kopaczyk and Sauer propose a definition of binomials that does not exclude instances such as in sentence (8), as they "may give us an insight to the more general nature and scope of this linguistic phenomenon" (2017: 3). Accordingly, they offer a board definition of binomial as "a coordinated pair of linguistic units of the same word class which show some semantic relation" (2017: 3).

Referring to the previous discussions, this study introduces the term 'Bi-Sum' (binomials representing the sum of its elements) for binomials that represent the sum of its elements, such as *husband and wife* in (4) and *fish and chips* in (6). Conversely, binomials similar to *husband and wife* in (5) and *fish and salt* in (8) are termed as 'Bi-Inds', indicating those that emphasise the individuality of their elements. Cases such as *fish and poultry* in (7) are also classified and labelled as Bi-Inds, given their specific co-text. With this terminology, what Malkiel defines as binomials encompasses only the Bi-Sums, while Kopaczyk and Sauer (2017) broaden the definition of binomials to encompass both Bi-Sum and Bi-Ind instances. Similarly, the multinomials are distinguished into with the terms 'Multi-Sum' and 'Multi-Ind' sub-types in this study, though not discussed independently given their less frequent occurrences.

To illustrate the occurrences of Bi-Sum and Bi-Ind in the selected works of Watson (1993) and Reeves (2008), the 'replacement test' method is employed. This involves systematically substituting elements within the expressions to observe changes in meaning, thereby allowing for a clear distinction between Bi-Sum and Bi-Ind, as well as Mult-Sum and Multi-Ind.

The test proceeds as follows: Sentences (10) – (13) containing binomial-like phrases are extracted from Watson (1993) and Reeves (2008):

(10) “some inhabit the realm of **human and heavenly beings**” (Watson 1993: 103)

(11) “so that **human and heavenly beings** can communicate and be within sight of each other” (Watson 1993: 143)

(12) “The one honored by **people and gods**” (Reeves 2008: 70)

(13) “so that **people and gods** can meet and be in sight of each other” (Reeves 2008: 209)

Given the co-text, both cases in (10) and (12) can be replaced by their hypernym ‘all beings’, and thus qualify as Bi-Sums. Conversely, cases in (11) and (13) semantically emphasise the individuality of human or people as distinct entities from heavenly beings or gods, and thus Bi-Inds.

Furthermore, certain binomial-like phrases not only require the support of co-text, but also the broader context in Buddhism studies. Refer to the examples in (14) and (15):

(14) “one should not speak in terms of **superior, medial or inferior** doctrines, of doctrines of **the conditioned or the unconditioned**, of **the real or the not real**.” (Watson 1993: 200)

(15) “one should not hold to things as **higher, middle or lower**, **constituted or unconstituted**, **real or unreal**.” (Reeves 2008: 264)

In Buddhism, this teaching belongs to the so-called *nirvikalpajñāna* ‘nondiscriminative wisdom’, representing “the insight that is marked by freedom from the misconception that there is an inherent bifurcation between a perceiving subject and its perceived objects” (s.v. “nirvikalpajñāna” *The Princeton Dictionary of Buddhism*, p. 591), a wisdom that Buddhist practitioners should aim to cultivate. The purpose of these two sentences is to instruct readers not to discriminate or treat doctrines differently when encountered with various teachings. Therefore, the highlighted phrases in bold underscore the uniqueness of the elements, conveying a lesson to abstain from making such distinctions, thus making these expressions in bold Bi-Inds and Multi-Inds.

In addition, there are instances where the distinction between Bi-Sum and Bi-Ind are ambiguous, even with the aid of co-text or context, as illustrated by:

(16) “he is no disciple of mine, he is no **arhat or pratyekabudhha**.” (Watson 1993: 33)

(17) “they are not true disciples of the Buddha, and not really **arhats or pratyekabuddhas**.” (Reeves 2008: 85)

Both phrases could be considered hyponyms under the hypernym of ‘Buddha’s disciple’, hence qualifying as Bi-Sums. However, given that *arhat* and *pratyekabuddha* represent different levels of Buddhist practitioners[11], the binomial could be interpreted that the Buddha is emphasising the impossibility of reaching any level, making them Bi-Inds.

4.3 Working definition in this study and inclusions

Recognising the presence of the Bi-Sum and Bi-Ind distinctions, as well as those of multinomials – Multi-Sum and Multi- Ind, the pertinent question is whether it is necessary to differentiate between Bi-Ind and Bi-Sum and to exclude all Bi-Inds from binomial analysis. In the spirit of this study, the answer is negative, for several reasons.

Firstly, instances of Bi-Ind are relatively rare, constituting a very small proportion of all tokens in both works under investigation. The results of the replacement test indicate that among the 2049 tokens of binomials in Watson (1993), only 75 cases are identified as Bi-Ind, including those questionable instances like (16) and (17), amounting to a mere 4%. Similarly, in Reeves (2008), 81 out of 1726 tokens are Bi-Inds, accounting for 5%. Consequently, it is reasonable to surmise that even if Bi-Ind were to be excluded, the fundamental conclusions drawn would likely align closely with those derived solely from Bi-Sum analysis.

[11] In Mahayana Buddhism, a practitioner reaches first the level of ‘arhat’, followed by ‘pratyekabuddha’, then ‘bodhisattva’, and finally attains supreme awakening to become a ‘buddha’. Together they are termed as ‘the four sages’. (s.v. “四聖” *Foguang Da Cidian*, p. 1785).

Moreover, while rare as tokens, it is also uncommon to encounter a binomial exclusively used as Bi-Ind. In many instances, what might appear as Bi-Ind in certain co-texts can also function as Bi-Sum under other circumstances, as illustrated by Examples (10) and (11), as well as (12) and (13). Consequently, in qualitative studies centred on the types of binomials and multinomials, the influence of such variations is minimal. On most occasions, a binomial excluded as Bi-Ind would invariably be analysed as Bi-Sums elsewhere.

Secondly, in line with Kopaczyk and Sauer (2017), this study does not consider the minority group of Bi-Inds unworthy of investigation. Consider the examples in (18) and (19):

(18) "their **width and depth** exactly two thousand yojanas." (Watson 1993: 12)

(19) "two thousand leagues in **length and width**." (Reeves 2008: 63)

Here, it is difficult to replace *width and depth* or *length and width* with a single word (such as 'size') and their occurrences are all in similar co-texts as Bi-Inds. However, such phrases are frequently seen used in English and further examination could offer additional insights into correlative constructions, for example, with regard to the perceptual markedness feature of spatial axis direction (see Section 9.1.4.1). Coordinative pairs such as these still hold value for studying into their grammatical features, formulaicity, and irreversibility.

Thirdly, from the perspective of the study's feasibility, including the co-text of every case would be both complex and unnecessary, as this study adopts a quantitative approach based on corpus findings. If the differentiation between Bi-Sum and Bi-Ind within Watson (1993) and Reeves (2008) were considered without applying the same criteria to compare frequencies in corpora such as COCA or BNC, the foundational comparison would be questionable. Similar decisions have been made by previous researchers who have adopted a corpus-based approach including Mollin (2012, 2014). In her investigation on the (ir)reversibility of binomials, she defines binomials as: "coordinated word pairs whose lexical elements share the same word class, such as *law and order*, *short*

and long, *red and green*, or *rights and duties*" (2014: 1). As a study encompasses the sequential characteristic of the elements in binomials based on corpus data, providing the co-text for binomials would not only be impractical but also irrelevant.

Given these considerations, this study no longer distinguishes between Bi-Sum and Bi-Ind, as well as Multi-Sum and Multi-Ind. Instead, it uses the terms 'binomial' and 'multinomial' in a broader sense, in line with the definitions provided by Kopaczyk and Sauer (2017) and Mollin (2014), aiming to be as inclusive as possible in examining the features of coordinative structures regardless of the co-text.

In line with the ethos of inclusivity, this study also does not restrict the elements in binomials and multinomials to only words, as many previous studies have done. It includes phrasal elements with at most one determiner or modifier, such as *fine robes and superior garments* (Watson 1993: 11) and *hard to understand and hard to enter* (Reeves 2008: 75). If there is already a determiner, then there can still be at most one other modifier, such as *I and the other members* (Watson 1993: 13), *the Buddha's name or the true Dharma* (Reeves 2008: 90).

To summarise, a binomial in this study is defined as a multi-word expression in the form of 'Element 1 + connector + Element 2', embodying a coordinative relationship between the two elements, be them words or phrases. These elements belong to the same grammatical category and share a certain semantic relationship. When the number of elements is extended to three or more, the expression is then termed as a multinomial, with the form being 'Element 1 + Element 2 + ... + connector + Element N'.

4.4 Exclusions

Despite the endeavour to be as inclusive as possible, it is essential to delineate boundaries to maintain the study's manageable scope and ensure the results possess explanatory value. In light of this, this study excludes the following constructions even though they fit the definition of binomials and multinomials.

For clarity in terminology, this study labels such excluded expressions as 'binomial (or multinomial) expressions', instead of 'binomial (or multinomial)' as per the working definition discussed in section 4.3.

First, binomial and multinomial expressions containing phrases with elements that have more than one modifier to the headword are excluded, as the multiple modifiers are less relevant to the fundamental features of the binomial, which primarily relate to the headword itself. Examples include:

(20) "at home and in **all the** lands **around**" (Watson 1993: 82), where the head word of Element 2 *lands* possesses two determiners: *all* and *the*, as well as a post-modifier *around*.

(21) "flowers, incense, **various kinds of** necklaces, heavenly robes and **assorted musical** instruments" (Watson 1993: 242), where the headwords of Element 3 and Element 5 each have two consecutive pre-modifiers.

(22) "out of **compassion for us** and for our benefit" (Reeves 2008: 185), where Element 1 is a prepositional phrase containing an object *compassion*, which is post-modified by *for us*.

(23) "remote and teeming **with dangerous beasts**" (Reeves 2008: 203), where the headword of Element 2 *teeming* is post-modified by *with dangerous beasts*.

In addition, in cases where there is a binomial embedded within a binomial or multinomial expression, the analysis focuses on the binomial at the most internal level rather than the entire construction. For example, in *dark, discolored, with scabs and sores* (Watson 1993: 74), only the binomial *scabs and sores* is analysed, and the entire construction is excluded from multinomials.

Secondly, binomial and multinomial expressions composed of clauses that involve different predicates are excluded from this study, regardless of whether they share a common subject. For example:

(24) "Buddha son [...] **settle these doubts and occasion joy**." (Watson 1993: 13). In this example, the two elements are constructed with different transitive

verbs *settle* and *occasion*, each followed by distinct direct objects: *these doubts* and *joy*, and the expression is thus excluded from binomials.

(25) "No, **it was me. And the Bodhisattva Fame Seeker was you**." (Reeves 2008: 67). In this example, the two elements are formed with different subject predicative *me* and *you*, and the expression is thus excluded.

(26) "The World-Honored One **kept silent and did not stop them**." (Reeves 2008: 83). In this example, the direct object of Element 2 *them* does not serve as the verb of Element 1 *kept*. Therefore, though the verb phrases *kept* and *did not stop* share the same subject *The World-Honored One*, the expression is still excluded from consideration as a binomial.

Thirdly, binomial and multinomial expressions composed of numerals phrases are excluded. The focus of this study is primarily on binomials and multinomials formed with lexical words, specifically nouns, adjectives, verbs, and adverbs, as well as two types of functional words: pronouns and prepositions. The choice of focus is due to their high frequency across registers among others (Figures 2.6–2.9 in Biber et al. 2021: 95–96). In addition, numeral phrases are excluded due to their narrow semantic domain and relatively stable forms and usage, which are highly co-text-dependent and less broadly representative. These characteristics constrain their utility in examining the core linguistic features of binomials and multinomials.

The excluded numeral phrases encompass three sub-categories: cardinals (Examples 27 and 28), ordinals (Examples 29 and 30), and complex cardinal numbers (Examples 31–33):

(27) "**ten, twenty or even fifty** years" (Watson 1993: 81)

(28) "**a foot or two** from the ground" (Reeves 2008: 120)

(29) "the **second, third and fourth** Law" (Watson 1993: 132)

(30) "for **a second, a third and a fourth** time" (Reeves 2008: 194)

(31) "**one hundred and thirty** kalpas" (Watson 1993: 127)

(32) "**hundreds, thousands, ten thousands, millions** of Buddhas" (Watson 1993: 17)

(33) “**billions and billions** of buddha-lands” (Reeves 2008: 84)

Fourthly, binomial and multinomial expressions containing proper nouns are also excluded from this study. Unlike common nouns, proper nouns pare arbitrary designations with no inherent lexical meaning and grammatically do not exhibit contrast in number or definiteness (Biber et al. 2021: 246–247). As a result, proper nouns are less representative of the core features of binomials and multinomials and are thus excluded from this study. Orthographically, proper nouns require the capitalization of their initial letters, which sets them apart from common nouns.

Instances of exclusion include expressions where proper names are elements within the expression (Examples 34 and 35), as well as cases where the proper noun itself is structured as a binomial (Examples 36 and 37).

(34) “**Subhuti**, **Mahakatyayana**, **Mahakashyapa**, and **Mahamaudgalyayana**” (Watson 1993: 80)

(35) “to me and to **Abundant Treasures**” (Reeves 2008: 242)

(36) “His land will be called **Good and Pure**” (Watson 1993: 148)

(37) “**Sun and Moon Light** Buddha” (Reeves 2008: 70)

4.5 Summary

This chapter positions binomials and multinomials within the broader framework of MWEs, building upon Sinclair’s (1991) idiom principle. These constructions are classified as MWEs not merely on the basis of frequency or idiomaticity, but due to their syntactic coordination, semantic cohesion, and cognitively unified representation. Structurally, they are schematised as occupying discrete syntactic ‘slots’, typically linked by coordinating conjunctions or lexical connectors. Given that such expressions are frequently processed holistically, this chapter argues for the necessity of distinguishing between different types of binomials and multinomials on the basis of their semantic holism. In particular, it draws a distinction between Bi-Sum and Bi-Ind, as well as their multinomial counterparts,

Multi-Sum and Multi-Ind, highlighting the relevance of this categorisation to the analysis of their holistic meaning.

With research into their occurrences in Watson (1993) and Reeves (2008) with the implementation of 'replacement test', it concludes that despite the minor presence of Bi-Ind and Multi-Ind, it remains necessary to include them in a comprehensive study of coordinative constructions such as binomials and multinomials. Additionally, it is more practical to do so without referring to the co-texts with each instance each time. The working definition in this study is thus established. To maintain the study's manageable scope, some binomial and multinomial expressions are excluded from this study, including expressions containing phrases with elements that have more than one modifier to the headword, expressions comprise of clauses, as well as expressions comprise of numerals and proper nouns.

Chapter 5 An overview of the binomials and multinomials in Watson (1993) and Reeves (2008)

5.1 Types, Tokens and TTR

With the definitions of binomials and multinomials provided in the previous chapter, the binomials in Watson (1993) and Reeves (2008) are manually collected, yielding total occurrence counts of 2049 and 1726, respectively. For multinomials, the counts are 401 and 414, respectively. Considering the total word count of each translation, the normalized rate of occurrence (per 100 words) for binomials and multinomials can thus be calculated, as presented in Table 5.1.1:

		Watson (1993)	Reeves (2008)
Total word count[12]		109377	103117
Binomial	Total occurrences	2049	1726
	Occurrences per 100 words	1.87	1.68
Multinomial	Total occurrences	401	414
	Occurrences per 100 words	0.37	0.40

Table 5.1.1 Total occurrences and occurrences per 100 words of binomials and multinomials in Watson (1993) and Reeves (2008)

The results indicate that the use of binomials and multinomials in the two translations is similar, albeit with slight differences. In Watson (1993), the normalized rate of occurrence (per 100 words) of binomials is higher than in Reeves (2008) by 0.19, indicating that Watson employs more binomials than Reeves. Conversely, Reeves (2008) exhibits a higher rate of occurrence (per 100 words) of multinomials by 0.03 compared to Watson (1993), although this difference is smaller than that observed for binomials. Furthermore, in both translations, the frequency of multinomials is significantly lower than that of

[12] The Total Word Count presented in Table 5.1.1 and the Word Count presented in Table 5.2.1 are obtained by using the Corpus Info function provided by Sketch Engine (Kilgarriff et al. 2004, 2014), after uploading the digital version of Watson (1993) and Reeves (2008) onto Sketch Engine.

binomials, highlighting a more prevalent usage of binomials compared to multinomials.

To examine the variations presented in each translation, the relationship between 'types' and 'tokens' is explored. Based on the definition given by Biber et al. (2021: 55), in this study 'types' refer to the distinct forms of binomials and multinomials found within the texts, while 'tokens' denote the total occurrences of these forms. To better illustrate the diversity in the use of the binomials and multinomials, grammatical inflections of basic forms are counted as single types. This includes (1) plural forms of nouns, where, for instance *leaders and teachers* (Watson 1993: 533) and *leader and teacher* (Watson 1993: 567) are considered as one type; (2) inflected forms of verbs, where, for example, *teach and transform* (Reeves 2008: 146), *taught and transformed* (Reeves 2008: 154) and *teaching and transforming* (Reeves 2008: 153) are treated as one type; and (3) comparative and superlative forms of adjective and adverbs, although no such cases are identified in either translation.

Using the counts of types and tokens, the type-token ratio (TTR) is calculated by dividing the former by the latter. TTR is considered a crucial metric for evaluating lexical diversity within the texts and can range from 0 to 1, with higher values signifying greater lexical diversity (Malvern et al., 2004: 19). In this way, TTR serves as a significant indicator of the range and variety of binomials and multinomials used in the translations, offering insights into the richness of linguistic expression employed by different translators.

The types and tokens of binomials and multinomials in Watson (1993) and Reeves (2008) are examined, and the TTR in each work is calculated, as presented in the following tables:

	Watson (1993)	Reeves (2008)
Type	1109	1041
Token	2049	1726
TTR	0.54	0.60

Table 5.1.2 Types, tokens and TTR of binomials in Watson (1993) and Reeves (2008)

	Watson (1993)	Reeves (2008)
Type	308	346
Token	401	414
TTR	0.77	0.84

Table 5.1.3 Types, tokens and TTR of multinomials in Watson (1993) and Reeves (2008)

The lower TTRs of both binomials and multinomials in Watson (1993) than in Reeves (2008) as shown in Table 5.1.2 and Table 5.1.3 suggest that the former employs these structures with less variation than the latter. In other words, Watson's translation of binomials and multinomials tends to adhere to a more consistent pattern, while Reeves exhibits greater lexical freedom in his rendition of the same source text.

Additionally, both translations demonstrate higher TTRs for multinomials than for binomials, indicating that multinomials display greater diversity despite their much fewer total count of occurrences. This disparity underscores a richer and more varied linguistic expression of multinomials than binomials across both translations.

5.2 Distribution of binomials and multinomials across chapters

Kumarajiva's Chinese translation of the *Lotus Sutra* comprises a total of 28 chapters. Following the Buddhist monk *Shi Dao'an*'s[13] methodology of analysing sutras, Master *Taixu* (1921) structured the sutra into three divisions: Chapter 1, 序分 (*xù fēn* 'preface')[14], which is the introductory section specifying the time and place where the sutra was delivered; Chapter 2 to 20, 正宗分 (*zhèng zōng fēn* 'text proper'), the main body of the sutra, detailing the doctrines and practices

[13] 道安 *Dao'an* (312–385), monk-exegete and pioneer of Buddhism during the Eastern *Jin* dynasty in China (s.v. "Dao'an" *The Princeton Dictionary of Buddhism*, p. 213).
[14] English translations and definitions of the three divisions follow the ones provided in the *The Princeton Dictionary of Buddhism* (s.v. "san fen ke jing" *The Princeton Dictionary of Buddhism*, p. 768).

that are the subject of the discourse; and Chapter 21 to 28, 流通分 (*liú tōng fēn* 'dissemination section'), which describes the confidence and insight the scripture inspired in its audience.

Particularly, the main body of the sutra, 正宗分 (*zhèng zōng fēn* 'text proper'), can be further subdivided following Master *Kuiji*'s[15] schema: Chapters 2 to 13, 顯一乘之境 (*xiǎn yī chéng zhī jìng* 'demonstrating the **realm** of the One Vehicle'); Chapters 14 and 15, 顯一乘之行 (*xiǎn yī chéng zhī xíng* 'demonstrating the **practice** of the One Vehicle'; and Chapter 16 to 20, 顯一乘之果 (*xiǎn yī chéng zhī guǒ* 'demonstrating the **fruition** of the One Vehicle'), illustrating the basic aspects of practising Buddhism: 境 (*jìng* 'realm'), 行 (*xíng)* 'practice' and 果 (*guǒ*) 'fruition' (s.v. "境行果" *Foguang Da Cidian,* p. 5766).

Besides, the seven parables[16] which the *Lotus Sutra* is most famous for, are also spread in various chapters among the section of 正宗分 (*zhèng zōng fēn* 'text proper'): 'the Parable of the Burning House' in Chapter 3, 'the Parable of the Poor Son' in Chapter 4, 'the Parable of the Medicinal Herbs' in Chapter 5, 'the Parable of the Phantom City' in Chapter 7, 'the Parable of the Jewel in the Garment' in Chapter 8, 'the Parable of the Jewel in the Topknot' in Chapter 14, and 'the Parable of the Skilled Physician' in Chapter 16.

The table below provides the translated titles of the 28 chapters by Watson (1993) and Reeves (2008), along with their respective word counts, for reference in subsequent discussions:

Chapter No.	Watson (1993)		Reeves (2008)	
	Title	Word count	Title	Word count
1	"Introduction"	6167	"Introduction"	5957
2	"Expedient Means"	8035	"Skillful Means"	7439

[15] 窺機 *Kuiji* (632–682), scholar–monk of the *Tang* dynasty, commonly regarded as the founder of the *Faxiang Zong* of Chinese *Yogācāra* Buddhism (s.v. "Kui Ji" *The Princeton Dictionary of Buddhism*, p. 450).
[16] Parables, together with analogies and illustrations, are one type of the *qizhongyu* 'seven modes of speech' in Buddhist sutras – *yuyu* (s.v. "qi zhong yu" *The Princeton Dictionary of Buddhism*, p. 692). They are employed to better instruct of the doctrines of Buddhism.

3	“Simile and Parable”	10749	“A Parable”	10010
4	“Belief and Understanding”	5757	“Faith and Understanding”	5209
5	“The Parable of the Medicinal Herbs”	3114	“The Parable of the Plants”	2693
6	“Bestowal of Prophecy”	2863	“Assurance of Becoming a Buddha”	2766
7	“The Parable of the Phantom City”	9547	“The Parable of the Fantastic Castle-City”	8835
8	“Prophecy of Enlightment for Five Hundred Disciples”	3608	“Assurance for the Five Hundred Disciples”	3385
9	“Prophecies Conferred on Learners and Adepts”	1869	“Assurance for Arhats, Trained and in Training”	1834
10	“The Teacher of the Law”	3580	“Teachers of the Dharma”	3315
11	“The Emergence of the Treasure Tower”	4235	“The Sight of the Treasure Stupa”	3835
12	“Devadatta”	2779	“Devadatta”	2599
13	“Encouraging Devotion”	1872	“Encouragement to Uphold the Sutra”	1711
14	“Peaceful Practices”	5172	“Safe and Easy Practices”	4796
15	“Emerging from the Earth”	4115	“Springing Up from the Earth”	3835
16	“The Life Span of the Thus Come One”	3236	“The Lifetime of the Tathagata”	3044
17	“Distinctions in Benefits”	3877	“The Variety of Blessings”	3699

18	“The Benefits of Responding with Joy”	2219	“Blessings of Responding with Joy”	2096
19	“Benefits of the Teacher of the Law”	4855	“The Blessings of the Dharma Teacher”	4452
20	“The Bodhisattva Never Disparaging”	2311	“Never Disrespectful Bodhisattva”	2115
21	“Supernatural Powers of the Thus Come One”	1665	“Divine Powers of the Tathagata”	1557
22	“Entrustment”	671	“Entrustment”	597
23	“Former Affairs of the Bodhisattva Medicine King”	4095	“Previous Lives of Medicine King Bodhisattva”	3859
24	“The Bodhisattva Wonderful Sound”	2952	“Wonderful Voice Bodhisattva”	2804
25	“The Universal Gateway of the Bodhisattva Perceiver of the World's Sounds”	3308	“The Universal Gateway of the Bodhisattva Regarder of the Cries of the World”	3262
26	“Dharani”	1559	“Incantations”	2263
27	“Former Affairs of King Wonderful Adornment”	2751	“The Previous Life of King Wonderfully Adorned”	2532
28	“Encouragements of the Bodhisattva Universal Worthy”	2416	“Encouragement of Universal Sage Bodhisattva”	2518

Table 5.2.1 Word count across chapters in Watson (1993) and Reeves (2008)

Based on the word count and the occurrences of binomials and multinomials in each chapter, the respective normalized rate of occurrence (per 100 words) is calculated and are presented in the following figures:

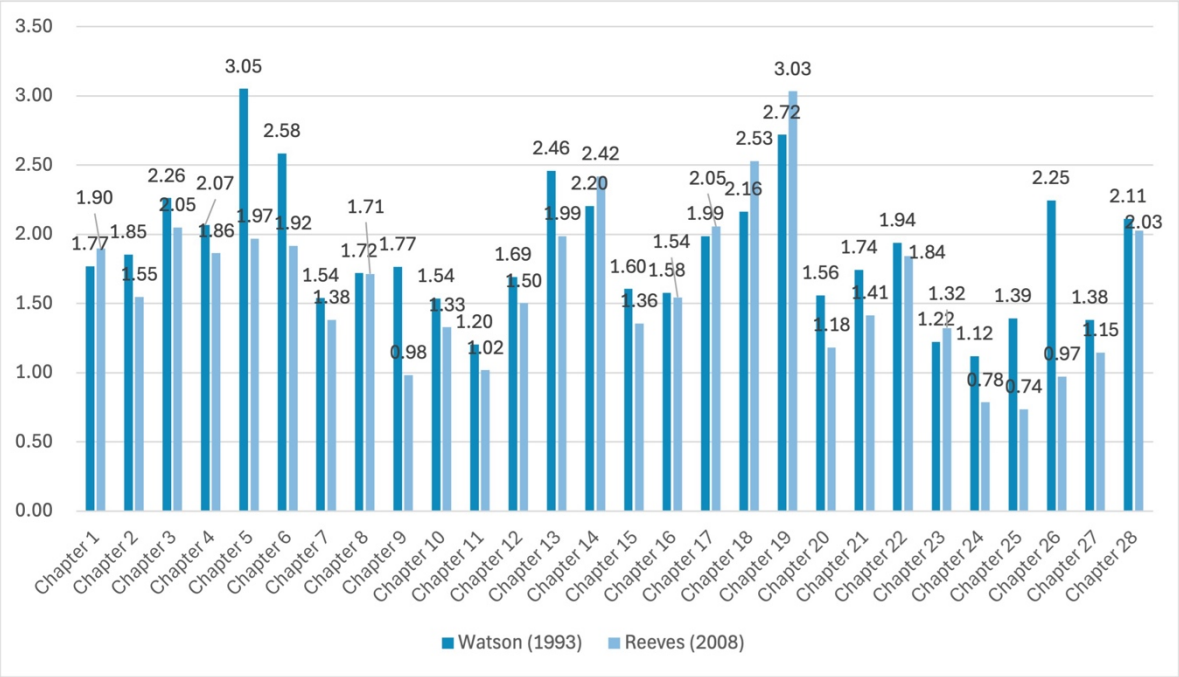

Figure 5.2.1 Occurrences per 100 words of binomials in Watson (1993) and Reeves (2008) across chapters

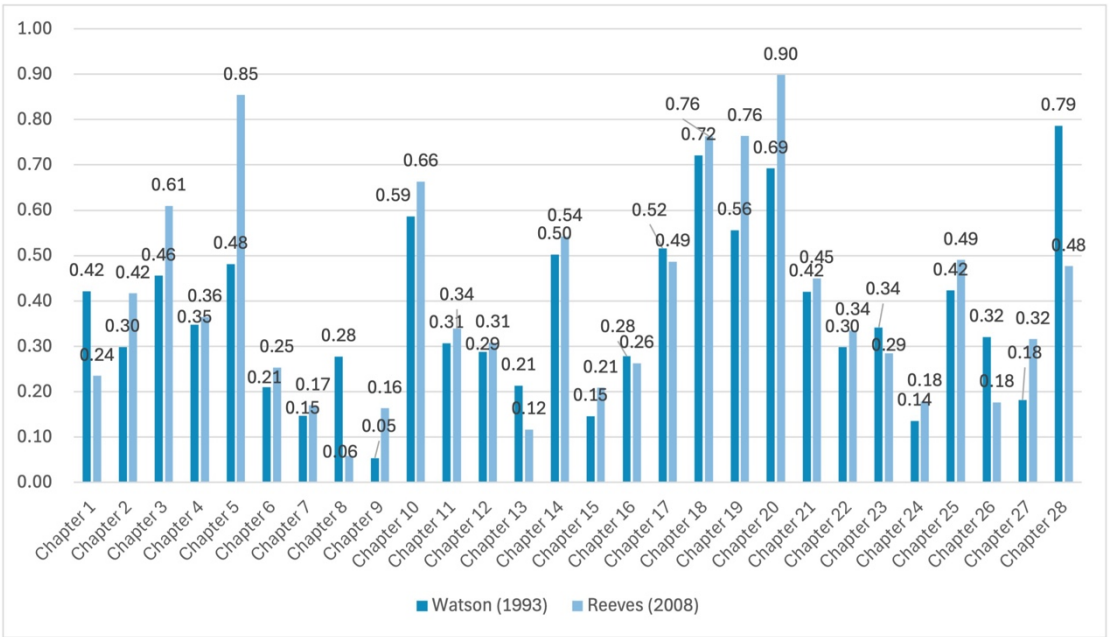

Figure 5.2.2 Occurrences per 100 words of multinomials in Watson (1993) and Reeves (2008) across chapters

Figures 5.2.1 and 5.2.2 indicate that binomials and multinomials are more prevalent in the 19 chapters of the 正宗分 (*zhèng zōng fēn* 'text proper'). In the case of binomials, nine chapters from the translations by Watson (1993) and Reeves (2008) exhibit a higher frequency of binomials than their respective

overall normalised rates (1.87 and 1.68). Similarly, for multinomials, eight chapters surpass their overall normalised rates (0.37 and 0.4). In contrast, within the concluding section 流通分 (*liú tōng fēn* 'dissemination section'), only two of the eight chapters contain a higher number of binomials than the overall norm in both translations, while three chapters exceed the overall level for multinomials. These findings suggest that binomials and multinomials play a significant role in articulating the key doctrines and practices of this sutra. Moreover, within 正宗分 (*zhèng zōng fēn* 'text proper'), the final sub-section, which illustrates the fruition of the One Vehicle, contains relatively higher frequency of both binomials and multinomials. Chapters 17, 18, and 19, which focus on presenting the benefits or blessings attainable through adherence to Buddha's teachings, particularly exemplify this pattern as a result of the essential function of binomials and multinomials: enumeration. Additionally, among the seven chapters focused on parables, Chapters 3, 5, and 16 exhibit a higher frequency of binomials and multinomials compared to the overall norm. This suggests that the impact of narrative style on the use of binomials and multinomials is not readily apparent.

Comparing the two translations, no clear overall pattern emerges despite both being based on the same source text. Instead, there is noticeable variability between the translators. Reeves uses more binomials than Watson in only six chapters (Chapters 1, 14, 17, 18, 19, and 23), while Watson exceeds Reeves in the remaining 22 chapters. The most significant difference occurs in Chapter 26, where Watson surpasses Reeves by a margin of 1.28, with 35 tokens compared to Reeves' 22. In contrast, Reeves (2008) employs more multinomials than Watson (1993) across 20 chapters, presenting an inverse trend to the distribution of binomials. The largest discrepancy in multinomial usage is found in Chapter 5, where Reeves exceeds Watson by 0.37, with 23 tokens compared to Watson's 15.

The absence of consistent patterns in the occurrence of binomials and multinomials in the two translations indicates that their usage is notably shaped by the translators' individual decisions regarding the translation strategies they choose to employ, a topic extensively examined in Chapter 7. Fundamentally, the

use of binomials and multinomials is a result of an interaction between the textual content and the translators' decisions, which are aligned with the goals of their translation endeavours.

5.3 Distribution of binomials and multinomials within chapters

5.3.1 Binomials and multinomials within prose and verse passages

From a stylistic perspective, there are two primary categories in the writing of Buddhist sutras: 長行 (*cháng háng* 'proses') and 偈誦 (*jì sòng* 'verses'). The prose style is characterised by continuous compositions unrestricted by their word count, while the verse style, in contrast, is bound by specific metre and length (s.v. "長行" *Foguang Da Cidian*, p. 3595). The *Lotus Sutra*, in particular, exemplifies the integration of both prose and verse passages, as early Chinese Buddhist monk and scholar *Ji Zang*[17] concluded in his celebrated work in early Buddhist philosophy "百論 (*bǎi lùn* 'Hundred [Verse] Treatise')":

> "Regarding general discussions on the establishment of [Buddhism] teachings, there are three categories: those that have only proses, without verses, such as 大品 (*dà pǐn* 'Perfection of Wisdom in Twenty-five Thousand Lines'); those that have only verses, without proses, such as 法論 (*fǎ lùn* 'Verses of Dharma'); and those that contain both proses and verses, such as 法華 (*fǎ huá* 'the Lotus Sutra')." (CBETA 2024.R1, T42, no. 1827, p. 238b8–11)[18]

The verse passages in the Chinese *Lotus Sutra* are characterised by a consistent syllabic structure, with each line typically consisting of four or five characters[19]. However, unlike traditional poetic forms, these lines do not follow any regular rhyming pattern. In their English translations, both Watson (1993) and Reeves (2008) retain the segmented structure of the original Chinese text, preserving the line breaks and also forgo any attempt to maintain a uniform metre or rhyme scheme in English.

---

[17] 吉藏 *Ji Zang* (549–623), Chinese Buddhist monk of originally Parthian descent and exegete within the *San Lun Zong*, the Chinese counterpart of the *Madhyamaka* school of Indian thought (s.v. "Ji Zang" *The Princeton Dictionary of Buddhism*, p. 395).

[18] Translated into English by the writer of this study from the original text: "總談設教，凡有三門：一但有長行、無有偈頌，如《大品》之類；二但有偈頌、無有長行，如《法句》之流；三具存二說，如《法華經》等".

[19] In Chinese, with very few exceptions, a syllable represents one lexeme and is written in a single character.

While the majority of the chapters follow this combined style of both prose and verse passages, three chapters (22, 24, and 28) in the *Lotus Sutra* contain only prose passages without accompanying verse passages. The distributions of binomials and multinomials in the prose and verse passages used by Watson (1993) and Reeves (2008) are as depicted in the following figures:

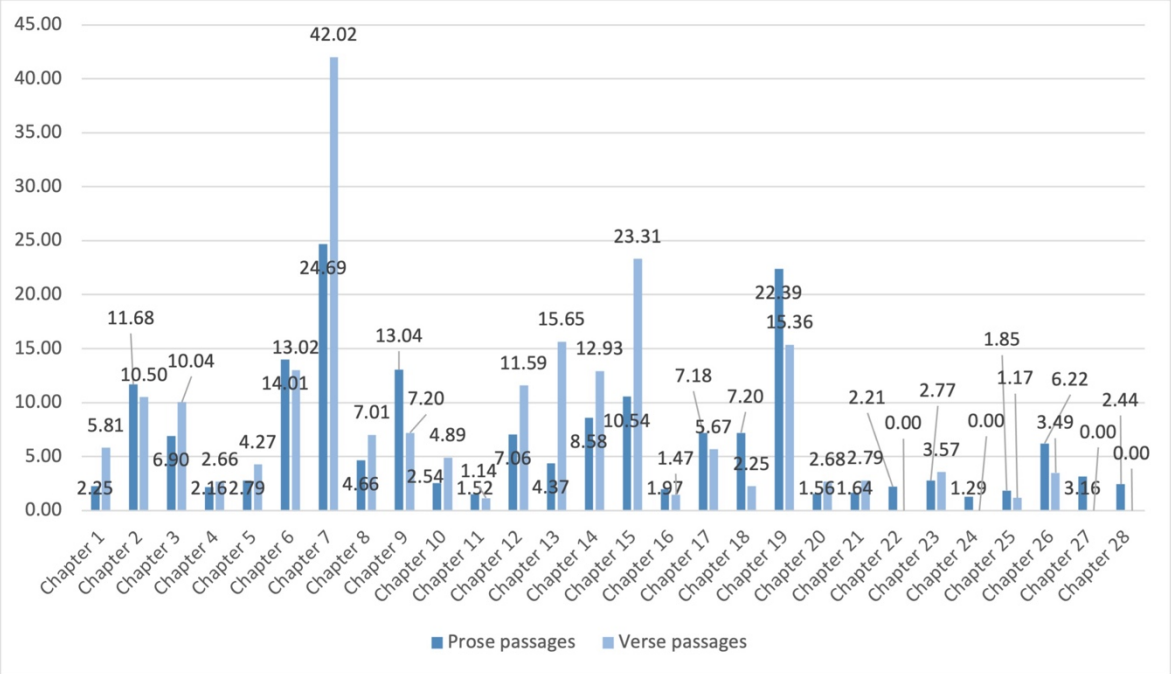

Figure 5.3.1.1 Occurrences per 100 words of binomials in prose and verse passages within each chapter in Watson (1993)

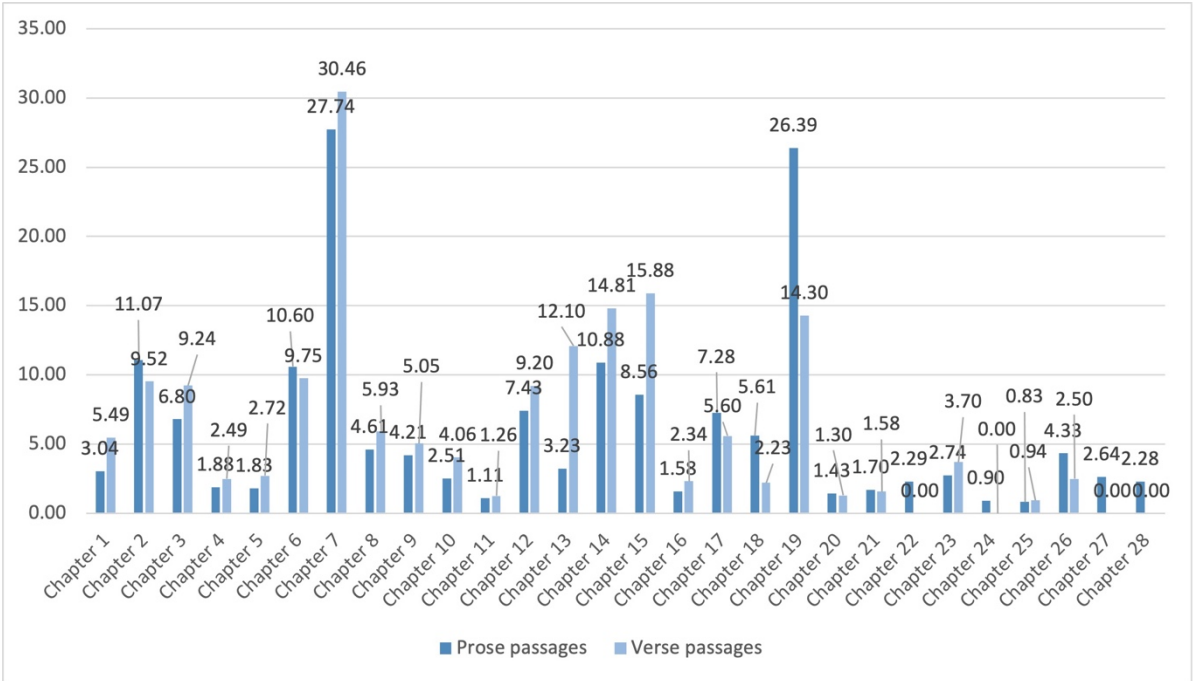

Figure 5.3.1.2 Occurrences per 100 words of binomials in prose and verse passages within each chapter in Reeves (2008)

According to figures 5.3.1.1 and 5.3.1.2, except for the three chapters where verses are absent, in the remaining 25 chapters, 11 chapters in Watson (1993) and 9 chapters Reeves (2008) in exhibit more binomials in prose passages than in verse passages, suggesting verse passages slightly contain more binomials. In both translations, the distribution of binomials generally follows a similar pattern regarding whether prose or verse passages contain a higher number of binomials. However, chapters 9, 11, 16, 20, 21, and 25 deviate from this trend. In Watson (1993), the greatest disparity occurs in Chapter 7, where binomials in verse passages exceed those in prose passages by 17.33 per 100 words. In contrast, in Reeves (2008), Chapter 19 shows a notable difference from others, with a higher frequency of binomials in prose passages than in verse, displaying a disparity of 12.09 per 100 words.

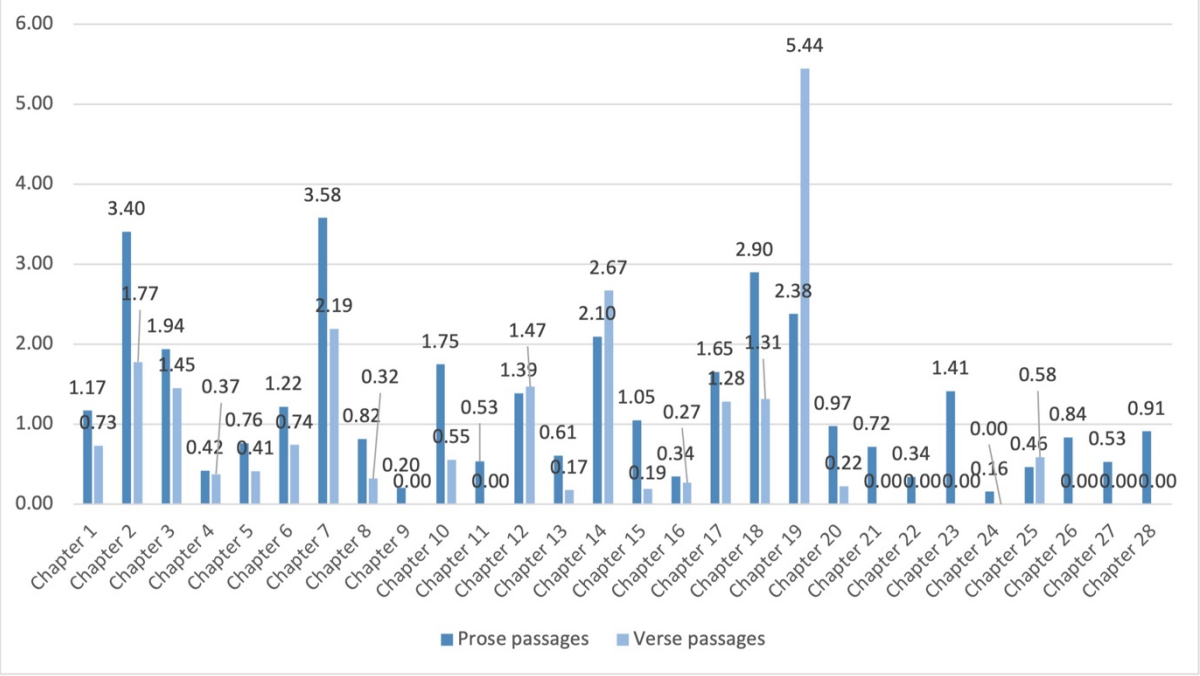

Figure 5.3.1.3 Occurrences per 100 words of multinomials in prose and verse passages within each chapter in Watson (1993)

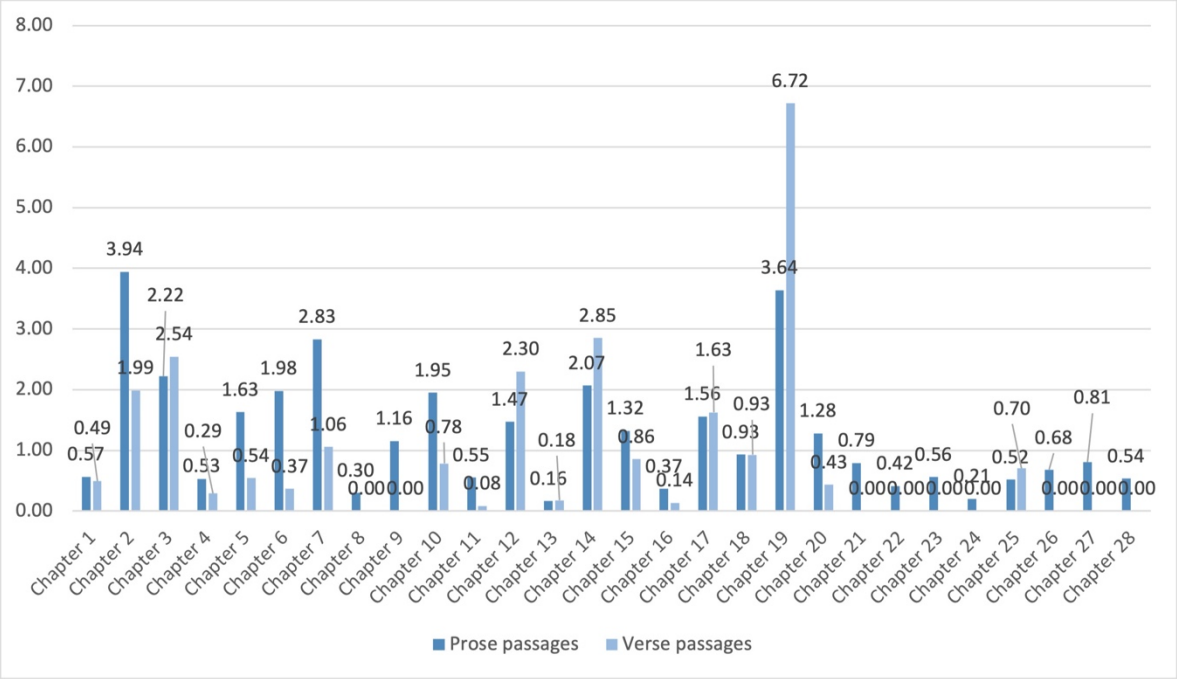

Figure 5.3.1.4 Occurrences per 100 words of multinomials in prose and verse passages within each chapter in Reeves (2008)

Figures 5.3.1.3 and 5.3.1.4 indicate that, among the 25 chapters containing verse passages, 21 chapters in Watson (1993) and 17 in Reeves (2008) exhibit a higher frequency of multinomials in prose passages than in verse, a trend much more pronounced than with binomials. This suggests that, due to the line-break patterns in verse passages, multinomials are used less frequently in verse passages.

The distribution of multinomials between prose and verse passages is consistent across most chapters in both translations, with the exception of Chapters 3, 13, and 17, where Reeves (2008) contains more multinomials in verse passages, different from Watson (1993). Particularly, Chapter 19 demonstrates the highest frequency of multinomials, with differences of 3.06 and 3.08 in Watson (1993) and Reeves (2008), respectively. This contrasts with the distribution of binomials in the same chapter, suggesting that verse passages are also capable of accommodating a significant number of multinomials. Additionally, in the Chapter 7 in Watson (1993), multinomials occur more frequently in prose passages than in verse, which may explain the lower occurrence of binomials in

prose when the translator prefers multinomials. However, the absence of a clear overall pattern in the use of binomials and multinomials between prose and verse passages suggests that the stylistic features of the text do not significantly influence the distribution of either binomials or multinomials.

5.3.2 Binomials and multinomials within *geya* and *gāthā* passages

Within the verse passages in the *Lotus Sutra*, two types are observed, namely, *geya* 'verse narratives' or 'songs' and *gāthā* 'odes' or 'religious verse'. *Geya* is distinguished by "being the verse reiteration of a preceding prose narrative or by sometimes having verse interspersed with prose narration" (s.v. "geya" *The Princeton Dictionary of Buddhism*, p. 319), whereas *gāthā* "does not include the *geya*'s interspersed prose narration and is not necessarily the verse reiteration of a preceding prose narrative" (s.v. "gāthā" *The Princeton Dictionary of Buddhism*, p. 315). In other words, *geya* passages is more closely related to the preceding prose passages, rephrasing the narratives as a form of emphasis, while *gāthā* passages is independent from prose passages, often serving as praises or prayers.

According to the definitions, in the *Lotus Sutra*, *geya* passages frequently follow the introductory sentences as exemplified in (38) and (39):

(38) "Then Bodhisattva Maitreya, **wishing to state his meaning once more**, asked the question in verse form [...]" (Watson 1993: 7)

(39) "Then Maitreya Bodhisattva, **wanting to say what he meant once again**, asked in verse [...]" (Reeves 2008: 56).

Meanwhile, *gāthā* passages typically occur after the expressions illustrated in (40) and (41):

(40) "At that time the Brahma kings, in the presence of the Buddha, with a single mind and joined voice **recited these verses of praise** [...]." (Watson 1993: 125)

(41) "Then all the kings of the Brahma heavens, before the Buddha, with one mind and voice **praised him in verse**, saying [...]" (Reeves 2008: 187)

Across the entire sutra, *geya* passages are more prevalent than *gāthā* passages: out of a total of 84 verse passages, 50 are *geya* passages and 34 *gāthā*.

Though defined as a repetition of the preceding prose passages, *geya* passages are not simple word-for-word copies. They may utilize more generalized language, as exemplified in Chapter 18 (Watson 1993: 245–250, Reeves 2008: 315–320); alternatively, they can elaborate on prose passages with additional details and descriptive language, as seen in the first verse passage of Chapter 1 (Watson 1993: 3–13, Reeves 2008: 53–64). In some instances, it is more of a balanced position between the prose and *geya* passages, as observed in Chapter 4 (Watson 1993: 80–96, Reeves 2008: 141–157). Thus, the utilizations of binomials and multinomials in *geya* passages and their corresponding prose passages are not uniformly repetitive, as exemplified in their distributions depicted the following figures:

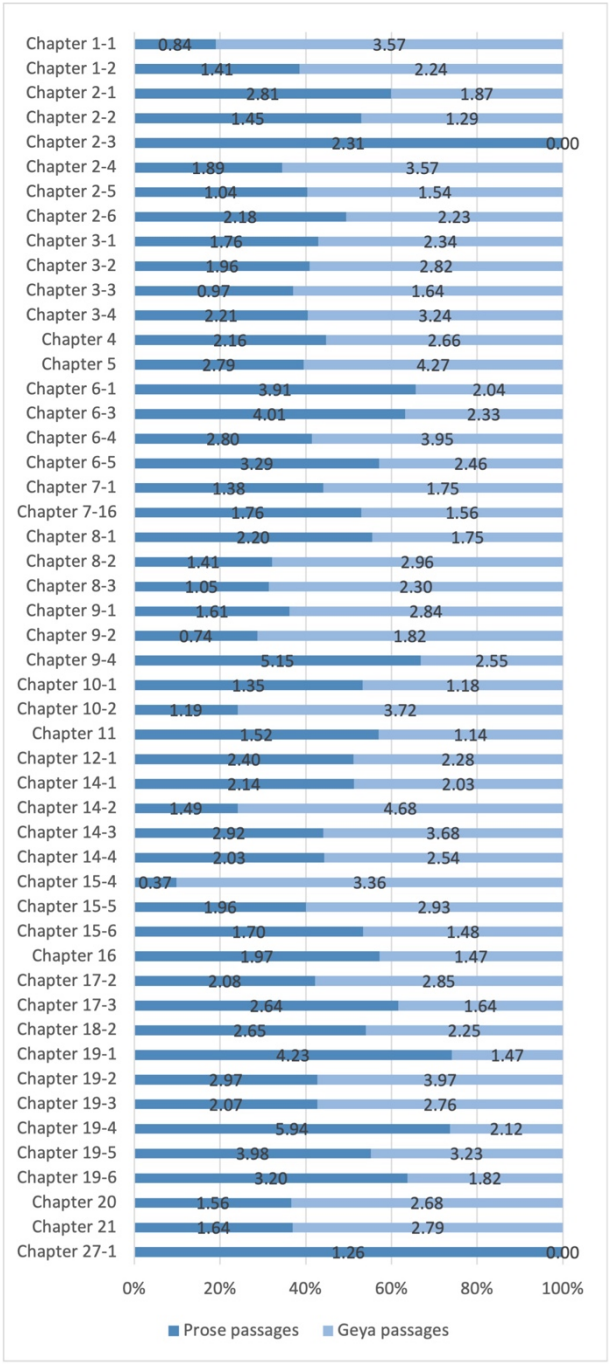

Figure 5.3.2.1 Occurrence per 100 words of binomials in *geya* passages and their corresponding prose passages in Watson (1993)

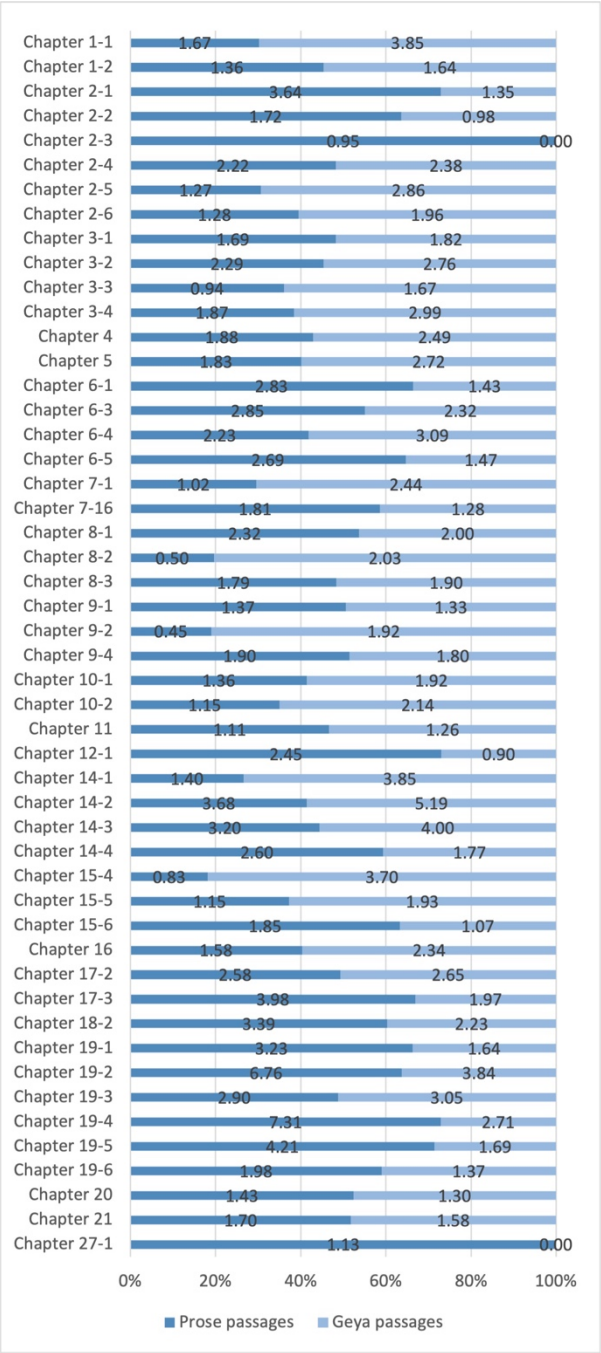

Figure 5.3.2.2 Occurrence per 100 words of binomials in *geya* passages and their corresponding prose passages in Reeves (2008)

As shown by the findings on binomials in Figures 5.3.2.1 and 5.3.2.2, in Watson's (1993) translation, 22 out of 50 prose passages contain more binomials than their corresponding *geya* passages, while in Reeves (2008), this number is 24 out of 50. This suggests that in both translations, *geya* passages tend to feature slightly more binomials than the prose passages on which their content is based, yet the overall distribution is a balanced one. Given that fewer prose passages

contain binomials compared to verse passages in general, as noted in Section 5.3.1, this balance likely arises due to the similar content shared between prose and *geya* passages, reflecting the nature of *geya*'s dependence on prose passages.

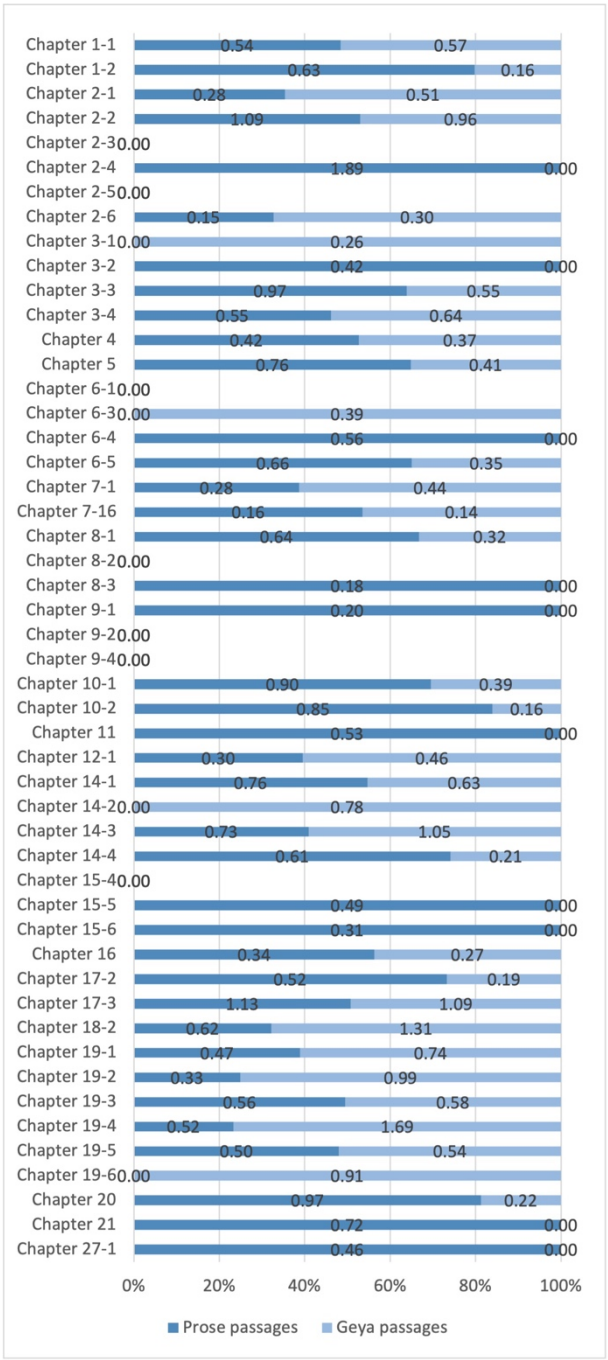

Figure 5.3.2.3 Occurrence per 100 words of multinomials in *geya* passages and their corresponding prose passages in Watson (1993)

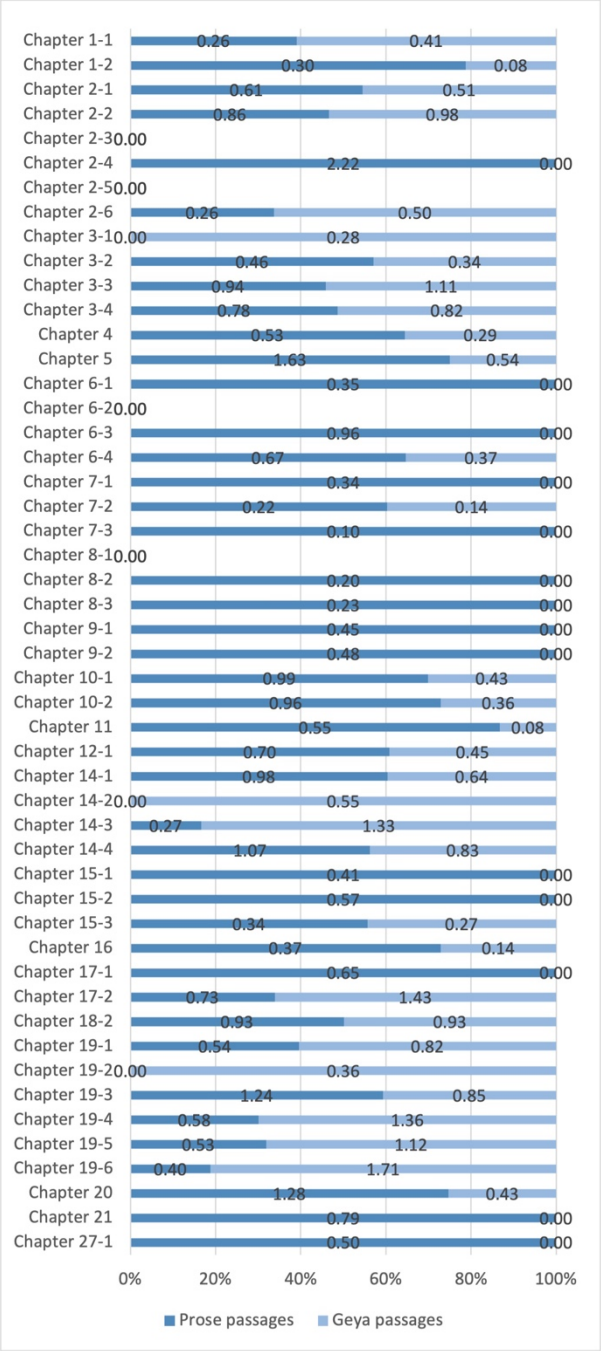

Figure 5.3.2.4 Occurrence per 100 words of multinomials in *geya* passages and their corresponding prose passages in Reeves (2008)

Figures 5.3.2.3 and 5.3.2.4 demonstrate that multinomials are more prevalent in prose than in *geya* passages, with 35 and 37 prose passages showing a higher frequency of multinomials compared to the subsequent *geya* passages. Notably, 10 *geya* passages in Watson (1993) and 14 in Reeves (2008) contain no multinomials at all. This pattern contrasts with the binomial distribution outlined

in the previous paragraph yet aligns with the general distribution of multinomials discussed in Section 5.3.1.

5.4 Summary

This chapter provides an overview of the use of binomials and multinomials in Watson (1993) and Reeves (2008). Both the types and tokens are counted, revealing that binomials are used much more frequently than multinomials in both translations. While Watson (1993) employs a higher number of binomials overall compared to Reeves (2008), Reeves (2008) features a greater frequency of multinomials. According to the TTR of binomials and multinomials, Watson's usage of binomials and multinomials exhibits less variety compared to that of Reeves.

The investigation into the distribution of binomials and multinomials across different chapters reveals that these linguistic structures are more frequently employed in the main body 正宗分 (*zhèng zōng fēn* 'text proper'), underscoring their significance in articulating the core doctrines and practices of the sutra. When comparing their occurrence across prose and verse passages, binomials tend to appear more often in verse than in prose. In the case of *geya* passages, however, slightly more binomials are found in the preceding prose passages, although the overall distribution between the two remains relatively balanced. Multinomials, by contrast, are more commonly found in prose passages, a tendency likely influenced by the structural presence of line breaks in the original text.

Nonetheless, the distribution of binomials and multinomials does not exhibit a consistent pattern, suggesting that their use is shaped by the specific content of the text and the individual strategies employed by the translators in rendering the source material.

Chapter 6 The grammatical features of binomials and multinomials

This chapter investigates the grammatical features of binomials and multinomials as found in Watson (1993) and Reeves (2008). It examines the structures, the connectors, and the elements through a comparative analysis. The elements are explored in detail in terms of their formal properties either as words or as phrases, along with the semantic relations between each other. It is important to note that the statistical data presented in this chapter are derived from the types of binomials and multinomials rather than individual tokens.

6.1 The grammatical features of binomials

6.1.1 Structure

Binomials can take the form of either single words or phrases and are thus categorized into basic and extended structures. A binomial with a 'basic structure' comprises two single words, such as *come and go* (Watson 1993: 85, Reeves 2008: 144), *monks and nuns* (Watson 1993: 20, Reeves 2008: 55), *this or that* (Watson 1993: 26), *good and gentle* (Watson 1993: 38, Reeves 2008: 92), *either see or hear* (Reeves 2008: 230).

On the other hand, a binomial with an 'extended structure' involves at least one phrase as an element. This phrase can occupy either Slot 1 or Slot 2, or both. For instance, in Slot 1, *transcendental powers and paramitas* (Watson 1993: 53), which is formed with a noun phrase and a noun. In Slot 2, examples include *safest and most comfortable* (Reeves 2008: 118), formed with an adjective and an adjective phrase. Both slots may also contain phrases, as seen in examples like *comprehensive wisdom and keen understanding* (Watson 1993: 135), formed with two noun phrases (nouns premodified by adjectives), and *hard to believe and hard to understand* (Reeves 2008: 197), containing two adjective phrases (adjectives postmodified by 'to-clause'). Based on this categorization, the binomial *human and heavenly beings* (Reeves 2008: 67) is classified as a binomial with an extended structure, comprising a noun and a noun phrase. In contrast, *heavenly and human being* (Watson 1993: 19) is considered as a phrase remodified by a

binomial in basic structure (*heavenly and human*), which serves as the attribute of the head word *being*.[20]

Additionally, some binomials in both works exhibit partial omission in one element, usually Element 2. Examples include *many or not [many]* (Watson 1993: 247, Reeves 2008: 316), *successful or not [successful]* (Watson 1993: 258, Reeves 2008: 328). This phenomenon also occurs when Element 1 is a phrase, as in *good tasting or vile [tasting]* (Watson 1993: 259), *big trees and small [trees]* (Reeves 2008: 162). Such binomials are referred to as having a 'reduced structure'. In reduced structures, the words or head words of the two elements do not belong to the same word class: in *many or not*, *many* is an adjective and *not* is an adverb, while in *good tasting or vile*, the head word of Element 1 *tasting* is a noun whereas Element 2 *vile* an adjective. Only by supplementing the missing component can the required correspondence of the two elements be restored in binomial.

Given this categorization, the distribution of binomials by their structure in the two translations is depicted in the following figures[21]:

[20] Given the frequent occurrent of the phrase *heavenly and human being* in Watson (1993), with 65 tokens, this construction is fully quoted in this study when referenced.

[21] In all pie-charts in this study, the digits before the semicolons represent the counts of the corresponding feature, while the percentage following the semicolons indicates its proportion relative to the total.

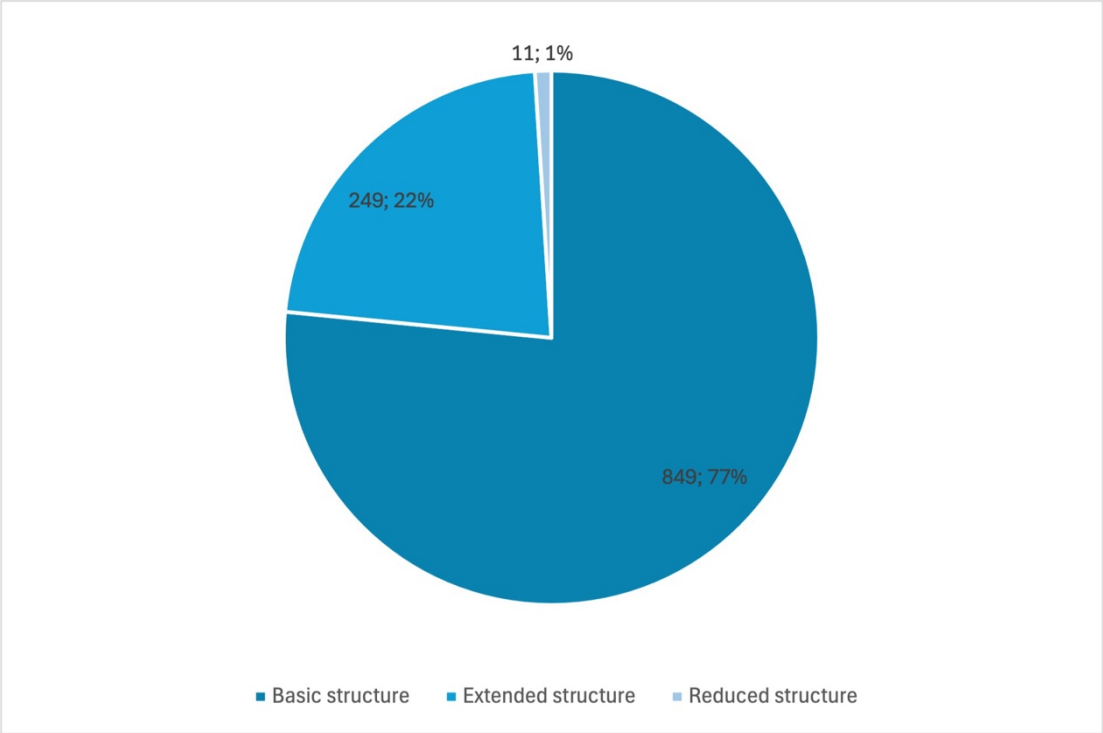

Figure 6.1.1.1 Distribution of binomials by structure in Watson (1993)

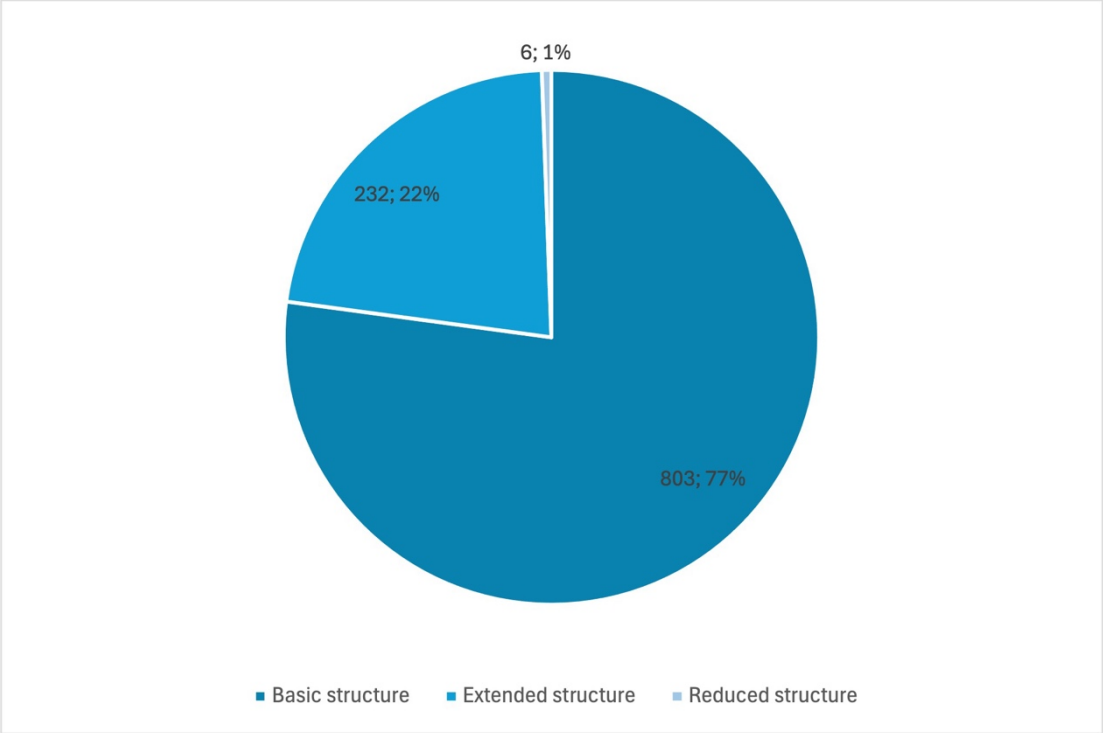

Figure 6.1.1.2 Distribution of binomials by structure in Reeves (2008)

The figures indicate a similar distribution of structures, with binomials featuring basic structures predominating in both translations, constituting 77% of all binomials. Extended structures account for 22%, while reduced structures represent the smallest proportion at just 1%.

In the subsequent discussion of the grammatical features of the elements in Section 6.1.3, this study focuses on examining those in basic structures as well as those in extended structures. Reduced structures are excluded due to their limited number of occurrences.

6.1.2 The connector

In the binomials found in Watson (1993) and Reeves (2008), the connectors observed between the elements include coordinators *and* and *or*, as well as correlative coordinators including *both... and*, *either... or*, *neither... nor*, *whether... or*, etc. In addition, there are instances where the connector is omitted, as seen in examples like *immeasurable, boundless* (Watson 1993: 97), *the buddhas, the tathagatas* (Reeves 2008: 85).

The distribution of connector usage in the two works is illustrated in the following figures:

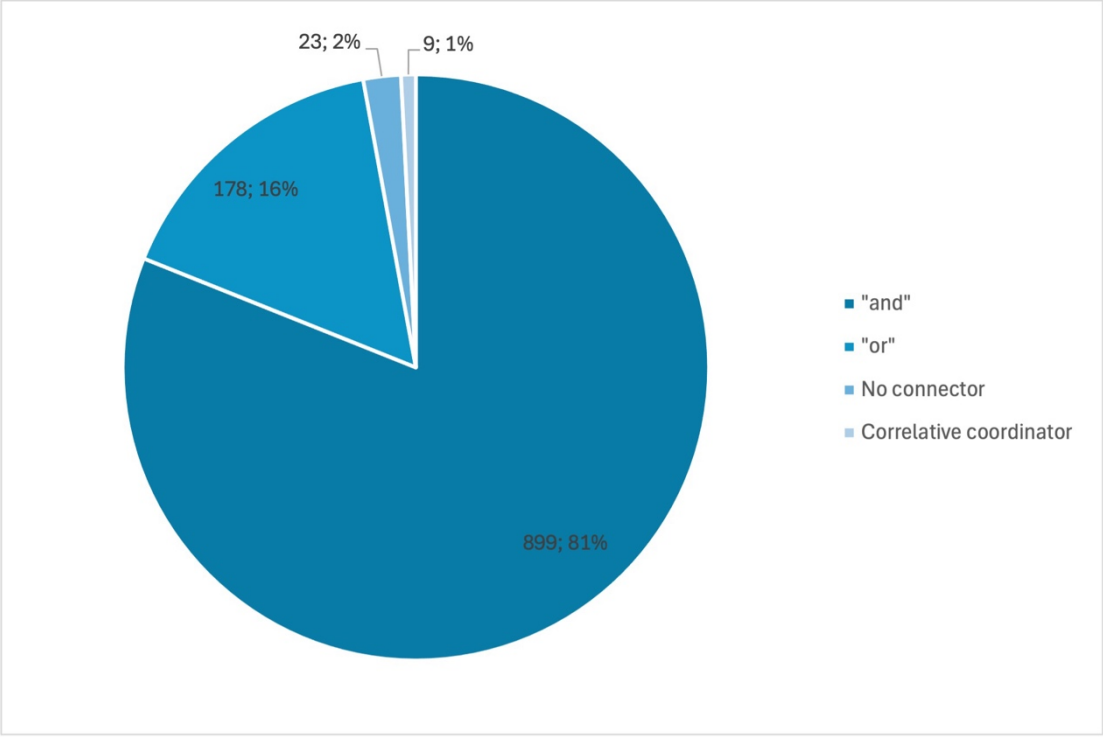

Figure 6.1.2.1 Distribution of binomials by connector in Watson (1993)

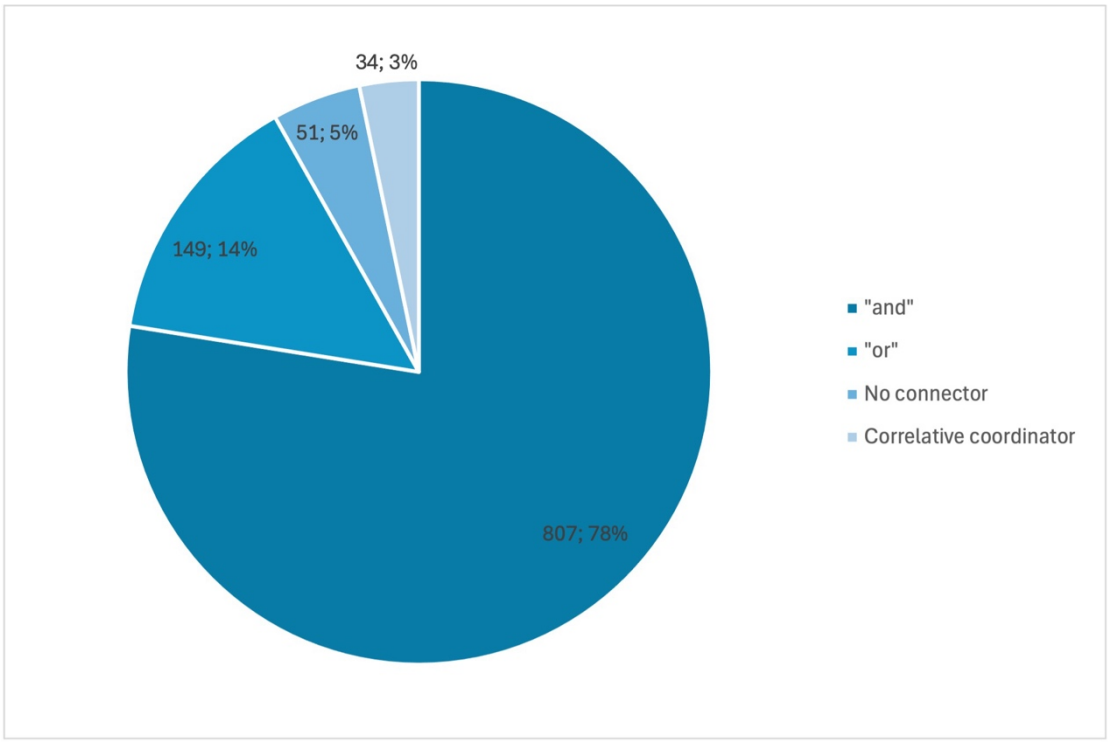

Figure 6.1.2.2 Distribution of binomials by connector in Reeves (2008)

The figures reveal that both works utilize various connectors or none at all. The occurrences of connectors follow this trend (in descending order): *and* > *or* > no connector > correlative coordinator. The coordinator *and* emerges as the predominant connector employed by both translators, accounting for 81% and 78% in Watson (1993) and Reeves (2008), respectively, while *or* is the next most common, comprising 16% and 14% in Watson (1993) and Reeves (2008), respectively. Many occurrences are noted within a co-text of negation, as illustrated by examples in (42) to (45):

(42) "he is no disciple of mine; he is no **arhat or pratyekabuddha**" (Watson 1993: 33)

(43) "if he himself had an illness, no one would **aid or nurse** him" (Watson 1993: 76)

(44) "but seldom seen by **heavenly or human beings**" (Reeves 2008: 101)

(45) "Never in the past have we **seen or heard** of such [...]" (Reeves 2008: 282).

Binomials with no connector constitute 2% and 5% of occurrences in Watson (1993) and Reeves (2008) respectively, with the latter slightly surpassing the

former. Examples include *without outflows, incomprehensible* (Watson 1993: 26), *the missing teeth, the withered form* (Watson 1993: 249), *buddhas, world-honored ones* (Reeves 2008: 229), *empty, quiet* (Reeves 2008: 60).

The utilization of correlative coordinators in Watson accounts for only 1%, whereas in Reeves (2008), it is 3%. In Watson (1993), the most frequently used correlative coordinator is *whether... or* with 4 types, including *whether old or young* (Watson 1993: 246). Conversely, in Reeves (2008), *neither... nor* emerges as the most common, as seen in examples like *neither timid nor weak* (Reeves 2008: 290), *neither our bodies nor our lives* (Reeves 2008: 259), totalling 16 types. Other correlative coordinators include *both... and* and *either... or*, as in *both width and depth* (Watson 1993: 112) and *either see or hear* (Reeves 2008: 230).

6.1.3 Elements in basic structure

In analysing binomials with basic structures, whether with a connector or not, the following formal features are examined: word class, phonetic features, morphological features, and features of etymological structures. Regarding elements in extended structures, particular attention is given to their internal structure. Considering that extended structures are less prevalent in the two works under study, this study does not delve further into examining the formal features of the head word in various phrase types. Instead, it maintains a primary focus on the elements within basic structures.

6.1.3.1 Word class

Given the correlative nature of binomials, the elements within a binomial belong to the same word class. Binomials typically consist of elements from five primary word classes, namely: (a.) Nouns, such as *monks or nuns* (Watson 1993: 33), *water and grass* (Reeves 2008: 133). (b.) Adjectives, such as *immeasurable and countless* (Watson 1993: 219), *incalculable, countless* (Reeves 2008: 363). (c.) Verbs, such as *read and recite* (Watson 1993: 16), *whether sitting or walking* (Reeves 2008: 103). (d.) Adverbs, such as *here and there* (Watson 1993: 63, Reeves 2008: 115), *physically or emotionally* (Reeves 2008: 247). (e.) Pronouns,

such as *you and I* (Watson 1993: 85, Reeves 2008: 154), *one and all* (Watson 1993: 125).

The distribution of binomials by the word class of the elements is depicted in the following figures:

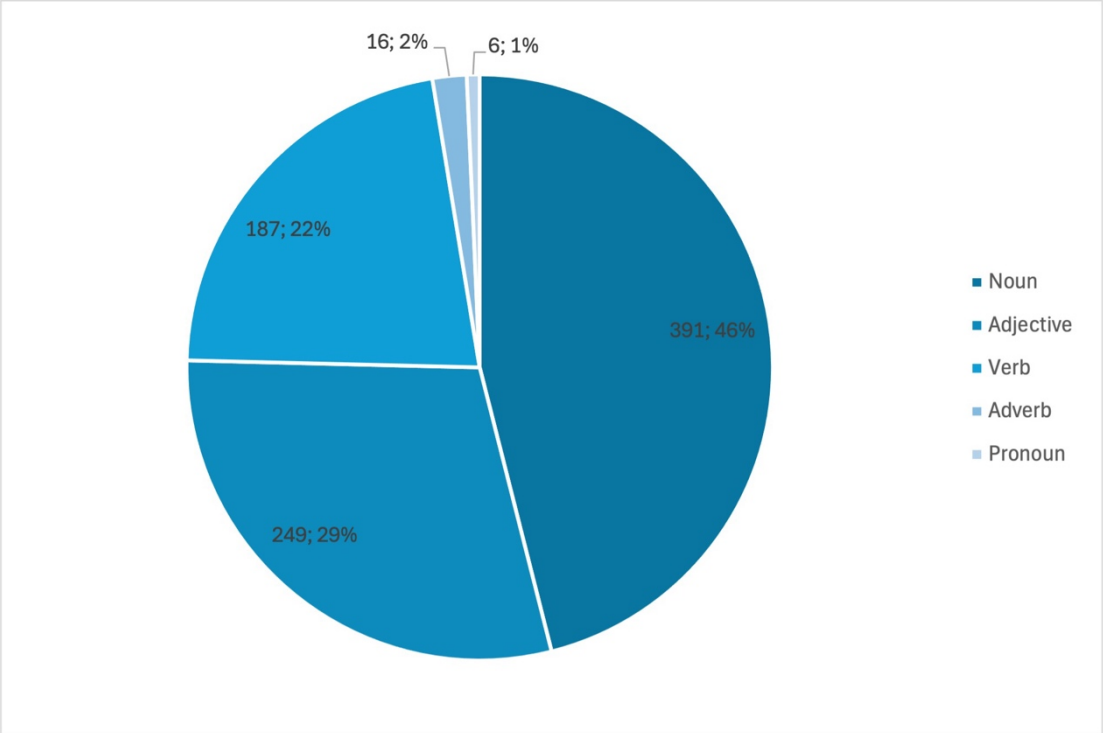

Figure 6.1.3.1.1 Distribution of binomials (basic structure) by word class in Watson (1993)

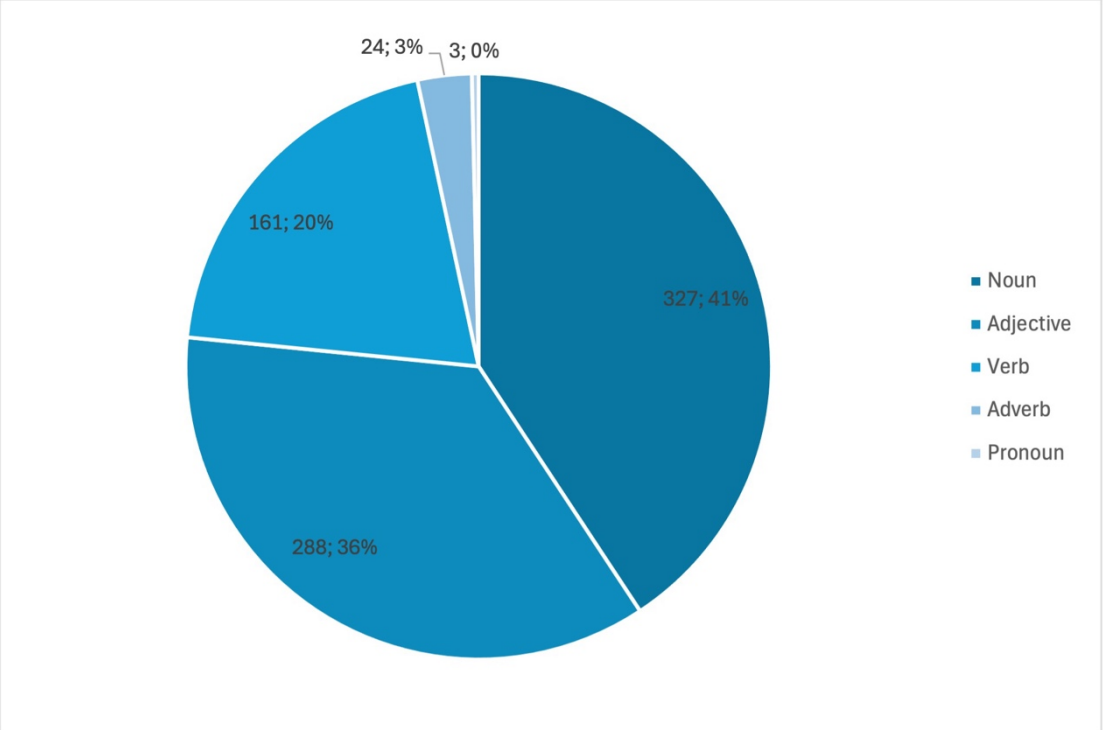

Figure 6.1.3.1.2 Distribution of binomials (basic structure) by word class in Reeves (2008)

From the figures, it is evident that the proportions of each category follow a similar pattern in both Watson (1993) and Reeves (2008), ranking from highest to lowest: nouns > adjectives > verbs > adverbs > pronouns. However, the proportions of each category differ between the two works. In Watson (1993), more binomials are formed with nouns, whereas in Reeves (2008), there is a higher prevalence of adjectival elements. Furthermore, while Watson (1993) exhibits more verbal binomials, Reeves (2008) features a greater number of adverbial ones. The proportion of pronouns remains consistent between both works, constituting the least common category at 1% or even less. The predominance of binomials formed by two nouns is consistent with findings from previous research on historical English texts, as reported in Kopaczyk and Sauer (2017). It also aligns with results from contemporary corpus-based studies; for example, Biber et al. observe that noun–noun binomial phrases are by far the most frequent in academic prose, followed by news writing, and appear significantly more often in written registers than in conversation (2021: 1026).

6.1.3.2 Phonetic features

Unique phonetic features of the elements in binomials include alliteration and rhyme. Alliteration refers to "the occurrence of the same letter or sound at the beginning of adjacent or closely connected words, especially when employed for stylistic effect" (s.v. "alliteration, n." *OED online*. 30 May 2024). Binomials such as *cause and condition* (Watson 1993: 317, Reeves 2008: 391), *fragrant or foul* (Watson 1993: 256), *arrived and assembled* (Reeves 2008: 239) demonstrate this phonetic feature. Meanwhile, rhyme involves the "correspondence of sound between the endings of two or more words or metrical lines such that the syllables involved carry identical vowel sounds and have (if present) identical final consonants" (s.v. "rhyme, n." *OED online*. 30 May 2024). Examples include *leader and teacher* (Watson 1993: 7, Reeves 2008: 56), *centipedes and millipedes* (Watson 1993: 62), *deep and steep* (Reeves 2008: 327). In both works, there are a

few instances where the elements alliterate and rhyme at the same time, such as *immeasurable, innumerable* (Watson 1993: 17), *laymen and laywomen* (Reeves 2008: 55), and *computation or comparison* (Reeves 2008: 108), among others.

Both alliteration and rhyme serve as stylistic devices, particularly in poetry and similar literary works, enhancing aesthetic value and aiding working memory (Fabb 2015: 127). In binomials, their presence is considered as 'additional embellishment', capable of strengthening the cohesion between elements (Sauer and Schwan 2017: 93).

The distribution of the two phonetic features in Watson (1993) and Reeves (2008) is illustrated in the figures below:

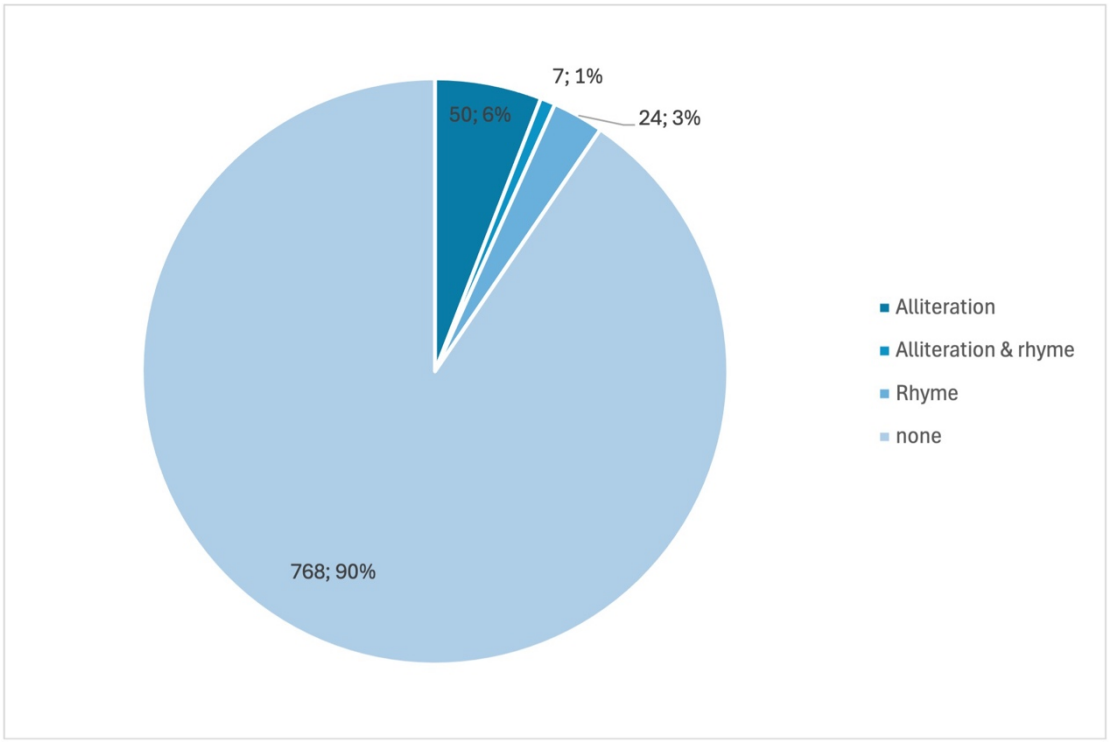

Figure 6.1.3.2.1 Distribution of alliteration and rhyme in binomials (basic structure) in Watson (1993)

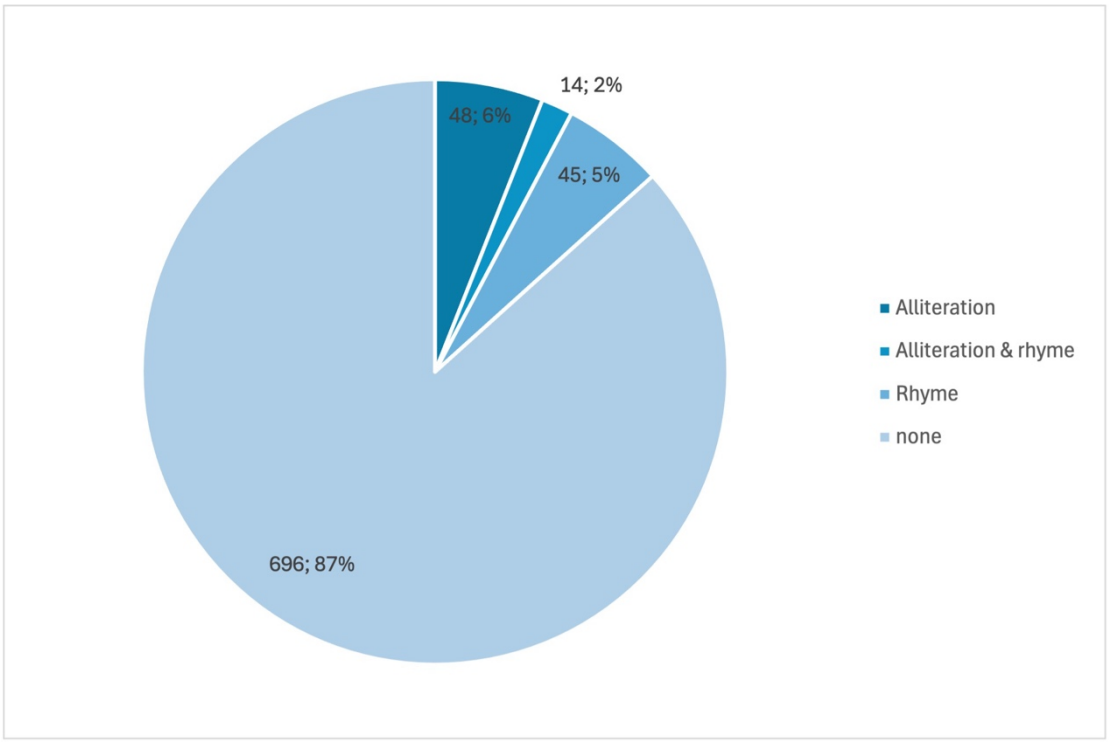

Figure 6.1.3.2.2 Distribution of alliteration and rhyme in binomials (basic structure) in Reeves (2008)

Despite their stylistic functions, figures 6.1.3.2.1 and 6.1.3.2.2 illustrate that binomials with such additional embellishments are considerably fewer than those without, constituting only 10% and 13% in Watson (1993) and Reeves (2008) respectively. Between alliteration and rhyme, the former is more prevalent than the latter in both translations. This contrast is particularly pronounced in Watson (1993), indicating the translator's relative preference for alliteration over rhyme. In Reeves (2008), however, occurrences are more evenly distributed, with 6% of cases featuring alliteration and 5% rhyme.

6.1.3.3 Morphological features

Morphologically, the elements in binomials can be simple words consisting of a single morpheme, such as *large or small* (Watson 1993: 101) and *day and night* (Reeves 2008: 105). Additionally, elements can result from three main word-formation processes: inflection, derivation, and compounding (Biber et al. 2021: 59–61).

As discussed in Section 5.1, in this study, elements formed by inflection (where inflectional suffixes are added to the base form) are counted as the same

type as their base form, since the word remains the same lexeme. Such suffixes include the plural suffix of nouns, the person or tense marker of verbs, and the comparative suffix of adjectives and adverbs, etc.

In contrast, both derivation and compounding form new lexemes. Derivation involves the addition of derivational affixes (prefixes or suffixes) to a base word, as seen in the example ***un****happy* and *hard****ness***. Compounding entails combining existing base words together to form a new word, as exemplified by the binomial *layman* and *laywoman*. The *Oxford English Dictionary* (OED) provides the word-formation information within the entry of each word and is used as the primary reference in this section.

The distributions of binomials based on their morphological features are illustrated in the following figures:

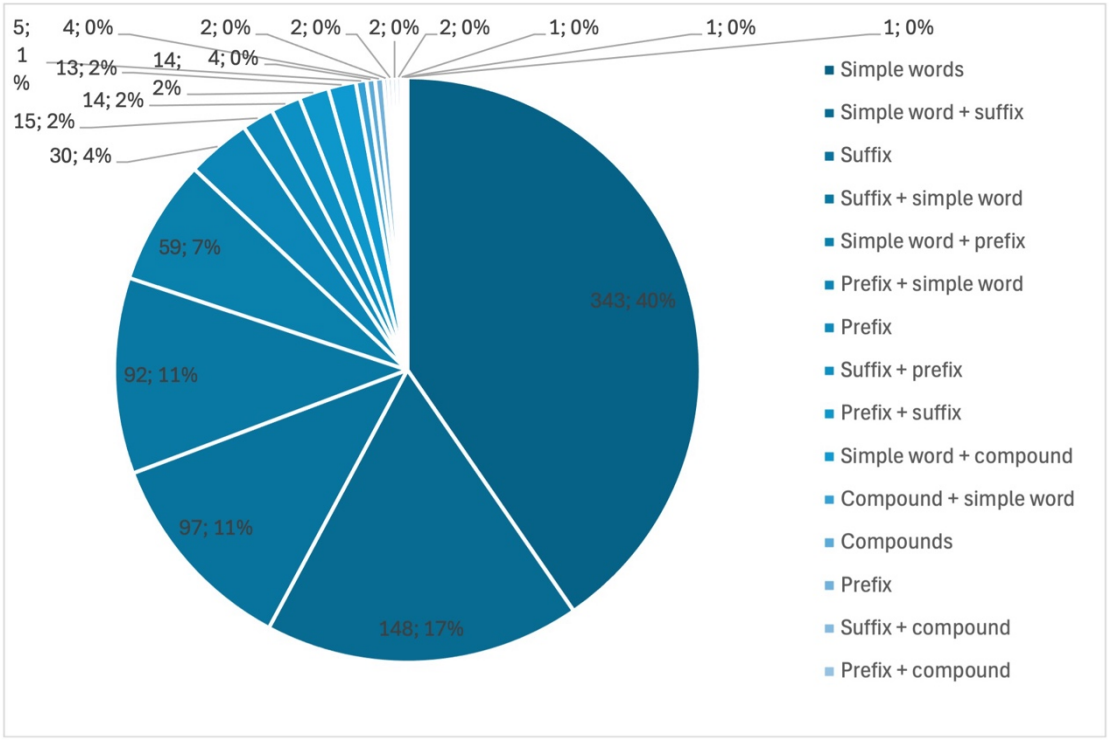

Figure 6.1.3.3.1 Distribution by the elements' morphological features in binomials (basic structure) in Watson (1993)

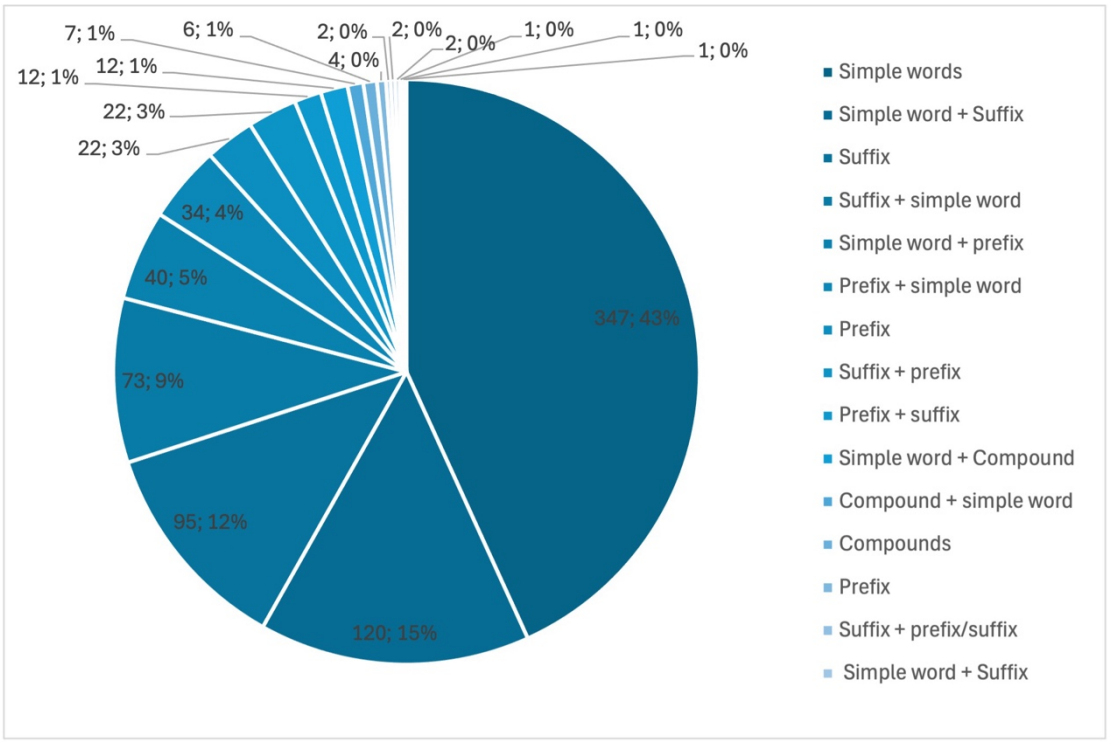

Figure 6.1.3.3.2 Distribution by the elements' morphological features in binomials (basic structure) in Reeves (2008)

The figures reveal a similar distribution in the morphology of elements in both translations, with the following descending occurrences: simple words > elements involving suffix > elements involving prefix > elements involving compounds > elements without simple words. Binomials formed with two simple words represent the highest share in both Watson (1993) and Reeves (2008), with 40% and 43% respectively.

When a simple word appears alongside a word with an affix, whether a prefix or suffix, it is more common for the simple word to precede the affixed word rather than vice versa. This trend is evident in the proportions of the 'simple word + suffix' combination compared to 'suffix + simple word' and the 'simple word + prefix' combination versus 'prefix + simple word'.

The combinations and their proportions in both Watson (1993) and Reeves (2008) include: (a.) 'simple word + suffix', e.g., *subtle and wonder**ful*** (Watson 1993: 18), accounting for 17% and 15% in Watson (1993) and Reeves (2008) respectively. (b.) 'suffix + simple word', e.g., *soft**en** and temper* (Reeves 2008: 154), comprising11% and 9% respectively. (c.) 'simple word + prefix', e.g.,

turmoil or ***dis****order* (Watson 1993: 120), making up 7% and 5% respectively. (d.) 'prefix + simple word', e.g., *neither* ***a****rising nor ending* (Reeves 2008: 265), constituting 4% in both works.

When neither of the elements is a simple word, binomials formed by pure suffixation outnumber those formed by pure prefixation in both works. Examples of the former include *wid****th*** *and dep****th*** (Watson 1993: 12), while examples of the latter include ***in****numerable,* ***un****limited* (Reeves 2008: 195). Additionally, pure suffixation binomials have a higher proportion than those formed by a combination of 'suffix + prefix', such as *filth****y*** *and* ***im****pure* (Reeves 2008: 252), followed by the reverse combination, such as ***out****look and ambi****tion*** (Watson 1993: 83).

In comparison to affixation, compounding is the least utilized morphological device, with only 27 and 28 binomials involve compounds in Watson (1993) and Reeves (2008) respectively, representing just 3% in both works. This disparity is attributed to the fact that "compounds condense information while binomials expand information" (Sauer and Schwan 2017: 94). The combinations include: (a.) 'simple word + compound', such as *long and far-stretching* (Watson 1993: 136), (b.) 'compound + simple word', such as *steadfast and firm* (Watson 1993: 105), (c.) 'two compounds', such as *quick-witted and dull-witted* (Reeves 2008: 165), (d.) 'compound with affixes', such as *playthings and amuse****ments*** (Reeves 2008: 316).

6.1.3.4 Etymological structures

From the etymological perspective, the elements of a binomial could be either native words or loanwords. In this study, native words are those of Germanic origin, including Old English, Old German, Old Norse, etc., and loanwords are those borrowed from non-Germanic languages, such as Latin, Greek, and Sanskrit. When analysing a word with affixation, the etymology of its base is examined. For example, *immeasurable* is considered as a loan word because its base form *measure* is loan from Old French *mesure* (s.v. "measure, n." *OED online*. 30 May 2024).

There are thus four types of combinations with elements regarding their etymological structures, namely (a.) 'native word + native word', as in *body and mind* (Watson 1993: 5, Reeves 2008: 55), (b.) 'loan word + loan word', as in *variously and beautifully* (Reeves 2008: 311), (c.) 'native word + loan word', as in *good and gentle* (Watson 1993: 38), *great, abundant* (Reeves 2008: 301), and (d.) 'loan word + native word', as in *jewels and gems* (Watson 1993: 11), *false and empty* (Reeves 2008: 90). The first two patterns could also be termed as the 'purely native group' and 'purely borrowed group', while the latter two could be collectively referred to as the 'etymologically mixed group'.

The distribution of the four groups in the two translations is depicted in the following figures:

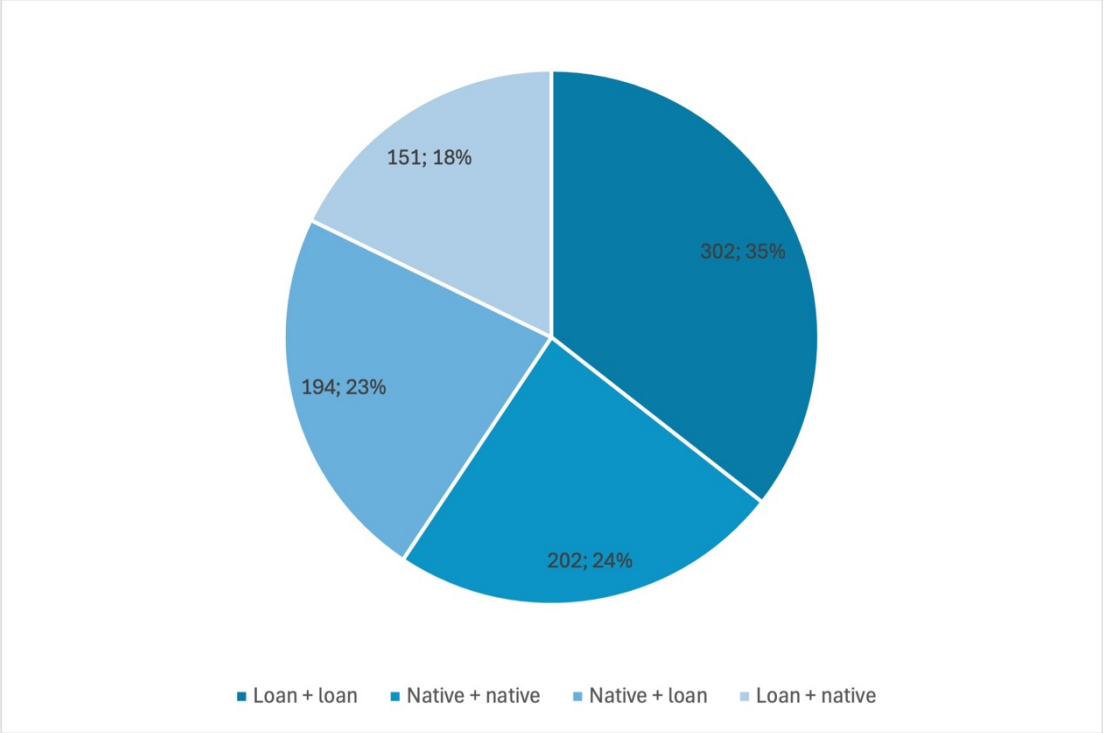

Figure 6.1.3.4.1 Distribution by features of the elements' etymological structures in binomials (basic structure) in Watson (1993)

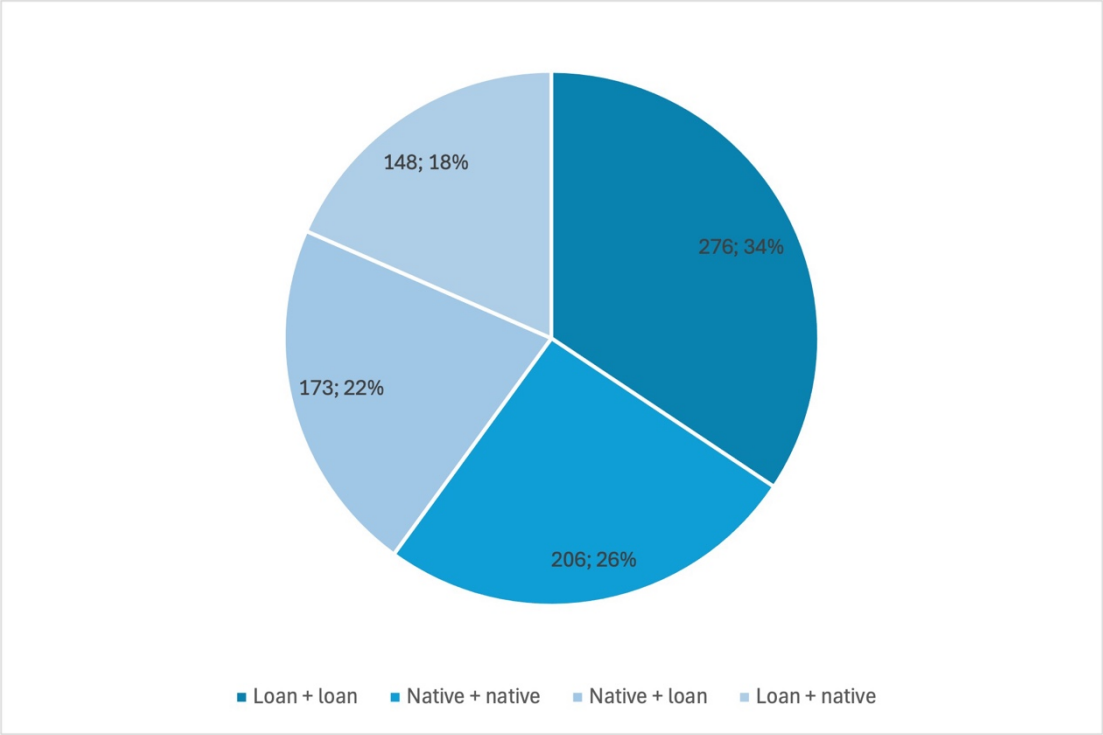

Figure 6.1.3.4.2 Distribution by features of the elements' etymological structures in binomials (basic structure) in Reeves (2008)

The figures indicate that in both translations, the distributions of the four groups follow a similar pattern, in descending order of occurrences: 'loan + loan' > 'native + native' > 'native + loan' > 'loan + native'. The differences between the four groups are not significant. While the 'loan + loan' group accounts for over 30% in both translations, the proportions of the other three groups range from 18% to 26% in both works, slightly more or less than a quarter.

The etymologically mixed group accounts for 41% and 40% in Watson (1993) and Reeves (2008), respectively, surpassing both the purely native group and the purely borrowed group. Between the 'native + loan' and the 'loan + native' groups, it is more common to see the native word preceding the loan word, though the difference is not significant, with only 5% and 4% in Watson (1993) and Reeves (2008), respectively.

Among the non-Germanic groups, words originating from Sanskrit warrant particular attention. In Kumarajiva's Chinese translation, he opts to transliterate those Sanskrit concepts which have no direct equivalent in Chinese, recording the Sanskrit pronunciation in Chinese to preserve as much fidelity to the source text

as possible. A similar approach is observed in the English translations by Watson (1993) and Reeves (2008), where 18 and 21 binomials (types), respectively, feature one or both elements borrowed directly from Sanskrit, accounting for approximately 2%. For instance, the two elements in *arhat or pratyekabuddha* (Watson 1993: 35, Reeves 2008: 85) are rooted in Mahayana Buddhism (see Footnote 7). In *mandarava and manjushaka* (Watson 1993: 7, Reeves 2008: 57), both elements refer to specific Indian plants. However, such approach imposes requirements on the reader's knowledge background.

As discussed in Section 2.2.2, both translators aspire to make their translations accessible even to readers with limited prior knowledge of Buddhism. Therefore, when dealing with Sanskrit-origin concepts, both Watson (1993) and Reeves (2008) often endeavour to employing analogous English counterparts, sometimes even sacrificing exact accuracy, as demonstrated by the examples below.

(46) *voice-hearers or* ***pratyekabuddhas*** (Watson 1993: 23), corresponding to ***shravaka*** *or* ***pratyekabuddha*** (Reeves 2008: 75), where Watson (1993) uses *voice-hearers* to represent *shravaka*.

(47) ***stupas*** *and monasteries* (Reeves 2008: 259) corresponding to *towers and temples* (Watson 1993: 195), where Watson (1993) uses *tower* to translate *stupa*, the Buddhist monument.

(48) ***yakshas*** *and* ***rakshasas*** (Watson 1993: 299), corresponding to satyrs and ogres (Reeves 2008: 372), where Reeves (2008) uses creatures from Greek mythology to represent imaginary creatures in Buddhism.

(49) ***samadhi*** *and* ***dharani*** (Watson 1993: 296), corresponding to *concentration and incantation* (Reeves 2008: 394), where Reeves (2008) translates the two terms into English concepts.

This approach helps to enhance accessibility for readers from diverse background. However, it can sometimes be misleading. For example, in instance (48), Reeves (2008) himself acknowledges that "using English (originally Greek or Roman) equivalents for Indian mythological creatures might seem misguided to

some" (Reeves 2008: ix). Nonetheless, he chooses to employ these equivalents, drawing inspiration from the Buddhist and Sanskrit scholar Hajime Nakamura's observations on the similarities between the two sets of creatures, as well as the precedent set by Jean-Noel Robert in his French translation of the *Lotus Sutra* (Reeves 2008: ix). This suggests that word choices in the translation process are closely linked to the aims of the translation activities and that such decisions are often subjective and personal to the translators themselves.

6.1.4 Elements in extended structure

6.1.4.1 Phrase type

Phrases are composed of heads and their accompanying constituents, and the phrase type corresponds to the word class of the head (Biber et al. 2021: 101). Five types of phrases are found as the elements in binomials with extended structures: noun phrases (abbreviated as NP), verb phrases (VP), adjective phrases (AP), adverb phrases (AdvP), and prepositional phrases (PP).

The NPs are composed of a noun functioning as the head, accompanied by determiners or modifiers (Biber et al. 2021: 101). NPs as elements of binomials encompass the following categories:

(a.) Determiner a/the + noun, e.g., *a passage or a phrase* (Watson 1993: 168), *the Buddha and his monks* (Watson 1993: 11), *one character and one type* (Reeves 2008: 117), *the Buddha and the monks* (Reeves 2008: 61).

(b.) Premodifier + noun, e.g., *various toys and curious objects* (Watson 1993: 57), *physical strength and wisdom* (Watson 1993: 130), *assumptions and false views* (Reeves 2008: 293), *fine robes and superior garments* (Reeves 2008: 62).

(c.) Noun + postmodifier, e.g., *offerings and tokens of respect* (Watson 1993: 5), *power and freedom from fear* (Watson 1993: 60), *blessings and powers of wisdom* (Reeves 2008: 360), *birth and departure from home* (Reeves 2008: 106).

VPs, which consist of a verb as the head, often accompanied by prepositions, adverbs, and other forms of modifiers (Biber et al. 2021: 104), comprise the following sub-groups:

(a.) Verb + preposition, e.g., *handed out or gathered in* (Watson 1993: 86), *whether sitting or walking around* (Watson 1993: 259, Reeves 2008: 104), *scrutinized and adhered to* (Watson 1993: 269), *neither retreat from nor emergence into* (Reeves 2008: 293).

(b.) Adverb + verb, e.g., *listen attentively and carefully ponder* (Watson 1993: 30), *gained and gratefully accepted* (Watson 1993: 79), *quarrel or play together* (Reeves 2008: 327), *not born, not emerging* (Reeves 2008: 265).

(c.) Verb + adjective, e.g., *are born and became extinct* (Watson 1993: 55), *be exhausted or run out* (Watson 1993: 301), *stink and be filthy* (Reeves 2008: 398).

(d.) Infinitive marker 'to' + verb, e.g., *to make or to adorn* (Reeves 2008: 93), *to hear and to retain* (Reeves 2008: 301).

APs, which consist of an adjective as the head and are accompanied by modifiers either preceding or following it (Biber et al. 2021: 106), include the following groups as elements in binomials:

(a.) Adjective + to-clause, e.g., *hard to see and hard to understand*' (Watson 1993: 24), *far apart and* ***difficult to encounter*** (Watson 1993: 45), *wonderful and* ***hard to imagine*** (Reeves 2008: 81).

(b.) Adjective + preposition or the reversed sequence, e.g., *handsome in form and of great strength* (Watson 1993: 58), *at an angle or crooked* (Watson 1993: 248), *of suffering and of delight* (Reeves 2008: 322), *pure in heart and ecstatic with joy* (Reeves 2008: 207).

(c.) Adverb + adjective, e.g., *firm and deeply committed* (Watson 1993: 78), *too thick or too big* (Watson 1993: 248), *highly honored and profoundly wise* (Reeves 2008: 161).

AdvPs are formed with an adverb as head, accompanied by modifiers (Biber et al. 2021: 107). For example: *high up and far away* (Watson 1993: 176), *high and far away* (Reeves 2008: 240), *near or far off* (Watson 1993: 255), *deep and far away* (Watson 1993: 166).

Lastly, PPs consist of a preposition and a complement, which usually in the form of a noun phrase (Biber et al. 2021: 107). Examples include *in the world or after their extinction* (Watson 1993: 40, Reeves 2008: 95), *with insight and by skillful means* (Reeves 2008: 207), *freely and without hindrance* (Watson 1993: 69)

The distribution of the binomials based on the phrase types of their elements as seen in Watson (1993) and Reeves (2008) is shown in the following figures:

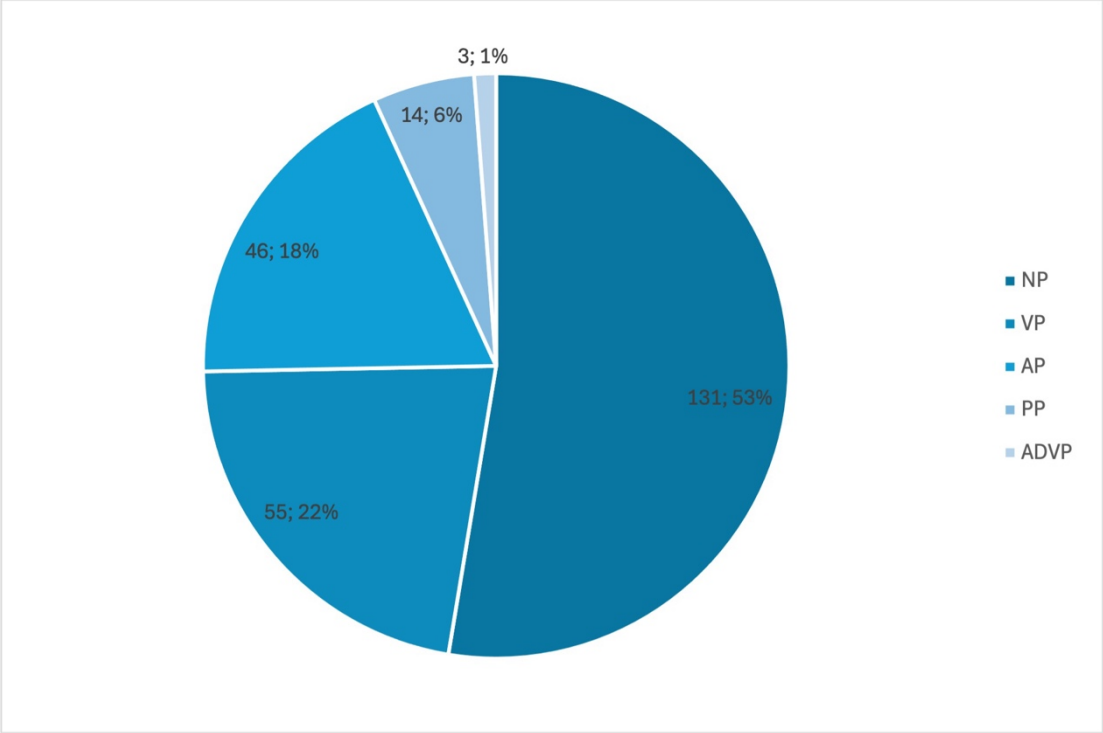

Figure 6.1.4.1.1 Distribution of binomials (extended structure) by phrase type in Watson (1993)

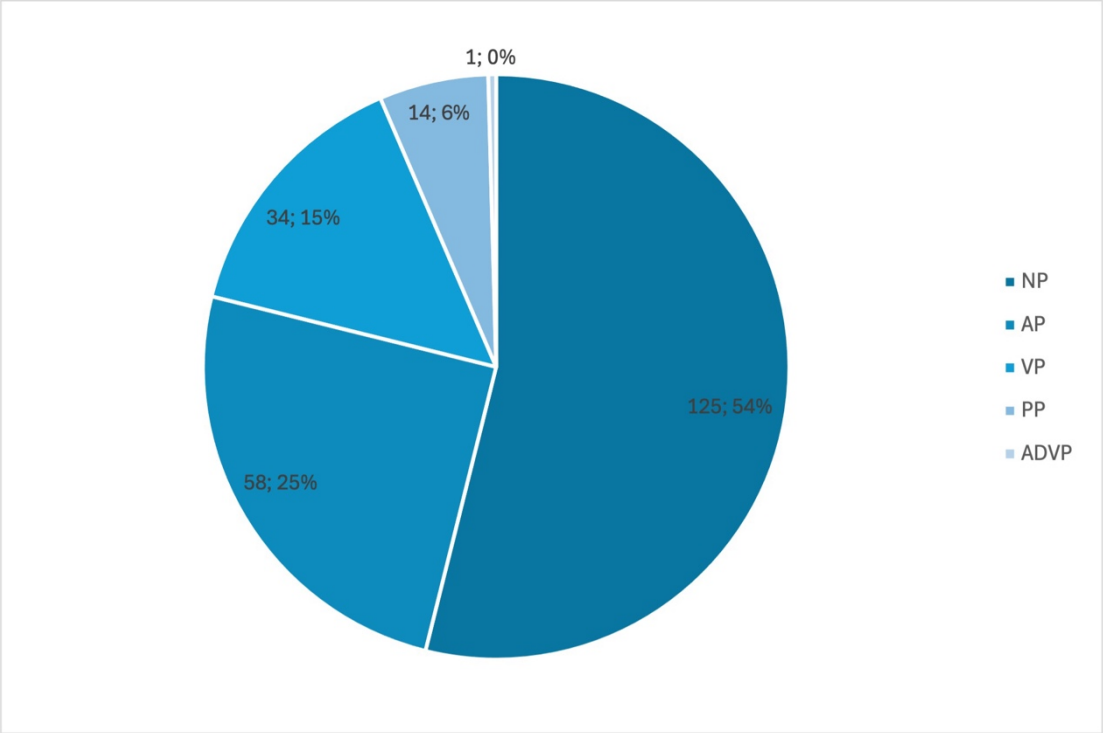

Figure 6.1.4.1.2 Distribution of binomials (extended structure) by phrase type in Reeves (2008)

The figures indicate that within both translations, NP occupies the largest proportion while PP and AdvP occupies the smallest share. This trend is consistent with the distribution by word class of binomials with basic structures (see Figure 6.1.3.1.1 and Figure 6.1.3.1.2). A major distinction is seen in the utilization of VPs in Watson (1993), which features a higher proportion (22%) compared to Reeves (2008), where VPs account for 15%. This also contrasts with his use of binomials with basic structures, where adjectives outnumber verbs. In Reeves (2008), such disparity is not observed and the distribution of VPs and APs mirrors that of binomials with basic structures.

6.1.4.2 Type of extension

As briefly mentioned in Section 6.1.1, the elements in a binomial with an extended structure may both be phrases, as exemplified by *in the world or after their extinction* (Watson 1993: 40, Reeves 2008: 95), or only one element may be a phrase, as demonstrated by *firm and deeply committed* (Watson 1993: 78), where only Element 2 is an AP and Element 1 an adjective. Labelling the former

as ‘Extended (both)’ and the latter ‘Extended (half)’, their distributions are depicted in the subsequent figures:

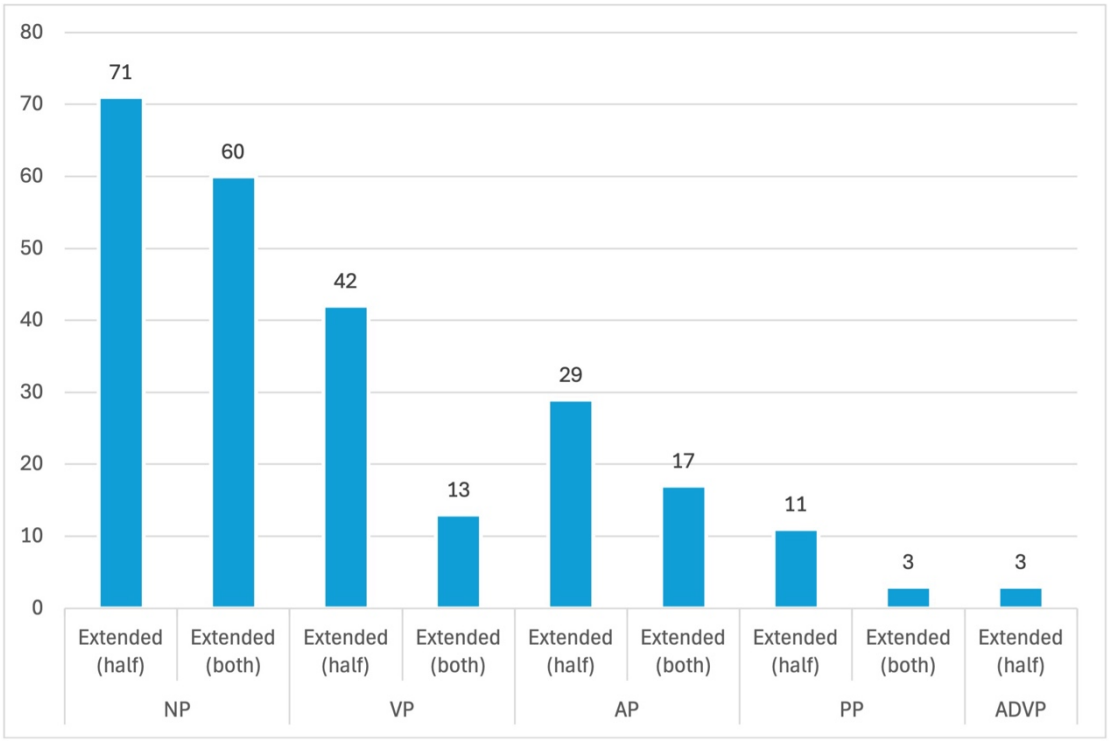

Figure 6.1.4.2.1 Distributions by the type of extension of binomials in Watson (1993)

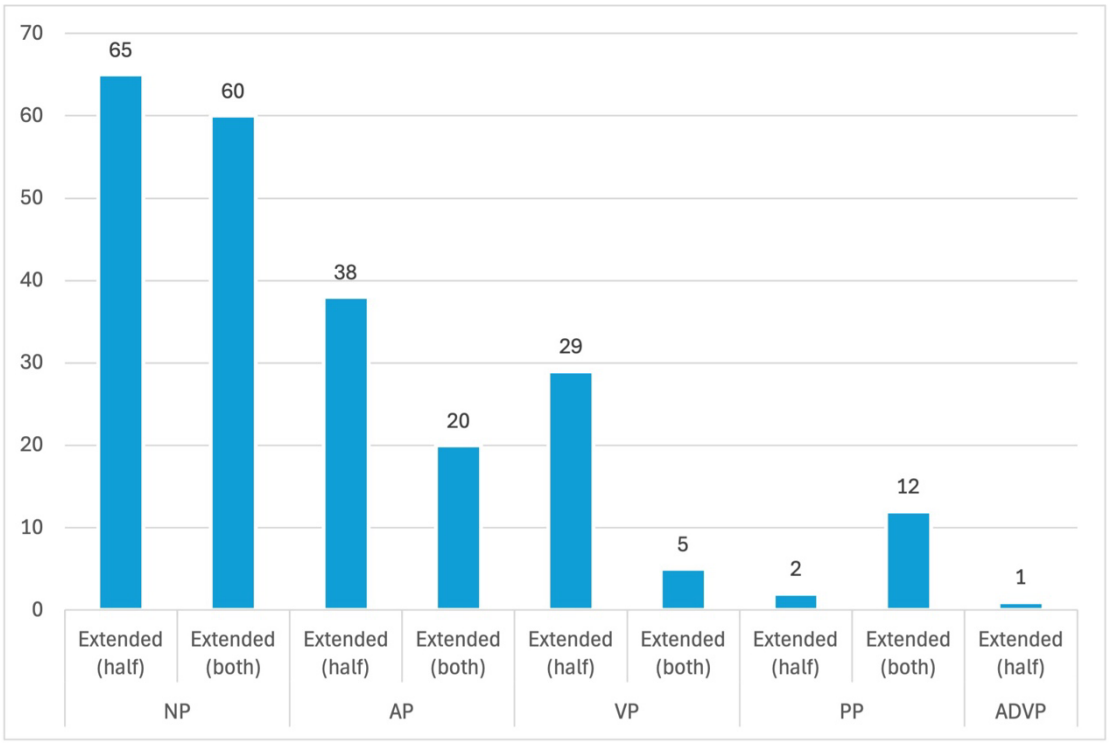

Figure 6.1.4.2.2 Distributions by the type of extension of binomials in Reeves (2008)

The findings indicate that the extension of binomials does not consistently exhibit symmetric extension of both elements but rather tends to the combination of 'simple word + phrase'. Across all phrase types in both translations, Extended (half) consistently outnumbers Extended (both), except for PPs in Reeves (2008), where the latter exceeds the former by 10 cases, such as *in body and in mind* (Reeves 2008: 57), *with insight and by skillful means* (Reeves 2008: 207). However, given the relatively minor proportion of PPs in his translation, this discrepancy is not substantial.

6.1.5 Semantic relations between the elements

Previous research, including Sauer and Schwan, classifies the semantic relations between elements of binomials into synonymy, antonymy, and complementarity (2017: 187). Among these categories, synonymous binomials are considered the core members, as they fully embody the stylistic function of repetition that binomials primarily represent. Some early scholars, such as Koskenniemi (1968), focused solely on synonymous binomials in their discussions. However, recent research is no longer confined to this group as representative of the whole. As observed in the diachronic study by Mollin, synonymous and near-synonymous binomials can significantly influence the frequency of binomials, either increasing or decreasing their usage as their use is stylistically motivated, with authors aiming for emphasis and potentially emulating a Latin rhetorical ideal. Meanwhile, antonymous and complementary binomials may characterise specific registers, such as sermons, since texts within a given register may vary in their likelihood of covering real-life opposites or additions (2017: 295).

To facilitate a thorough understanding of the semantic relations between elements in binomials, all three semantic relations: synonymy, antonymy and complementarity, are examined and analysed and the binomials are accordingly termed as 'synonymous binomial', 'antonymous binomial' and 'complimentary binomial'. To ensure precise and accurate definitions of the elements, the *Oxford English Dictionary* is utilised as the primary reference. For binomials with basic

structure, the two words are examined whereas in extended structures, the focus shifts to the head words.

Synonymy is not restricted to situations where the two elements are identical in meaning across all contexts; rather, it applies when they are "close enough in their meaning to allow a choice to be made between them in some context" (s.v. "synonymy" *A Dictionary of Linguistics and Phonetics*, p. 470). In other words, elements are considered synonymous if one or more items in their dictionary definitions are identical or very similar. For instance, in the binomial *faults and errors* (Reeves 2008: 216), *fault* is defined as "A defect, imperfection, blameable quality or feature" (s.v. "fault, n.5" *OED online*. 12 May 2024), and *error* is defined as "The condition of erring in opinion; the holding of mistaken notions or beliefs; an instance of this, a mistaken notion or belief; false beliefs collectively" (s.v. "error, n. III.3.a" *OED online*. 12 May 2024), thus making them a pair of synonymies. There are instances where one element is explained by the other, as seen in *pushing and shoving* (Watson 1993: 57), where *shove* is defined as "To move (a heavy or resisting object) forward by the application of muscular strength from behind; to **push** along with effort" (s.v. "error, n. 2.a." *OED online*. 12 May 2024), making them synonymous, too. In addition, in both translations there are a few binomials when the elements are identical, forming a 'tautological binomial', such as *round and round* (Watson 1993: 54) or *around and around* (Reeves 2008: 111), expressing repetition to an indefinite extent. Such instances are included as a special type of synonymous binomial in this study.

Antonymy refers to "semantic oppositeness" and can further be divided into 'graded', where the difference is gradable, and 'ungraded', where it represents an "either/or opposition" (s.v. "antonymy" *A Dictionary of Linguistics and Phonetics*, p. 28). The graded antonymy includes examples such as *large or small* (Watson 1993: 101, Reeves 2008: 159), *young or old* (Reeves 2008: 315) and the ungraded antonymy is exemplified by *birth and death* (Watson 1993: 18, Reeves 2008: 97), *men and women* (Watson 1993: 9, Reeves 2008: 322). Sauer and Schwan (2017) introduce a third category, 'converseness', where "one concept

presupposes the other" (Sauer and Schwan 2017: 189). An example of converseness is *traders and customers* (Watson 1993: 147), where the relationship between seller and buyer relies on the existence of the other.

Binomials with elements that do not conform to the typical patterns of either synonymous or antonymous relations are classified as complementary binomials and grouped separately (Sauer and Schwan 2017: 190). Complementary elements may be further subdivided into several subgroups and examples of such cases are discussed in Section 6.1.5.3.

Using this categorisation, the distributions of the three types of semantic relations between elements in binomials are illustrated in the following figures:

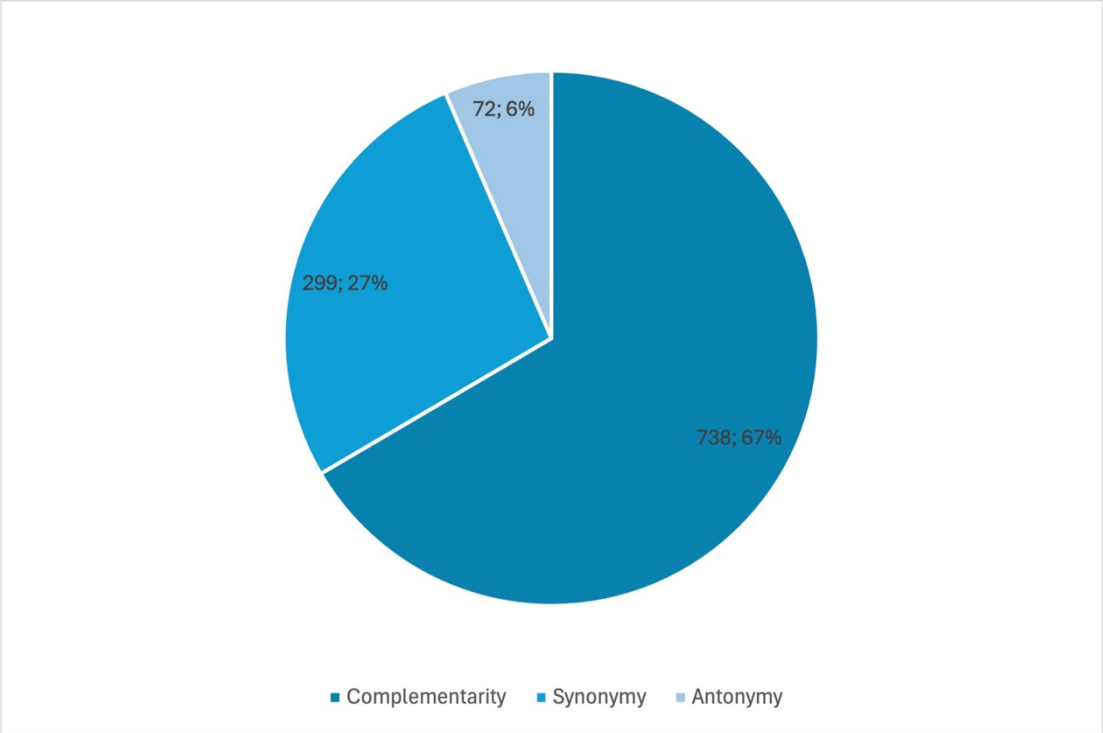

Figure 6.1.5.1 Distribution by semantic relations between elements in binomials Watson (1993)

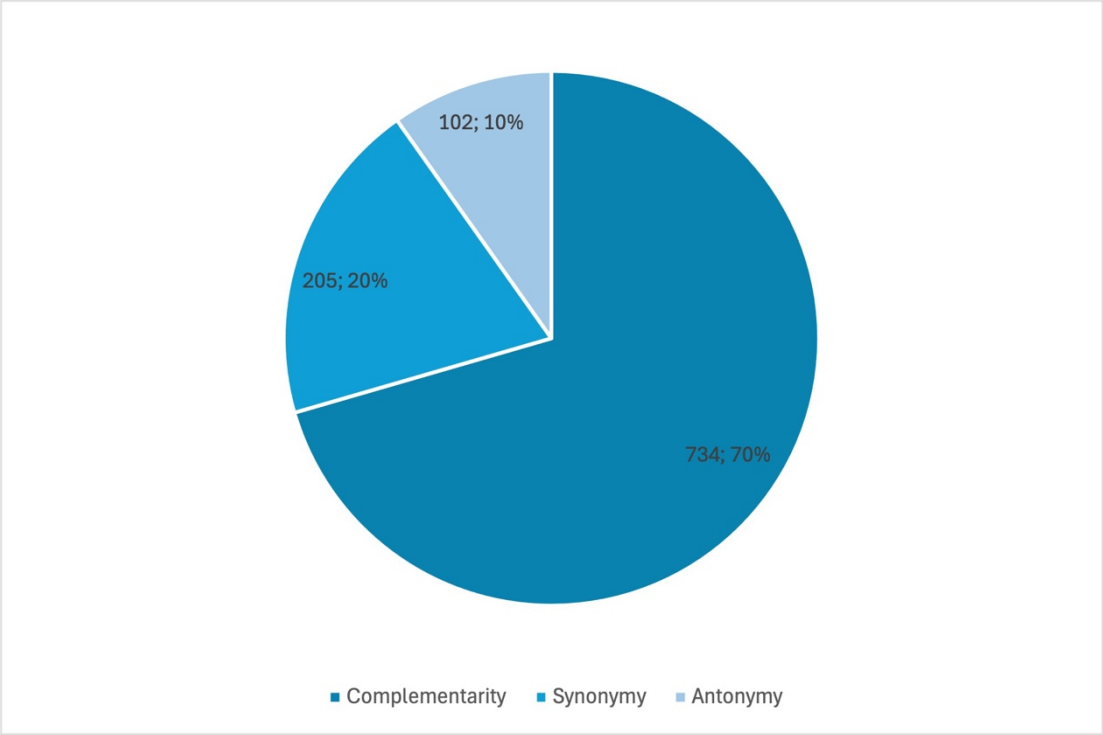

Figure 6.1.5.2 Distribution by semantic relations between elements in binomials in Reeves (2008)

The distributions of the three types of semantic relations are consistent across the two translations, with complementarity constitutes the majority, comprising around 70%. Synonymy holds a higher percentage than antonymy, with Watson (1993) containing more synonymous binomials than Reeves (2008) (27% compared to 20%). In contrast, Reeves (2008) contains a higher proportion of antonymous binomials than Watson (1993). A more detailed examination of the formal properties within each group, particularly synonymous and antonymous binomials, is provided below.

6.1.5.1 Synonymous binomials

Regarding the structures of synonymous binomials, the distribution is presented in the following table:

Structure	Watson (1993)	Reeves (2008)
Basic structure	264; 88%	182; 89%
Extended structure	35; 12%	23; 11%
Reduced structure	0	0

Total	299	205

Table 6.1.5.1.1 Counts of types by structure of synonymous binomials

The statistics show a similar distribution of synonymous binomials as that in general (see Figure 6.1.1.1 and Figure 6.1.1.2), with the exception of the absence of reduced structures among synonymous binomials. Among extended structures, a common occurrence is when Element 2 includes a phrase with negation or negative connotations. Examples include *pure and **without** alloy* (Watson 1993: 14), *profound and difficult **to understand*** (Watson 1993: 27), *long and **never** ending* (Reeves 2008: 199), and *true and **not** false* (Watson 1993: 226, Reeves 2008: 357).

As for the use of connectors in synonymous binomials, the following table below illustrates the distribution:

Connector	Watson (1993)	Reeves (2008)
and	261; 87%	170; 83%
or	29; 10%	17; 8%
No connector	9; 3%	14; 7%
Correlative coordinator	0	4; 2%
Total	299	205

Table 6.1.5.1.2 Counts of types by connectors of synonymous binomials

The above table indicates that *and* is the most frequently used connector in synonymous binomials, surpassing its general usage, with percentages of 87% in Watson (1993) and 83% in Reeves (2008) (see Figure 6.1.2.1 and Figure 6.1.2.2). In contrast, the use of *or* is notably lower, constituting only 10% and 8% respectively, as seen in examples such as *concerned or fearful* (Watson 1993: 317), *sores or scabs* (Reeves 2008: 317). This suggests that *or* is less commonly employed to connect synonymous relations in binomials. Instances of correlative coordinators are minimal in Reeves (2008), exemplified by *both profound and immeasurable* (Reeves 2008: 75) whereas no such cases are found in Watson (1993).

The formal features of elements in binomials with basic structures are studied in detail, covering their word class, phonetic features, morphological features, and etymological aspects. These aspects can, to some extent, reflect those observed in the head words of binomials with extended structures, which are notably less frequent, as indicated by the findings in Table 6.1.5.1.1.

Firstly, concerning word class, the distribution in synonymous binomials does not deviate significantly from the average (see Figure 6.1.3.1.1 and Figure 6.1.3.1.2), except that pronouns are absent in synonymous binomials in both translations.

Secondly, comparing phonetic features of alliteration and rhyme, the former predominates in both translations, constituting 9% and 10% in Watson (1993) and Reeves (2008) respectively. Examples include *cause and condition* (Watson 1993: 317), *still and silent* (Watson 1993: 109), *flaw or fault* (Reeves 2008: 142), *remorse and regret* (Reeves 2008: 142). Additionally, among all alliterated binomials, 23 out of 50 in Watson (1993) and 18 out of 48 in Reeves (2008) are synonymous, accounting for 46% and 38% respectively, suggesting that not only is alliteration more common than rhyme in synonymous binomials, but also that alliteration occurs more frequently when the elements are synonymous compared to other semantic relations.

Thirdly, morphologically, Reeves (2008) shows a higher incidence of the 'simple word + prefix' combination, with 33 instances (18%), significantly exceeding the general rate of 5% in his translation (see Figure 6.1.3.3.2). Among these, negation prefixes are frequently used in synonymous binomials, as evidenced by examples such as *pure, **im**maculate* (Reeves 2008: 62), *older and **in**firm* (Reeves 2008: 147), *whole and **un**impaired* (Watson 1993: 175), *turmoil or **dis**orde*r (Watson 1993: 120). Such instances correspond with the earlier findings in this section indicating extended structures involving negation or negative phrasal elements, such as *pure and **without** alloy* (Watson 1993: 14).

Fourthly, from an etymological perspective, the etymologically mixed group, particularly the 'native + loan' category, appears more frequently in synonymous

binomials than average, with 70 and 42 instances in Watson (1993) and Reeves (2008) respectively, accounting for 27% and 23%. This encompasses various word classes, exemplified by binomials like *grooms and servants* (Watson 1993: 58), *long and extensive* (Reeves 2008: 252), *quaked and trembled* (Watson 1993: 5), *greatly and abundantly* (Reeves 2008: 207). This finding aligns with the 'translation hypothesis' initially proposed by Jespersen, who notices the binomials in Chaucer's work with "a French word side by side with its native synonym", suggesting that the writer "uses them to heighten or strengthen the effect of the style" ([1905]1955: 89–90). The findings from Watson (1993) and Reeves (2008) indicate that this trend continues to be observed in modern English binomials as well.

6.1.5.2 Antonymous binomials

Following a similar approach to the analysis of synonymous binomials, the structure of antonymous binomials is examined first, and the following table illustrates the distribution:

Structure	Watson (1993)	Reeves (2008)
Basic structure	49; 68%	76; 74%
Extended structure	18; 25%	21; 21%
Reduced structure	5; 7%	5; 5%
Total	72	102

Table 6.5.1.2.1 Counts of types by structure of antonymous binomials

What stands out in antonymous binomials is the higher percentage of reduced structures, accounting for 7% and 5% in Watson (1993) and Reeves (2008), respectively, comparing to just 1% in binomials overall (see Figure 6.1.1.1 and Figure 6.1.1.2). Examples include *readily or not* (Watson 1993: 214), *good tasting or vile* (Watson 1993: 259), *big trees and small* (Reeves 2008: 162), *many or not* (Reeves 2008: 316), among others.

The employment of connectors in antonymous binomials is illustrated in the following table:

Connector	Watson (1993)	Reeves (2008)
or	35; 49%	46; 45%
and	31; 43%	46; 45%
Correlative coordinator	6; 8%	10; 10%
No connector	0	0
Total	72	102

Table 6.5.1.2.2 Counts of types by connectors of antonymous binomials

The results reveal a higher proportion of the use of *or* in antonymous binomials compared to the average (see Figure 6.1.2.1 and Figure 6.1.2.2), with 49% and 45% observed in the two translations. Particularly in Reeves (2008), out of all 149 binomials connected with *or*, 46 cases (31%) involve antonymous elements while only 17 synonymous, indicating a strong preference of using *or* between antonyms rather than synonyms. This can be explained by the function of the conjunction *or* to "coordinate two (or more) sentence elements between which there is an alternative" (s.v. "or, conj.1" *OED online*. 12 May 2024), as antonyms are more commonly "alternatives" than synonyms with their oppositions in meaning. Examples of such binomials include: *pleasing or ugly* (Watson 1993: 8), *this or that* (Watson 1993: 26), *going or coming* (Reeves 2008: 165), *hills or pits* (Reeves 2008: 173). In addition, it is also noteworthy that no instances of omitted connectors are found in antonymous binomials in either Watson (1993) or Reeves (2008).

Similar to the approach in Section 6.1.5.1, the elements in antonymous binomials with basic structures is also examined by their formal features.

Firstly, concerning their word class, adjectives exhibit a higher percentage in antonymous binomials in both translations. In Watson (1993), adjectives even surpass nouns with 22 cases (45%), while in Reeves (2008), though nouns still outnumber adjectives by three instances, the latter account for a higher proportion at 42%, exceeding the average distribution of 29% and 36% (see Figure 6.1.3.1.1 and Figure 6.1.3.1.2). Unlike synonymous binomials, pronouns are also observed

in antonymous examples, such as *this or that* (Watson 1993: 26), *he or she* (Reeves 2008: 326).

Secondly, between alliteration and rhyme, the latter is more prevalent in antonymous binomials with 7 and 17 instances (14% and 22%) in Watson (1993) and Reeves (2008) respectively, diverging from the general distributions (see Figure 6.1.3.2.1 and Figure 6.1.3.2.2) and synonymous binomials as discussed in Section 6.1.5.1. Some of the rhyming binomials in Reeves are formed with a base form and the addition of a negation prefix, such as *constituted or **un**constituted* (Reeves 2008: 265), *likes and **di**slikes* (Reeves 2008: 266).

Thirdly, morphologically, Reeves (2008) features more compounds (6 types, 8%), including *precept-keepers and precept-breakers* (Reeves 2008: 165), *within and without* (Reeves 2008: 267). In addition, corresponding with the previous paragraph, Reeves (2008) includes more combinations of 'simple word + prefix', adding a negation prefix to the first element itself, as seen in *constituted or **un**constituted* (Reeves 2008: 265). This feature is also consistent with the patterns observed in his use of synonymous binomials.

Fourthly, from an etymological perspective, both translations predominantly feature the 'native + native' group, with 27 instances in Watson (1993) and 45 in Reeves (2008), accounting for 55% and 59%, respectively. Examples of this pattern include *good and bad* (Watson 1993: 7), *birth and death* (Watson 1993: 18, Reeves 2008: 97). The combination of 'loan + native' is also more prevalent in antonymous binomials than in other categories, with 10 instances (21%) in Watson (1993) and 8 instances (11%) in Reeves (2008), as seen in examples like *pleasing or ugly* (Watson 1993: 8, Reeves 2008: 57). In contrast, the 'native + loan' combination, such as *great and minor* (Reeves 2008: 331) is less frequent in antonymous binomials compared to synonymous ones, with only 3 and 4 instances respectively (see Section 6.1.5.1).

6.1.5.3 Complementary binomials

Based on the semantic domains of their elements, complementary binomials are classified into the following sub-categories, according to the classification by Sauer and Schwan (2017: 190–191):

(a.) Co-hyponyms in the same semantic field, e.g., *red or white* (Watson 1993: 39), *the officials and powerful clans* (Watson 1993: 88), *gods and dragons* (Reeves 2008: 60), *skillful means and practice of insight* (Reeves 2008: 75).

(b.) Generally positive concepts or attributes, e.g., *good and gentle* (Watson 1993: 38), *joy and good fortune* (Watson 1993: 164), *joyfully and without grudging* (Reeves 2008: 62), *great comfort and abundant benefits* (Reeves 2008: 183).

(c.) Generally negative concepts or attributes, e.g., *illness or pain* (Watson 1993: 209), *negligent or slothful* (Watson 1993: 205), *sad or afraid* (Reeves 2008: 71), *gaunt with hunger and shrinking from fear* (Reeves 2008: 119).

(d.) Sequence of actions, e.g., *listen attentively and carefully ponder* (Watson 1993: 30), *whirling and fluttering down* (Watson 1993: 236), *read and memorized* (Reeves 2008: 67), *hurt and kill* (Reeves 2008: 264).

(e.) A more general concept with a more specific concept, e.g., *the devil and the devil's people* (Watson 1993: 108), *we and our attendants* (Watson 1993: 139), *to me and to the monks* (Reeves 2008: 309), *wealth and goods* (Watson 1993: 93).

(f.) Alternative actions, e.g., *boxing or wrestling* (Watson 1993: 197), *difficult to understand and difficult to enter* (Watson 1993: 23), *to make or to adorn* (Reeves 2008: 93), *either see or hear* (Reeves 2008: 230).

(g.) Alternative locations or time, e.g., *in the world or after their extinction* (Watson 1993: 40), *whether alone or in the assembly* (Watson 1993: 262), *in a heaven or among people* (Reeves 2008: 115), *on the prairies and in narrow places* (Reeves 2008: 327).

Nevertheless, cases involving complementary binomials are more complex than those with synonymous or antonymous binomials. Unlike the latter two,

which can often rely on dictionary entries for reference, complementary relations typically require the use of co-text or context to ascertain the internal relationship between the elements, which underscores the expressiveness of binomials to be used in diverse fields.

6.2 The grammatical features of multinomials

6.2.1 Length

Based on the number of elements, a multinomial can be categorised as a 'trinomial' (consisting 3 elements), such as *complete, clean and spotless* (Watson 1993: 14), a 'quadrinomial' (or 'quadruplets') (consisting 4 elements), such as *kings, princes, ministers or office heads* (Reeves 2008: 261), a 'quintuplet' (consisting 5 elements), such as *accepts, upholds, reads, recites and copies* (Watson 1993: 243), or a 'list' (more than 5 elements), such as *gold, silver, lapis lazuli, coral, amber, crystal and other gems* (Reeves 2008: 142), following the terms employed by Sauer (2017c: 31).

The distributions of the four groups in Watson (1993) and Reeves (2008) are illustrated in the following figures.

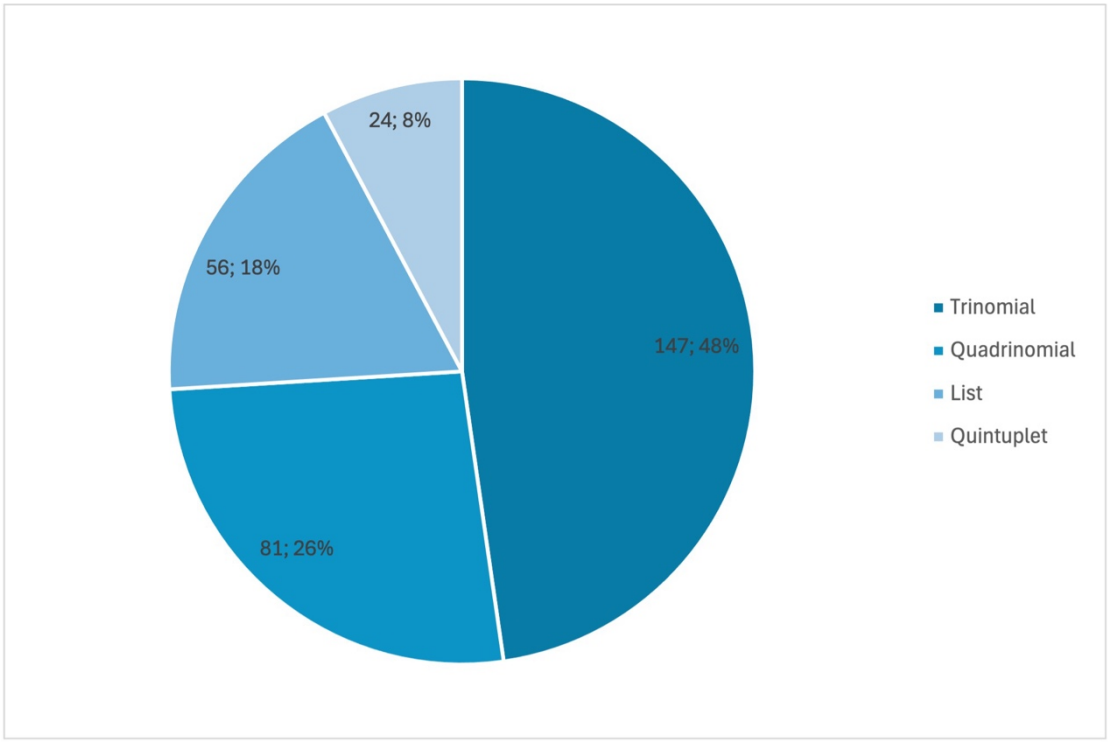

Figure 6.2.1.1 Distribution of multinomials by length in Watson (1993)

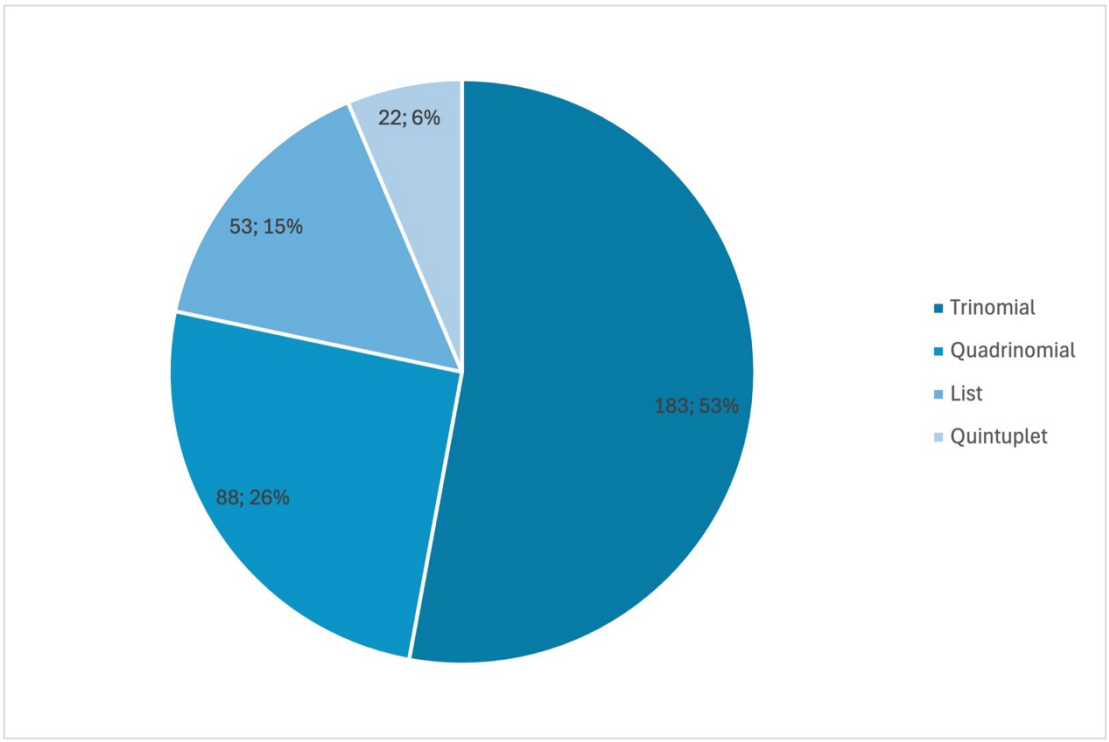

Figure 6.2.1.2 Distribution of multinomials by length in Reeves (2008)

The results indicate that the distribution of the four types of multinomials is consistent across the two selected works, following a descending order: trinomial > quadrinomial > list > quintuplet. The difference between the two translations is only minimal. More trinomials are employed in Reeves (2008) than Watson (1993) (53% vs 48%), while the latter translation contains more quadrinomials and lists. The proportion of quintuplets is the lowest among all four categories, constituting less than 10% in the two works.

6.2.2 Structure

Similar to binomials, the elements in multinomials can also be words or phrases. The former is also referred to as a basic structure, as in *complete, clean, and spotless* (Watson 1993: 14). When one or more of the elements is a phrase, the multinomial is classified as an extended structure, such as *coming, going, walking, sitting, or lying down* (Reeves 2008: 329), where Element 5 is a VP.

The distributions of multinomials by their structures are depicted in the following figures:

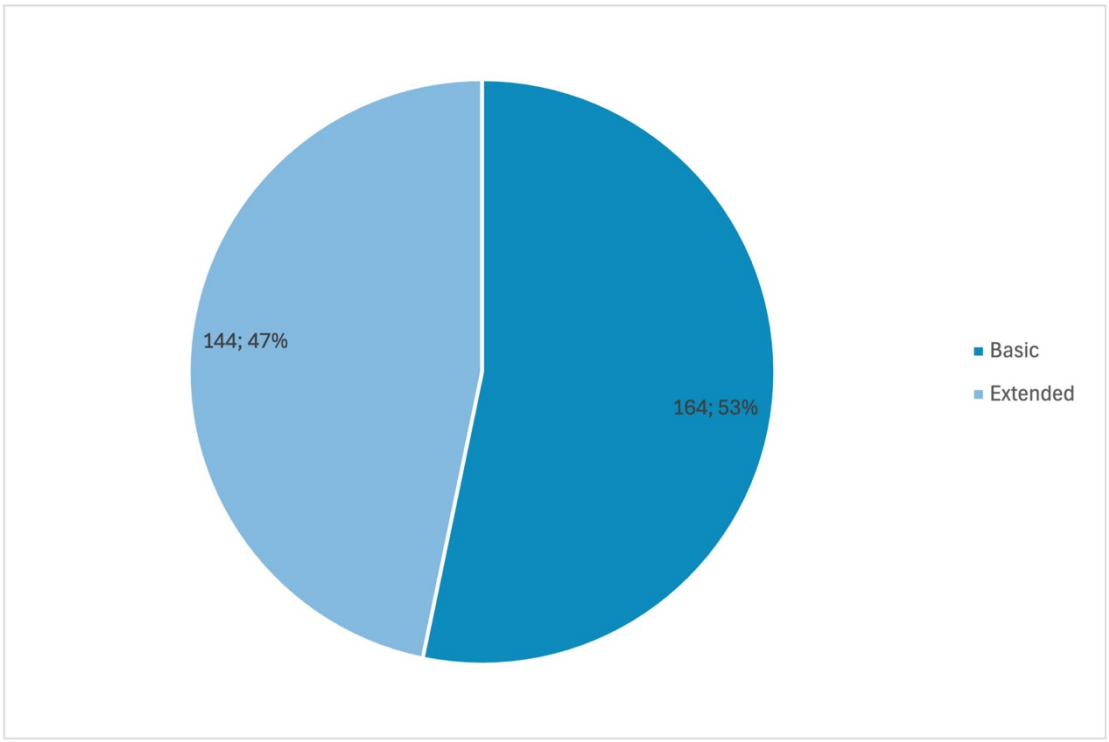

Figure 6.2.2.1 Distribution of multinomials by structure in Watson (1993)

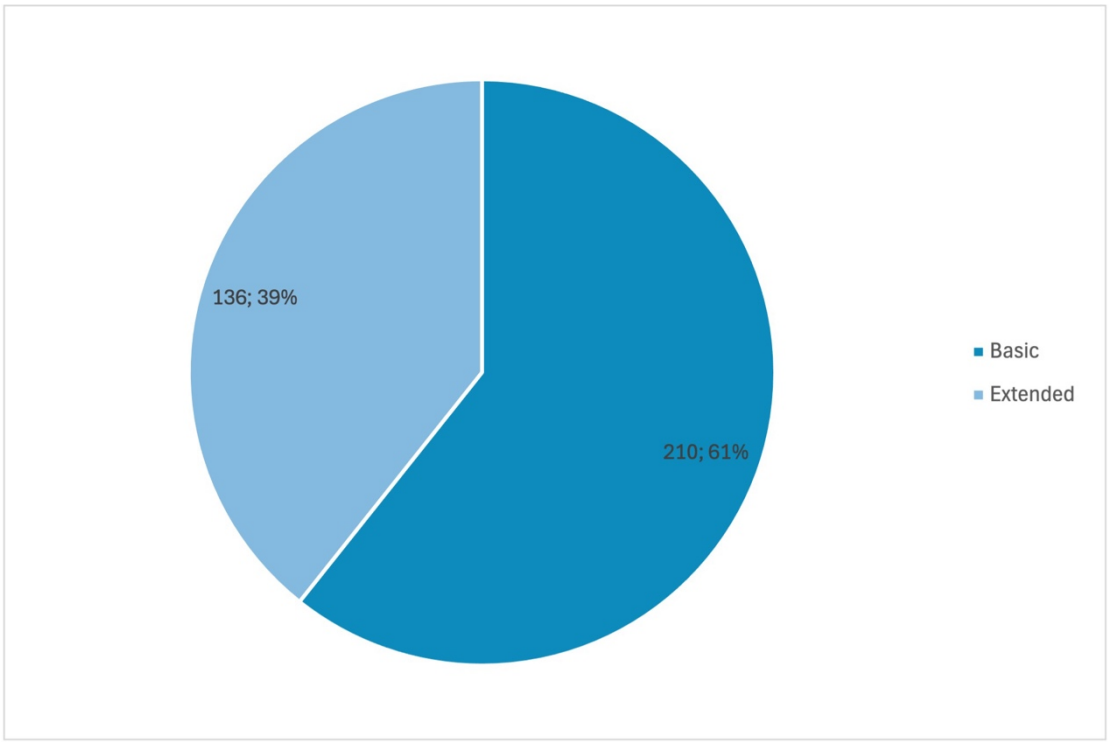

Figure 6.2.2.2 Distribution of multinomials by structure in Reeves (2008)

The figures indicate that in both translations, the proportion of multinomials with a basic structure exceeds that of those with an extended structure. In Watson (1993), the basic structure accounts for 53%, while the extended structure represents 47%. In Reeves (2008), these proportions are 61% and 39%,

respectively. No reduced structures analogous to binomials are observed in multinomials from either translation.

6.2.3 The connector

Similar to binomials, the connectors of multinomials include *and*, *or*, as exemplified by *complete, clean, and spotless* (Watson 1993: 14), and *kings, princes, ministers or office heads* (Reeves 2008: 261). Correlative coordinators, such as *either ... or*, *whether... or*, are also found in multinomials, as illustrated by *either read, recite, explain or copy* (Reeves 2008: 330). There are also instances where no connector is used in multinomials, such as the trinomial *food, drink, medicine* (Watson 1993: 203).

The distributions of multinomials by their connectors are depicted in the following figures:

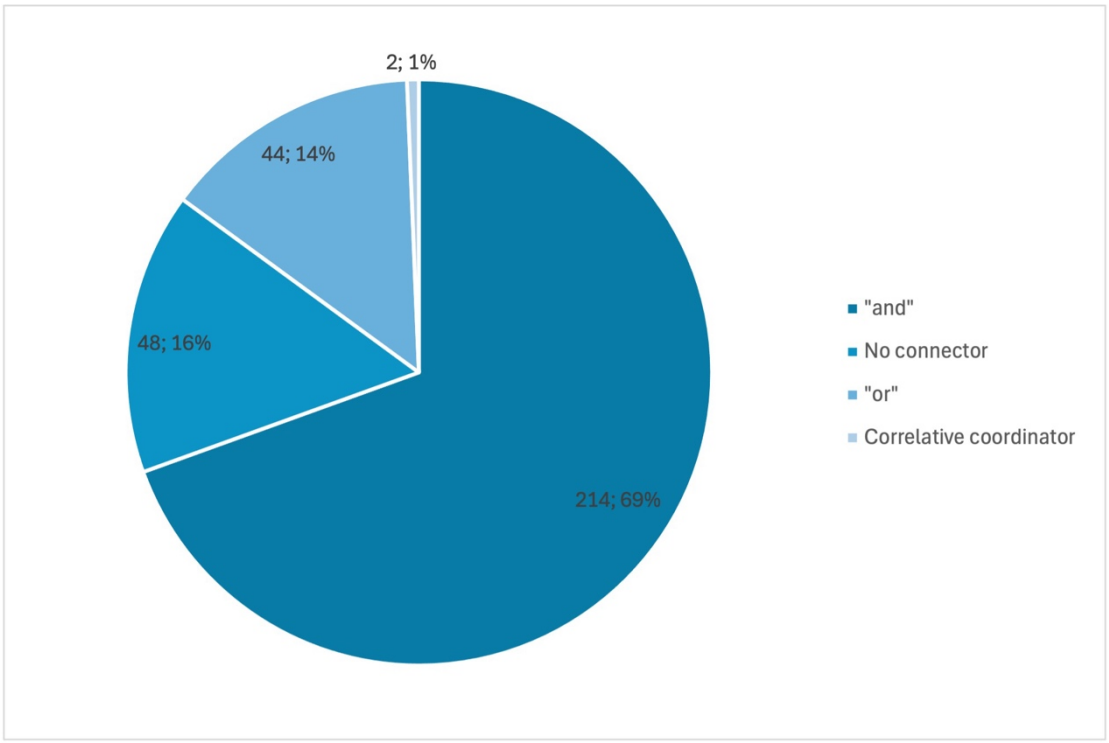

Figure 6.2.3.1 Distribution of multinomials by connector in Watson (1993)

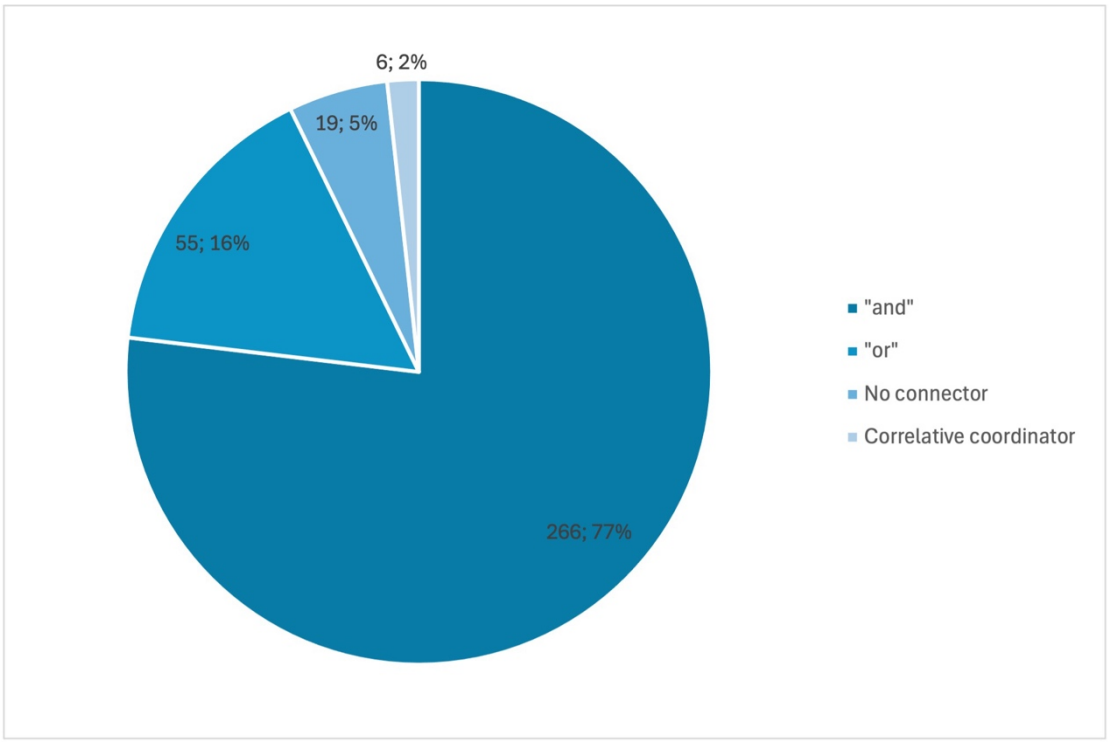

Figure 6.2.3.2 Distribution of multinomials by connector in Reeves (2008)

The figures indicate that in both works, *and* is the most used connector in multinomials, taking up 69% and 77% in Watson (1993) and Reeves (2008) respectively. This trend parallels findings in binomials, where it constitutes 81% in Watson (1993) and 78% in Reeves (2008) (see Figure 6.1.2.1 and Figure 6.1.2.2).

In Watson (1993), multinomials with no connectors account for 16%, a significantly higher proportion compared to their occurrences in his binomials (2%) and the multinomials in Reeves (2008) (5%) (see Figure 6.1.2.1 and Figure 6.2.3.2). These instances encompass various lengths: trinomials, such as *food, drink, medicine* (Watson 1993: 203), quadrinomials like *sleek, stalwart, of great strength, handsome in form* (Watson 1993: 68), and lists such as *powers, awareness, the way, meditation, emancipation, samadhis* (Watson 1993: 60), among which trinomials are the most frequent, with 26 instances, comprising 54% of the total. In Reeves (2008), only 9 trinomials and 10 quadrinomials are observed without connectors.

In contrast, Reeves (2008) shows a higher prevalence of multinomials using *or* as the connector compared to Watson (1993) (16% and 14% respectively), as

well as a slightly greater use of correlative connectors (2% and 1%). This trend mirrors findings in binomials. Multinomials with correlative connectors are exemplified by structures such as *whether superior, middling or inferior* (Watson 1993: 101), *either read, recite, explain or copy* (Reeves 2008: 330), and *neither satyrs, nor ogres, nor incubi, nor succubi, nor kumbhandas, nor hungry spirits, nor others* (Reeves 2008: 383).

Moreover, while connectors in most multinomials are typically found only preceding the last element, both works feature instances where connectors appear before each element. For instance, in trinomials such as *greed and attachment and striving* (Watson 1993: 59) and *bubbles or spray or flames* (Reeves 2008: 318), as well as quadrinomials like *upside-down, or moving, or receding or revolving* (Reeves 2008: 262), and lists such as *heard, or known, or realized, or inquired, or believed or understood* (Reeves 2008: 271). Such cases are rare and are mostly seen in trinomials.

6.2.4 The elements

6.2.4.1 Elements in basic structure

Within the basic structures, the distributions by the word class of the elements in multinomials from the two translations are illustrated in the following figures:

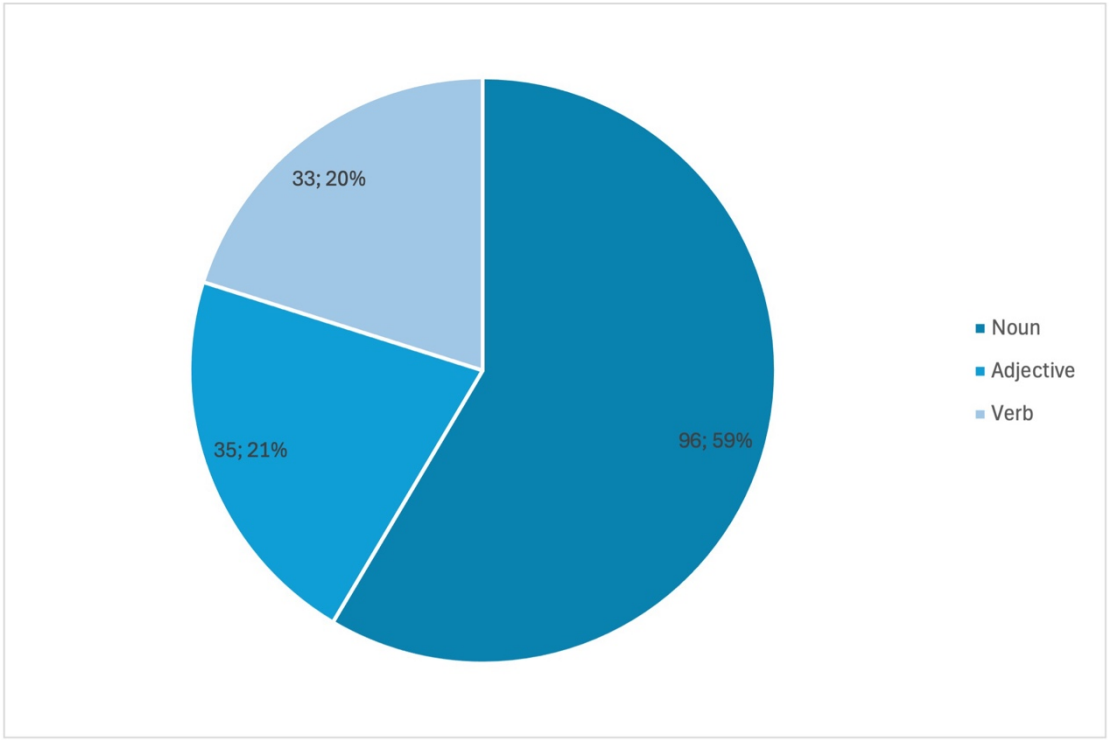

Figure 6.2.4.1.1 Distribution of multinomials by word class in Watson (1993)

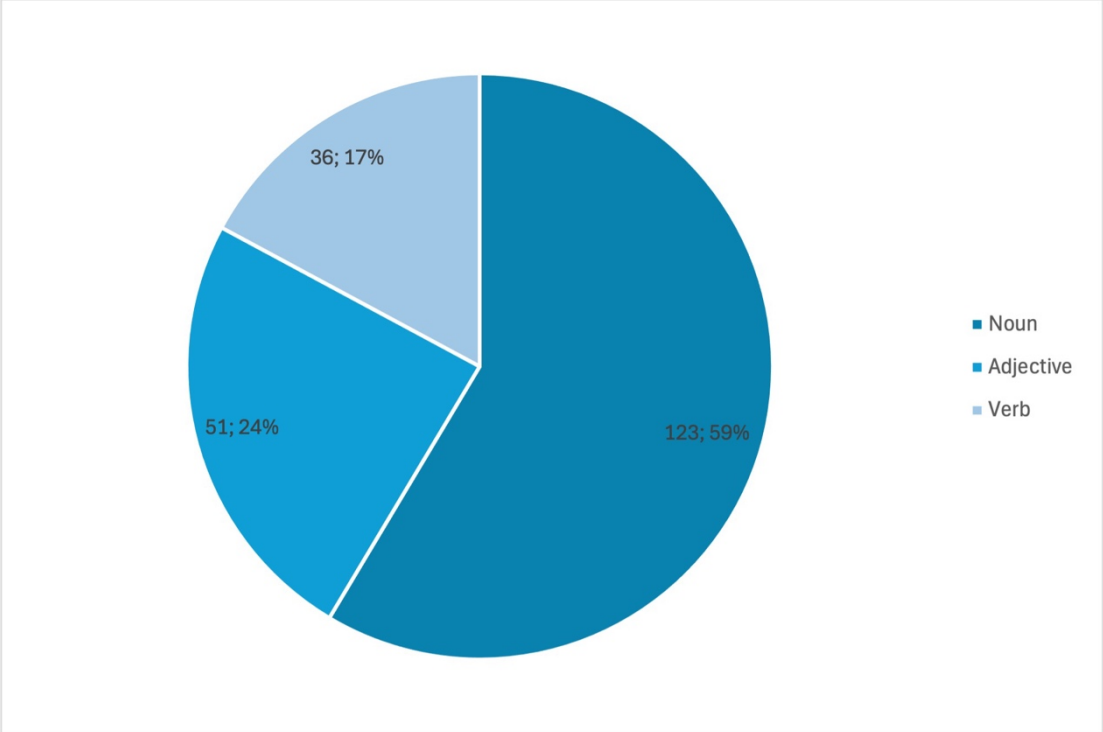

Figure 6.2.4.1.2 Distribution of multinomials by word class in Reeves (2008)

The figures indicate that the distributions follow a similar pattern (in descending order) in Watson (1993) and Reeves (2008): noun > adjective > verb. The pattern is also consistent with that observed in their use of binomials (see Figure 6.1.3.1.1 and Figure 6.1.3.1.2). However, unlike binomials, no multinomials in the two works are formed with either adverbs or pronouns.

6.2.4.2 Elements in extended structure

Similarly, the elements within extended structures are also categorised based on their phrase types, with the results presented in the following figures:

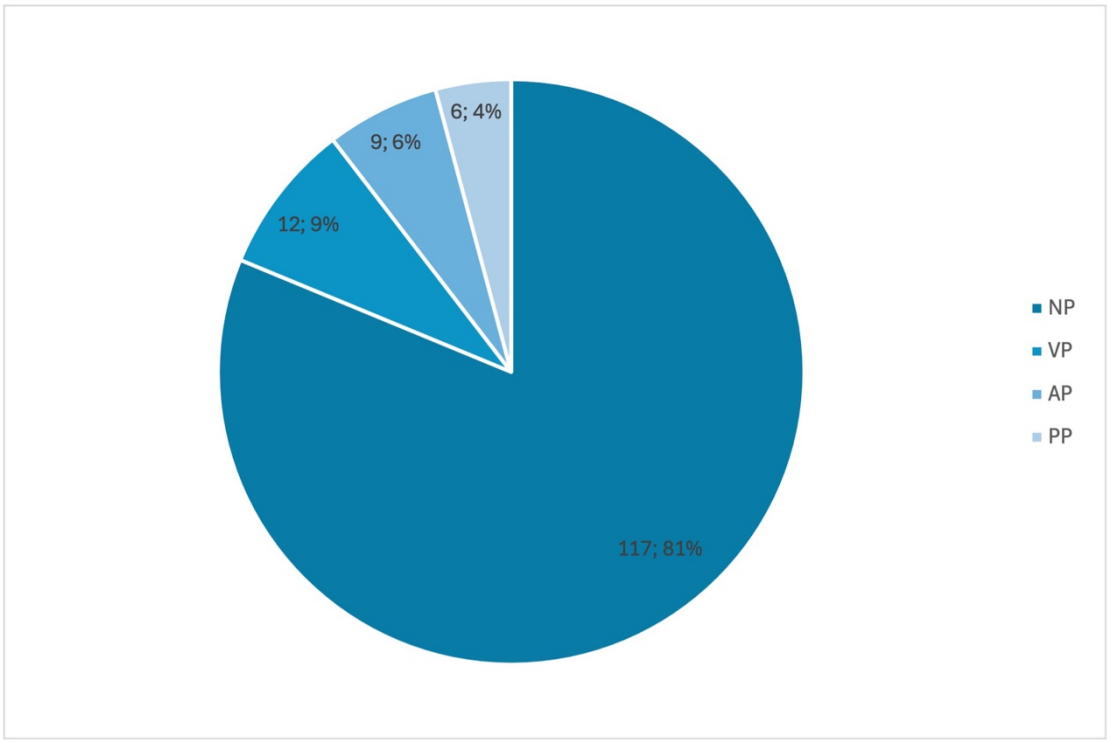

Figure 6.2.4.2.1 Distribution of multinomials by phrase type in Watson (1993)

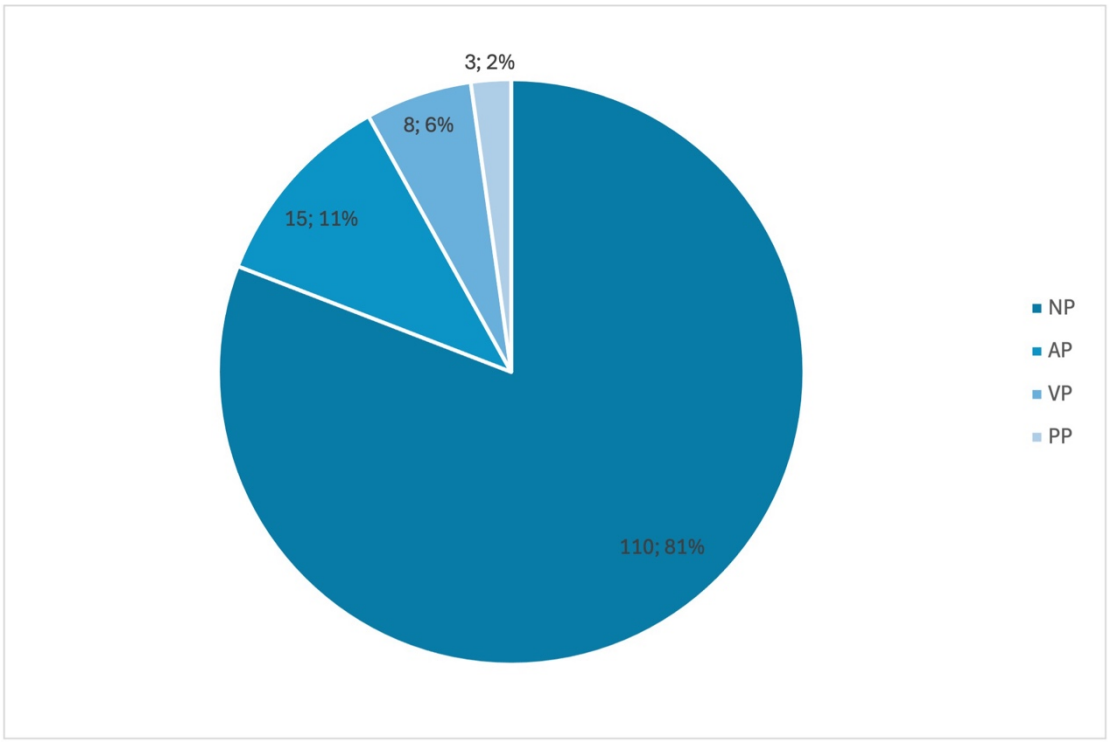

Figure 6.2.4.2.2 Distribution of multinomials by phrase type in Reeves (2008)

The figures indicate a similar distribution of binomials with extended structures in both works (see Figure 6.1.4.1.1 and Figure 6.1.4.1.2). NPs constitute

the majority in both translations, each accounting for 81%. While VPs appear more frequently in Watson (1993) than in Reeves (2008), at 9% and 6% respectively, the latter contains a higher proportion of APs, at 11%. Multinomials with PPs occur least frequently in both translations, with only six instances in Watson (1993) and three in Reeves (2008). Examples include *at the beginning, in the middle and at the end* (Watson 1993: 14), *from an egg, from a womb, from moisture, or by metamorphosis* (Reeves 2008: 316), among others.

6.2.4.3 A special element: the coordination tag

A particular feature in multinomials that merits closer examination is the use of coordination tags, such as *and others*, *and the like*, *and so on*. They typically appear as the last element in a multinomial and serve a generalizing function in meaning (Biber et al 2021: 201). In Watson (1993) and Reeves (2008), 31 and 39 multinomials containing coordination tags have been identified, representing 10% and 11% of the total, respectively. Notably, all such instances are associated with nouns or NPs. The coordination tags found in the works under analysis include the following, listed in descending order of frequency:

(a.) *and (the) others*, as in *the heavenly beings, dragons, spirits* ***and the others*** (Watson 1993: 6) and *gods, dragon-gods* ***and others*** (Reeves 2008: 81).

(b.) *and/or other* + noun, as in *arrogance, envy* ***or other defilements*** (Watson 1993: 287) and *bodhisattva practice, the ten powers* ***and other virtues*** (Reeves 2008: 109).

(c.) *and so on*, as in *brick, tile, clay* ***and so on*** (Reeves 2008: 92).

(d.) *and so forth*, as in *almsgiving, forbearance* ***and so forth*** (Watson 1993: 18) and *fine sandalwood and aloe powders* ***and so forth*** (Reeves 2008: 302).

(e.) *and the like*, as in *utensils, rice, flour, salt, vinegar* ***and the like*** (Watson 1993: 84) and *existence and nonexistence* ***and the like*** (Reeves 2008: 90).

(f.) Other sporadic instances, such as *water blisters, diabetes, scabs, sores, ulcers, maladies* ***such as these*** (Watson 1993: 77) and *hawks, eagles, kites, owls, ground beetles* ***and similar creatures*** (Watson 1993: 66).

6.2.5 Semantic relations between the elements

As previously discussed in Section 2.2.1, the multinomials in the *Lotus Sutra* frequently encompass collective concepts within Buddhism, as illustrated by the aforementioned examples such as 'the four group', 'the seven jewels', etc. Consequently, the relationship between the elements in multinomials is less diversified than that of binomials; only complementarity is evident in the selected works.

Following the approach in line with Sauer and Schwan (2017: 194), the elements in multinomials can semantically be categorised into three groups:

(a.) 'general positive elements', such as *subtle, wonderful and foremost* (Watson 1993: 8)

(b.) 'general negative elements', such as *curses, abuses or slanders* (Reeves 2008: 337)

(c.) 'factual elements', such as *at the beginning, in the middle and at the end* (Watson 1993: 14), *rice, hemp, bamboo, or reeds* (Reeves 2008: 78).

This categorisation is not confined to the dictionary definitions of the elements but rather considers their meanings within the related co-text and context. For example, *birth, old age, sickness, and death* (Watson 1993: 14) in Buddhism represents the four sufferings of life (s.v. "duḥkha" *The Princeton Dictionary of Buddhism*, p. 270–271), and is thus regarded as a multinomial composed of 'general negative elements'. Conversely, *generosity, morality, patience, perseverance, single-mindedness, and wisdom* (Reeves 2008: 309) refers to the six perfections for Bodhisattvas on their path to enlightenment (s.v. "pāramitā" *The Princeton Dictionary of Buddhism*, p. 624) and is thus categorised as comprising 'general positive elements'.

Based on this, the distributions of multinomials of the three semantic groups are illustrated in the following figures:

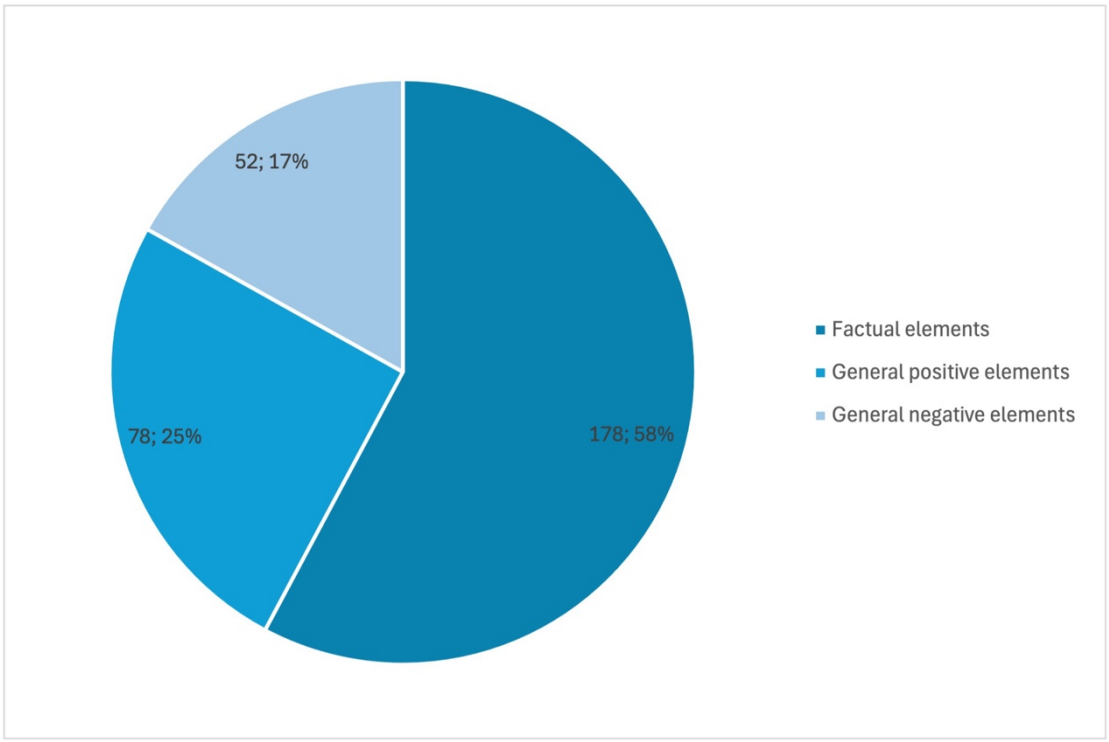

Figure 6.2.5.1 Distribution of multinomials by semantic features in Watson (1993)

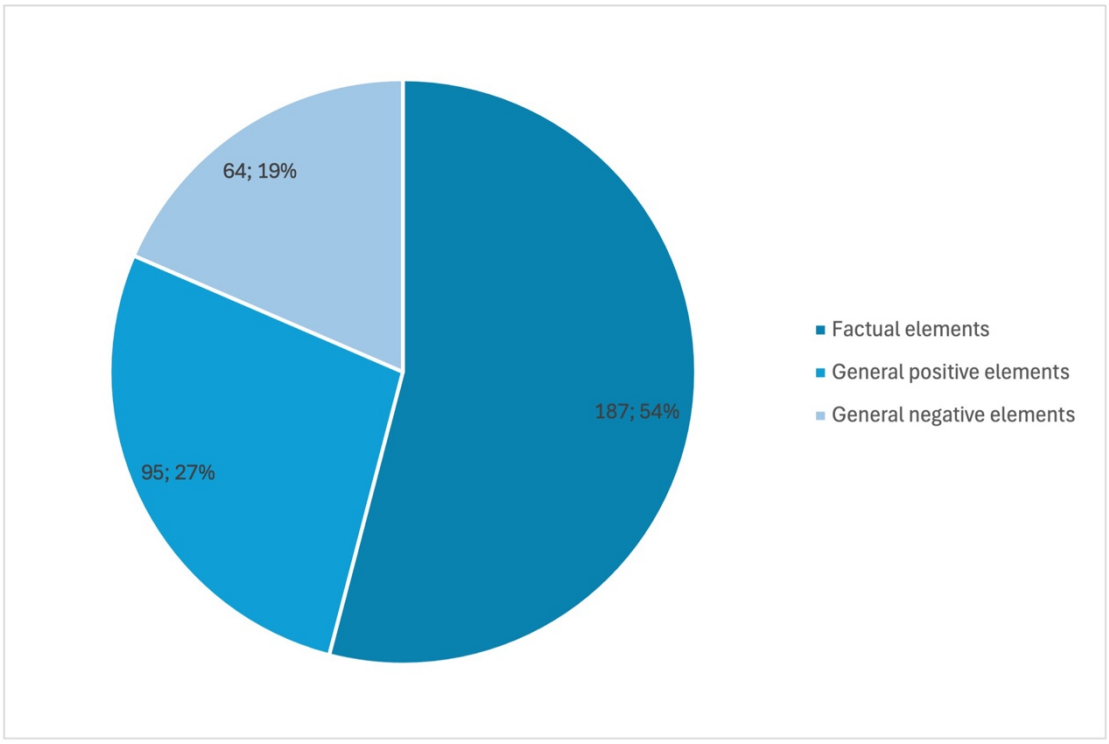

Figure 6.2.5.2 Distribution of multinomials by semantic features domains in Reeves (2008)

The figures illustrate a consistent decline in the usage of multinomials across the following categories in both translations: factual elements > general positive

elements > general negative elements. This pattern indicates that in Watson (1993) and Reeves (2008), multinomials are predominantly employed to represent factual information, comprising over 50% in both works (58% and 54%, respectively). Among the remaining categories, general positive elements occur more frequently than general negative elements in the given texts, namely, the translated Buddhist scripture, though these results may differ across various genres or registers.

Nonetheless, the findings reveal that, unlike binomials, the stylistic function of multinomials is not distinctive, given the fact that no synonymous multinomials are found. Instead, they are more often used to embody the factual aspects of the context, with the enumeration of various facets contributing to a comprehensive understanding of the topic addressed. These conclusions align with the findings of previous researchers, as discussed in Chapter 3, which suggests that multinomials primarily serve an informative function rather than a stylistic one. This underscores the role of multinomials in enhancing clarity and detail, providing a multifaceted view that aids in the reader's comprehension of complex subjects.

6.3 Summary

This chapter offers a comprehensive analysis of the binomials and multinomials in Watson (1993) and Reeves (2008), focusing on the grammatical features of their structure, connectors, and elements. The analysis uncovers both similarities and differences between the translations, providing insights into how each translator uses these linguistic constructs to convey meaning.

In both translations, binomials predominantly exhibit basic structures, with *and* emerging as the most frequently used connector. This is followed by *or*, instances without a connector, and the much rarer use of correlative coordinators.

Special attention is given to the elements within the basic structures of binomials, covering various linguistic dimensions in detail, including word class, phonetic features, morphological characteristics, and etymological aspects. In both translations, nouns are the most commonly used word class, followed by

adjectives, verbs, adverbs, and pronouns. This pattern suggests that binomials often convey descriptive or conceptual relationships. Phonetically, alliteration and rhyme are less common, though they contribute stylistically to certain binomials. Alliteration appears more frequently than rhyme, particularly in Watson (1993), but both translators generally prioritise meaning over additional embellishments. Morphologically, simple words are the most frequent in both translations, followed by binomials involving affixes, mainly suffixes, with prefixes used less often. When one element includes an affix, the simple word typically precedes the affixed element. Compounding is rarely used in either translation. From an etymological perspective, both translators favour mixed pairings of native and loan elements, and though both use Sanskrit terms directly at times, they more often employ analogous English equivalents, reflecting an attempt to balance adherence to the source text with clarity for the English readers.

Binomials with extended structures show a preference for NPs, while PPs and AdvPs occur less frequently. Watson and Reeves both favour NPs when extending binomials. However, a distinction arises in their use of VPs and APs: Watson employs VPs more frequently than APs, whereas Reeves uses both with similar frequency. Binomials with extended structures generally avoid symmetrical extensions, instead combining a simple word with a phrase. The exception is found in Reeves's occasional use of symmetrical prepositional structures.

From a semantic perspective, complementarity is the dominant relation in both translations, accounting for around 70% of binomials. Synonymy is the second most common relation, with Watson using more synonymous binomials than Reeves. In synonymous binomials, *and* is the most frequently used connector, surpassing its general usage in binomials. Additionally, synonymous binomials often feature alliteration, which is more frequent in this category than in the overall trend, adding cohesion to the paired elements. Morphologically, Reeves shows a higher incidence of the 'simple word + prefix' combination in synonymous binomials, particularly with negation prefixes. Etymologically,

synonymous binomials frequently comprise ‘native + loan’ pairings, aligning with Jespersen’s ([1905] 1938) ‘translation hypothesis’ that translators combine native and borrowed elements to create richer meanings by repetition.

Antonymous binomials, by contrast, often feature reduced structures compared to synonymous and complementary binomials. The connector *or* is more common, reflecting the oppositional nature of the pairs. Adjectives play a larger role in antonymous binomials, underscoring the contrast between qualities. Phonetic features also differ, with rhyme being more frequent than alliteration. Reeves’s translation contains more antonymous binomials involving compound words, particularly with negation prefixes, echoing patterns seen in his synonymous binomials. Etymologically, antonymous binomials primarily feature native word pairs, though there is an increase in ‘loan + native’ combinations compared to other categories.

Complementary binomials, the most common semantic relation, are subdivided into categories based on the semantic domains of their elements. These include co-hyponyms, binomials expressing positive or negative attributes, and sequences of actions, among others. This classification illustrates the versatility of complementary binomials in expressing a range of meanings, from value judgements to procedural descriptions, contributing to the translations’ semantic coherence.

Turning to multinomials, the analysis reveals consistent patterns between Watson and Reeves in terms of length and structure. Both translators prefer trinomials, followed by quadrinomials and quintuplets, demonstrating a shared preference for three-part structures. Multinomials with basic structures outnumber those with extended structures, mirroring the trend in binomials. The connector *and* is most frequently used in multinomials, though Watson employs a higher proportion of multinomials without connectors compared to binomials. Conversely, Reeves uses *or* more frequently in multinomials than Watson, highlighting different preferences differences between the two translators. Both translators also use coordination tags in multinomials, where a summarising

element appears at the end to encapsulate the preceding list. These coordination tags account for approximately 10% of multinomials in both translations, aiding in the clarity of longer enumerations.

In terms of word classes, multinomials with basic structures resemble binomials, with nouns being the most frequent class, followed by adjectives and verbs. This reflects the central role of nouns in both binomials and multinomials for categorising and organising information. In multinomials with extended structures, NPs dominate, with Watson favouring VPs and Reeves featuring a higher proportion of APs. PPs remain the least frequent in both translations. The similarities between binomials and multinomials suggest that both translators treat multinomials similarly, using them to extend descriptions while maintaining syntactic consistency.

Multinomials primarily express complementarity, often presenting factual or neutral information. There is a decline in the use of multinomials in categories representing positive or negative attributes, indicating that both translators predominantly use multinomials for the enumeration of objective details, contributing to a comprehensive understanding of the text.

In conclusion, the analysis of binomials and multinomials in Watson (1993) and Reeves (2008) reveals significant similarities. Both translators rely heavily on basic structures and complementary semantic relations, with nuanced use of etymologically mixed elements and occasional phonetic features. These findings provide insights into the employment of these linguistic structures within the two works, establishing a foundational understanding for further studies in subsequent chapters.

Chapter 7 The translation strategies of binomials and multinomials

In the translation process, translators strive for the target text (hereafter referred to as TT) to possess the same 'value' (i.e. the same worth or function) as the source text (ST), thereby attaining an 'equivalence' in the target language (TL) as in the source language (SL), which can be on the level of form, function, or anything in between. (Pym [2010] 2014: 33). To achieve this goal, both Watson (1993) and Reeves (2008) employ various translation strategies for binomials and multinomials, which form the focus of this chapter.

This study adopts the framework of translation strategies proposed by Vinay and Darbelnet ([1958] 1995), in line with previous relevant studies in the translation of binomials to or from English, such as those by Khatibzadeh and Sameri (2013), as well as Hejazi and Dastjerdi (2015) (see Section 3.1.4). Vinay and Darbelnet ([1958] 1995) categorises the translation strategies into 'direct translation' and 'oblique translation', the latter encompassing the subcategories of 'modulation', 'transposition' and 'equivalence', along with the strategies of 'amplification' and 'economy'. This chapter closely examines the application of these strategies in the translation of binomials and multinomials by the two translators.

7.1 Features of the source language

Before discussing the strategies employed by translators, it is important to first consider the linguistic features of the source language, which pose unique challenges to the act of translation.

As briefly introduced in Section 2.2.1, the ST of Kumārajīva's translation is composed in Classical Chinese, more specifically within the phase referred to as Middle or Medieval Chinese, which was in use approximately from the 4th to the 12th century CE (Wang [1957] 2013: 35). One prominent feature of Classical Chinese is the predominant use of 'asyndetic coordination', which, as Haspelmath explains, "consists of simple juxtaposition of the coordinands" (2004: 2). In other words, with asyndetic coordination, elements are placed side by side without any linking device, in contrast to the so-called 'syndetic coordination', where

conjunctions are used to connect the parts of a syntactic construction (s.v. "syndeton" *A Dictionary of Linguistics and Phonetics*, p. 470).

Scholars have found that in Classical Chinese, asyndetic coordination was the dominant method. Norman, drawing on the work of Gurevich (1974) who examines Buddhist texts from the third to fifth centuries, reports that such asyndetic coordination frequently involved pairs of synonymous or near-synonymous verbs that resisted insertion of additional linking elements between them (1988 [2010]: 121–122). Pulleyblank similarly notes that "simple juxtaposition is sufficient to indicate coordination" in Classical Chinese (1995: 61). Further evidence is provided by Tao's (1991) diachronic analysis of NP coordination in Medieval Chinese texts spanning the 3rd to the 13th centuries. In his analysis of the Buddhist scripture *Bai Yu Jing* (ca. 479–502) in Early Medieval Chinese, Tao reports that 93.7% of coordinated NPs appear without conjunctions. This preference for asyndetic coordination persists into Late Medieval Chinese, where it still accounts for approximately 82% of NP coordination instances in the text under study *Shi Shuo Xin Yu* (1991: 92–93). In contrast, binomials in English are most often formed through syndetic coordination, with conjunctions such as *and* or *or* explicitly used to connect the elements (see Section 6.1.2). Therefore Vogelsang, noticing this typological difference, highlights that when translating such 'unmarked forms of coordination' in Classical Chinese into English, one typically must "insert *and* between their constituent elements" (2021: 18).

The predominance of asyndetic coordination in the SL presents particular challenges for translators in determining the relationship between the two elements in a construction. Only when the constituent elements share equal syntactic status can they be considered coordinated, thereby forming a true binomial; otherwise, if one element functions as a modifier or elaborates on the other, the construction reflects a hierarchical syntactic relationship, indicating subordination rather than coordination. Consider the following examples:

(52) 汝於來世百千萬億諸佛法中修**菩薩行**，為大**法師** (*rǔ yú lái shì bǎi qiān wàn yì zhū fó fǎ zhōng xiū **pú sà xíng**, wéi dà **fǎ shī***)(CBETA 2024.R2, T09, no. 262, p. 36a26-28)[22]

"In future ages, [...] you will practice the **deeds of a bodhisattva**, will be a great **teacher of the Law**" (Watson 1993: 192)

"In future lives, [...] by doing **bodhisattva practice** you will become a great **Dharma teacher**" (Reeves 2008: 256)

In this instance, the phrases 菩薩行 (*pú sà xíng* 'bodhisattva practice') and 法師 (*fǎ shī* 'Dharma teacher') are both NPs in which the preceding nouns function as premodifiers, a point on which both translators concur. This conclusion can be supported by applying a replacement test, whereby each element is placed independently as the object of the preceding verb. Such a construction, however, proves to be implausible.

There are also instances where the translators' interpretations diverge, particularly when the phrase is composed of verbs. For example:

(53) 若有**輕笑**之者，當世世牙齒踈缺 (*ruò yǒu **qīng xiào** zhī zhě, dāng shì shì yá chǐ shū quē*) (CBETA 2024.R2, T09, no. 262, p. 62a20-21)

"If anyone **disparages or laughs at** that person, then in existence after existence he will have teeth that are missing or spaced far apart" (Watson 1993: 324)

"If they **disparagingly smirk** at them, for generation after generation their teeth will be sparse or completely missing." (Reeves 2008: 398)

(54) 佛所**悅可**。一切眾生，所應稱讚 (*fó suǒ **yuè kě**, yī qiè zhòng shēng, suǒ yīng chēng zàn*) (CBETA 2024.R2, T09, no. 262, p. 15a9)

"[...] The Buddha **delights in and approves** it, / and all living beings / should praise it [...]" (Watson 1993: 70)

[22] Since the translations by Watson (1993) and Reeves (2008) are provided subsequently, the quotations from the ST hereafter do not include their English translations of the complete sentence, in order to avoid redundant information.

"[...] Buddhas **joyfully approve of** it. / All living beings / Should praise it [...]

In Examples (53) and (54), Watson interprets the phrases as coordinative, translating them as binomials: "disparages or laughs at" and "delights in and approves". In contrast, Reeves views the phrases as subordinative, treating the preceding verbs 輕 (*qīng* 'to look down upon') and 悅 (*yuè* 'to delight in') as premodifiers of the following verbs 笑 (*xiào* 'to laugh at') and 可 (*kě* 'to approve'). Although both interpretations pass the replacement test, as each element can independently function as the predicate within the clause, dictionary definitions provide favourable support for Watson's translation: the phrase in Example (53) is defined as "輕蔑譏笑 (*qīng miè jī xiào* 'to disparage and laugh at')" (s.v. "輕笑" *Hanyu Da Cidian online*. 12 September 2024) and Example (54) as "喜悅認可 (*xǐ yuè rèn kě* 'to delight in and approve')" (s.v. "悅可" *Hanyu Da Cidian online*. 12 September 2024).

Nevertheless, cases such as (53) and (54) are less common in the works under study. More frequently, the two translators reach consensus on the interpretation of constructions, as in:

(55) 諸佛如來但**教化**菩薩 (*zhū fó rú lái dàn **jiào huà** pú sà*) (CBETA 2024.R2, T09, no. 262, p. 7a29)

"The Buddhas, the Thus Come Ones, simply **teach and convert** the bodhisattvas." (Watson 1993: 31)

"The buddha-tathagatas only **teach and transform** bodhisattvas." (Reeves 2008: 83)

In Example (55), 教化 (*jiào huà*) is understood by both translators as a verbal binomial, a reading further supported by the dictionary definition "教育感化 (*jiào yù gǎn huà* 'to educate and transform')" (s.v. "教化*" Hanyu Da Cidian online*. 12 September 2024).

In summary, the widespread use of asyndetic coordination in Chinese, the source language, can sometimes pose challenges for translators in determining the relationships between elements in a construction, these decisions can be made by

testing the individual syntactic roles of each element within the construction to determine if they share equal status. Additionally, consulting dictionary definitions can provide clarity, though attention should be given to the temporal divide in the language's usage.

Another challenge lies in accounting for diachronic lexical change, particularly the evolution from Classical Chinese to Modern Chinese. A prominent feature of Classical Chinese is its reliance on monosyllabic morphemes, as Norman explains, "the overwhelming majority of Old Chinese morphemes were monosyllables, [which] means that, at the phonological level, every graph represents a single syllable" (1988 [2010]: 58). In contrast, Modern Chinese is predominantly disyllabic. Hu estimates that over 80% of lexical items in Modern Chinese are disyllabic (1981: 28), and Wang identifies the disyllabification of the lexicon as one of the most significant grammatical developments since the Middle Chinese period, noting that a substantial presence of disyllabic vocabulary was already evident as early as the Tang Dynasty (7th – 10th century) ([1957] 2013: 336).

This linguistic change occurred largely during the Middle Chinese period, a phase during which numerous new expressions entered the lexicon, with the translation of Buddhist scriptures playing a catalytic role. As Shi observes, "under the influence of this tendency [of disyllabification], two monosyllabic words were subject to compounding if they often co-occurred in contexts where they were adjacent" (2023: 78). Over time, these constructions became lexicalised (Zhu 1992b: 299), resulting in a shift from a predominantly monosyllabic lexicon to one increasingly characterised by disyllabic and multisyllabic forms (Dong [2011] 2017: 322). In the ST analysed in this study, a number of such expressions have undergone lexicalisation and are now recognised as independent lexical entries in Modern Chinese, as evidenced by their inclusion in the *Xiandai Hanyu Cidian* 'Modern Chinese Dictionary'. For instance, the expression "教化" in Example (55) appears as a headword (s.v. "教化" *Xiandai Hanyu Cidian* p. 659).

This phenomenon presents considerable challenges for the translators, who may struggle to disregard the influence of these now-conventionalised lexical forms. In fact, identifying the boundary between words and phrases in the transitional period of Middle Chinese in itself is a complex task, due to the "lack of sufficient morphological clues to help identify a word, and the long-lasting and unclear transition from monosyllabic to multisyllabic words" (Li 2022: 174). In practice, both Watson (1993) and Reeves (2008) at times render such binomials in ST as words in their translations. This translation strategy, referred to in this study as 'economy', is examined in detail in Sections 7.2.4 and 7.3.4.

A comprehensive resolution of the complexities surrounding the lexicalisation of Chinese binomials underscores the necessity for further research in the field of historical Chinese linguistics. Moreover, considering the fact that Kumārajīva's *Lotus Sutra* is itself a work of translation, any attempt to trace the origins and motivations behind his use of binomial and multinomial expressions must involve a systematic cross-comparison with the ST upon which his translation was based. These lines of inquiry, however, fall beyond the scope of the present study, which is situated within the field of English linguistics and focuses specifically on the analysis of binomials and multinomials as they appear in the English translations by Watson (1993) and Reeves (2008). In addressing this issue, this study adopts a descriptive and analytical approach, examining how each English translator handles such constructions in the same ST, and identifying both similarities and differences in their respective translation strategies.

7.2 Translation strategies of binomials

Based on the Vinay and Darbelnet's model, the observed translation strategies used in translating binomials by the two translators encompasses direct translation, oblique translation, amplification and economy.

7.2.1 Direct translation

Direct translation, also termed as 'literal translation' is defined as "the direct transfer of an SL text into a grammatically and idiomatically appropriate TL text,

in which the translator's task is limited to adhering to the linguistic servitudes of the TL" (Vinay and Darbelnet [1958] 1995: 33). In the context of translating binomials, this approach involves rendering both elements and the connector from the ST without modification, as illustrated in:

(56) 我所有福業，**今世若過世** (*wǒ suǒ yǒu fú yè*, ***jīn shì ruò guò shì***) (CBETA 2024.R2, T09, no. 262, p. 12a29-b1)

'The meritorious deeds we have done in **this existence or past existences**' (Watson 1993: 55).

Here, the translator preserves the two elements 今世 (*jīn shì* 'this existence') and 過世 (*guò shì* 'past existence'), as well as the connector 若 (*ruò* 'or') unaltered and translates into the binomial with extended structure *this existence or past existences*.

For binomials lacking connectors in ST, direct translation similarly entails a word-for-word correspondence, as illustrated by the example:

(57) 得佛智慧，成**等正**覺 (*dé fó zhì huì*, *chéng* ***děng zhèng*** *jué*) (CBETA 2024.R2, T09, no. 262, p. 21c9)

'He will acquire the wisdom of the Buddha / And reach **impartial, proper** awakening.' (Reeves 2008: 176)

In this case, the translator renders the two elements 等 (*děng* 'impartial') and 正 (*zhèng* 'proper') without supplementing any connectors.

Due to the frequent cases of asyndetic coordination in ST as previously discussed, the strategy of direct translation is employed only sparingly, with 24 instances in Watson (1993) and 47 in Reeves (2008), accounting for 1% and 3%, respectively. Among these limited cases, the two translators exhibit different preferences in their approaches. Watson (1993) tends to use direct translation when connectors are present in the ST, as shown in Example (56). Other such examples include:

(58) 若人於塔廟、**寶像及畫像**，以華香幡蓋，敬心而供養 (*ruò rén yú tǎ miào*, ***bǎo xiàng jí huà xiàng***, *yǐ huá xiāng fān gài*, *jìng xīn ér gòng yǎng*) (CBETA 2024.R2, T09, no. 262, p. 9a10-11)

‘If persons, in the presence of such memorial towers, such **jeweled images and painted images**, should with reverent minds make offerings.’ (Watson 1993: 39)

(59) 譬如少壯人，年始二十五，示人百歲子，**髮白而面皺**（*pì rú shǎo zhuàng rén*, *nián shǐ èr shí wǔ*, *shì rén bǎi suì zǐ*, ***fà bái ér miàn zhòu***) (CBETA 2024.R2, T09, no. 262, p. 42a11-12)

‘It is as though a young man / just turned twenty-five / were to point to a hundred year old man / with gray hair and wrinkled face.’ (Watson 1993: 222)

In Example (58) the connector 及 (*jí* ‘and’) is translated into *and* while in Example (59), the connector 而 (*ér* ‘and’) is similarly rendered as *and*.

Only 8 instances in Watson (1993) are used without connectors, including:

(60) 常說法**教化**，無數億眾生（*cháng shuō fǎ **jiào huà***, *wú shù yì zhòng shēng*) (CBETA 2024.R2, T09, no. 262, p. 43b14)

‘Constantly I have preached the Law, **teaching, converting** / countless millions of living beings’ (Watson 1993: 229)

In contrast, of the 47 instances of direct translation in Reeves (2008), 26 occur without connectors, preserving the structure of the ST. All of these cases are formed using adjectives, as demonstrated by the following examples:

(61) 惡世中比丘，邪智心**諂曲**（*è shì zhōng bǐ qiū xié zhì xīn **chǎn qǔ***) (CBETA 2024.R2, T09, no. 262, p. 36b25)

‘In that evil age there will be monks / With twisted minds and **fawning, crooked** hearts’ (Reeves 2008: 257)

(62) 彼國諸佛，以**大妙**音而說諸法（*bǐ guó zhū fó*, *yǐ **dà miào** yīn ér shuō zhū fǎ*) (CBETA 2024.R2, T09, no. 262, p. 33a4)

‘All the buddhas in those lands preached various teachings with **great, wonderful** voices’ (Reeves 2008: 237)

(63) 能以千萬種，**善巧**之語言（*néng yǐ qiān wàn zhǒng **shàn qiǎo** zhī yǔ yán*) (CBETA 2024.R2, T09, no. 262, p. 50b21-22)

‘With tens of millions / Of **good, skillful** words’ (Reeves 2008: 335)

In the case of the binomials in Examples (61) to (63), Watson (1993) adds connectors in the binomials, rendering them as *fawning and crooked* (Watson 1993: 193), *great and wonderful* (Watson 1993: 173) and *apt and skillful* (Watson 1993: 264), respectively, employing the strategy of modulation (see Section 7.2.2.1 below). The different approaches suggest that while Watson tends to adapt binomials to suit English conventions, Reeves seeks to maintain a precise word-for-word correspondence in both form and meaning between the ST and the TT, preserving the original features of the ST as much as possible.

7.2.2 Oblique Translation

Compared to direct translation, oblique translation is employed when "certain stylistic effects cannot be transposed into the TL without upsetting the syntactic order, or even the lexis" (Vinay and Darbelnet [1958] 1995: 31). This strategy arises from the "structural or metalinguistic differences" (Vinay and Darbelnet [1958] 1995: 31) between the SL and TL, necessitating adaptations to accommodate the features of the TL. Yet despite these adaptions, binomials from the ST are still preserved in the TT as binomials.

Oblique translation encompasses various sub-categories, including 'modulation', 'transposition' and 'equivalence', all of which are evident in Watson's and Reeves's translation of binomials.

7.2.2.1 Modulation

The strategy of modulation is defined as "a variation of the form of the message" when direct translation results in "unsuitable, unidiomatic, or awkward" constructions in the TL (Vinay and Darbelnet [1958] 1995: 36). By employing modulation, translators preserve semantic equivalence between the the ST and the TT while adjusting the form of the language. This approach ensures that the translations are grammatically and idiomatically more accessible to the TL readers.

In the translation of binomials, modulation involves adjustments to the connectors and elements, modifying them to fit the linguistic norms of English.

7.2.2.1.1 Alteration of the connectors

The alteration of connectors in binomials include adding, reducing, or modifying them from the ST to TT. Due to the prevalence instances of asyndetic coordination in the ST, most instances of connector modification involve the addition of new connectors. The added connectors include *and*, *or* and some correlative connectors such as *neither ... nor*, with *and* being the most frequently used connector, aligning with the findings regarding connectors in binomials presented in the previous chapter (see Section 6.1.2).

The following Examples (64) to (70) illustrate the addition of connector *and* in binomials. Among these, Examples (64) and (65) involve binomials with nouns and NPs, Examples (66) to (68) feature adjectives and APs, Examples (69) and (70) involve verbs and Example (71) include adverbs.

(64) 欲知此光所為**因緣** (*yù zhī cǐ guāng suǒ wéi **yīn yuán***) (CBETA 2024.R2, T09, no. 262, p. 4a22)

'They wished to know the **causes and conditions** that had occasioned this light' (Watson 1993: 15)

'All these bodhisattvas, [...] wanted to know the **causes and circumstances** of that light' (Reeves 2008: 66)

(65) **惡獸毒蟲**，藏竄孔穴 (***è shòu dú zhǒng**, cáng cuàn kǒng xué*) (CBETA 2024.R2, T09, no. 262, p. 14a24-25)

'The **evil beasts and poisonous creatures** / hid in their holes and dens.' (Watson 1993: 65)

'**Evil beasts / And poisonous insects** / Hid in their holes.' (Reeves 2008: 121)

(66) 其土**平正** (*qí tǔ **píng zhèng***) (CBETA 2024.R2, T09, no. 262, p. 11b21)

'The land will be **level and smooth**.' (Watson 1993: 52)

'It will be **level and smooth**.' (Reeves 2008: 108)

(67) 先世**善惡**業 (*xiān shì **shàn è** yè*) (CBETA 2024.R2, T09, no. 262, p. 7c22)

‘the **good and bad** deeds they have done in previous existences’ (Watson 1993: 34)

‘The **good and evil** deeds of their previous lives’ (Reeves 2008: 86)

(68) 其智慧門**難解難入** (*qí zhì huì mén **nán jiě nán rù***) (CBETA 2024.R2, T09, no. 262, p. 5b26)

‘The door to this wisdom is **difficult to understand and difficult to enter**’ (Watson 1993: 23)

‘and the gate ways to this wisdom are **hard to understand and hard to enter**’ (Reeves 2008: 75)

(69) 諸佛如來但**教化**菩薩 (*zhū fó rú lái dàn **jiào huà** pú sà*) (CBETA 2024.R2, T09, no. 262, p. 7a29)

‘The Buddhas, the Thus Come Ones, simply **teach and convert** the bodhisattvas.’ (Watson 1993: 31)

‘The buddha-tathagatas only **teach and transform** bodhisattvas.’ (Reeves 2008: 83)

(70) 若善男子、善女人，**受持**是法華經 (*ruò shàn nán zǐ, shàn nǚ rén, **shòu chí** shì fǎ huá jīng*) (CBETA 2024.R2, T09, no. 262, p. 47c3-4)

“If goodmen or good women, **accept and uphold** this Lotus Sutra” (Watson 1993: 251)

“If any good sons or good daughters **receive and embrace** this Dharma Flower Sutra” (Reeves 2008: 321)

(71) [...] 著新淨衣，**內外**俱淨 (*zhuó xīn jìng yī, **nèi wài** jù jìng*) (CBETA 2024.R2, T09, no. 262, p. 38a11)

“[...] put on a new clean robe / and make himself **both inwardly and outwardly** pure” (Watson 1993: 202)

“They put on a new, clean robe, / And, clean **within and without**” (Reeves 2008: 267)

Examples (72) and (73) include binomials in which the translators add the connector *or* in their translations.

(72) 若有**善男子、善女人**，聞是法華經隨喜者 (*ruò yǒu **shàn nán zǐ, shàn nǚ rén**, wén shì fǎ huá jīng suí xǐ zhě*) (CBETA 2024.R2, T09, no. 262, p. 46b22-23)

"if there are **good men or good women** who, hearing this Lotus Sutra, respond with joy" (Watson 1993: 245)

"if there are **good sons or good daughters** who, hearing the Dharma Flower Sutra, respond with joy" (Reeves 2008: 315)

(73) 汝等當信佛之所說，言不**虛妄** (*rǔ děng dāng xìn fó zhī suǒ shuō, yán bù **xū wàng***) (CBETA 2024.R2, T09, no. 262, p. 7a17)

"you and the others must believe me. The words that the Buddhas preach are not **empty or false** (Watson 1993: 30)

"You should believe me, Shariputra, in the teachings of the buddhas nothings is **empty or false** (Reeves 2008: 83)

The addition of correlative connector such as *neither ... nor* is illustrated by Examples (74) and (75).

(74) **非實非虛，非如非異** (***fēi shí fēi xū, fēi rú fēi yì***) (CBETA 2024.R2, T09, no. 262, p. 42c14-15)

"It is **neither substantial nor empty**, **neither consistent nor diverse**" (Watson 1993: 226)

(75) 若人有病，得聞是經，病即消滅，**不老不死** (*ruò rén yǒu bìng, dé wén shì jīng, bìng jí xiāo miè, **bù lǎo bù sǐ***) (CBETA 2024.R2, T09, no. 262, p. 54c25-26)

"If anyone is sick, when they hear this sutra their sickness will quickly disappear and they will **neither grow old nor die**." (Reeves 2008: 360)

There are 1,497 instances in Watson (1993) and 860 in Reeves (2008) in which connectors are added, accounting for 73% and 50% of the respective total occurrences. This discrepancy aligns with the translators' differing approaches in employing direct translation: Watson tends to conform to the English convention of syndetic coordination, whereas Reeves more often preserves the original

structure of the SL (see Section 7.2.1). Nonetheless, the addition of a connector alone remains the most frequently employed strategy by both translators.

Apart from adding the connectors, there are also cases where the connector in ST is changed into a different connector in TT. For example:

(76) 或有起石廟，**栴檀及沈水** (*huò yǒu qǐ shí miào,* ***zhān tán jí chén shuǐ***) (CBETA 2024.R2, T09, no. 262, p. 8c21)

"Or if they raise up stone mortuary temples / or those of **sandalwood or aloes**" (Watson 1993: 38)

(77) 我等無智故，**不覺亦不知** (*wǒ děng wú zhì gù,* ***bù jué yì bù zhī***) (CBETA 2024.R2, T09, no. 262, p. 29b16)

"But because of our ignorance / We **neither perceived nor knew** this" (Reeves 2008: 217)

In Example (76), the connector 及 (*jí* 'and') is replaced by *or* in Watson (1993), whereas in Example (77), another connector with the meaning of "and", 亦 (*yì* 'and'), is rendered as the correlative connector *neither ... nor* in Reeves (2008).

(78) **聲聞若菩薩**，聞我所說法 (***shēng wén ruò pú sà****, wén wǒ suǒ shuō fǎ*) (CBETA 2024.R2, T09, no. 262, p. 8a15-16)

"When the **voice-hearers and bodhisattvas** / hear this Law that I preach" (Watson 1993: 35)

(79) **若坐若經行**，除睡常攝心 (***ruò zuò ruò jīng xíng****, chú shuì cháng shè xīn*) (CBETA 2024.R2, T09, no. 262, p. 45a18)

"If he practices **sitting and walking** exercises, / banishing drowsiness, constantly regulating his mind" (Watson 1993: 238)

"For innumerable eons / Dwelling in secluded places, / And, **whether sitting or walking /** Avoiding sleepiness and always concentrating" (Reeves 2008: 306)

In Example (78), the connector 若 (*ruò* 'or') is replaced with *and* by Watson (1993). In Example (79), where 若 (*ruò* 'or') appears before both elements 坐 (*zuò* 'to sit') and 经行 (*jīng xíng* 'to walk'), Watson modulates it

into *and*, while Reeves uses the correlative connector *whether ... or* in his translation.[23]

7.2.2.1.2 Alteration of the elements

The sequence of elements in a binomial, is sometimes reversed by the translators during the translation process. Both translations contain instances where the sequences in the translated binomials differ from that of the ST, although such occurrences are relatively few. An analysis reveals that while Watson adheres more closely to the original Chinese word order, with 62 instances of reversed element order, Reeves demonstrates greater flexibility in his translations, with as many as 110 such instances. This method is classified based solely on the semantic perspective. Examples include:

(80) [...] 往至貧里、以求**衣食**（*wǎng zhì pín lǐ, yǐ qiú **yī shí***) (CBETA 2024.R2, T09, no. 262, p. 17a6-7)

"[...] went off to the poor village in order to look for **food and clothing**." (Watson 1993: 81)

"[...] went off to a poor village in search of **food and clothing**." (Reeves 2008: 143).

The ST in Example (80) 衣食 (*yī shí* 'clothing [and] food') is translated into *food and clothing* by both translators, with the sequence of the elements reversed. Additionally, both translators added the connector *and* in TT.

(81) 而年**朽邁**，益憂念子（*ér nián **xiǔ mài***, *yì yōu niàn zǐ*) (CBETA 2024.R2, T09, no. 262, p. 17c25)

"But as he grew **old and decrepit /** he recalled his son with greater distress than ever." (Watson 1993: 88)

"But as he became **older and infirm**, / He longed all the more for his son." (Reeves 2008: 147).

[23] In this example, the word class of the elements are also changed by two translators, demonstrating the use of the 'transposition' strategy (see Section 7.2.2.2).

In Example (81), the ST 朽邁 (*xiǔ mài* 'decaying [and] old') is translated with a reversed sequence into *old and decrepit* and *older and infirm* by both translators.

(82) 我已悉**知見** (*wǒ yǐ xī **zhī jiàn***) (CBETA 2024.R2, T09, no. 262, p. 5c22)

"I have already come to **see and know** completely" (Watson 1993: 25)

The verbal binomial in Example (82) 知見 (*zhī jiàn* 'know [and] see') is rendered as *see and know* by Watson (1993).

(83) 今**我與汝**，便為不異 (*jīn **wǒ yǔ rǔ***, *biàn wéi bù yì*) (CBETA 2024.R2, T09, no. 262, p. 17b3)

"Because from now on, **you and I** will not behave as two different persons." (Watson 1993: 85)

"Because from now on **you and I** will be no different." (Reeves 2008: 145).

In Example (83) the binomial 我與汝 (*wǒ yǔ rǔ* 'I and you') is reversed by both translators into *you and I*.

It is worth noting that, it is not always clear whether the sequence of elements is reversed when the two elements of the binomial are synonymous, as seen in Examples (84) and (85):

(84) 普佛世界，六種**震動** (*pǔ fó shì jiè*, *liù zhǒng **zhèn dòng***) (CBETA 2024.R2, T09, no. 262, p. 2b12)

'and everywhere the Buddha world **quaked and trembled** in six different ways' (Watson 1993: 5)

'while the whole Buddha/world **trembled and shook** in six ways' (Reeves 2008: 55)

(85) 我等未來世，一切所**尊敬** (*wǒ děng wèi lái shì*, *yī qiē suǒ **zūn jìng***) (CBETA 2024.R2, T09, no. 262, p. 45b6)

'So may we too in ages to come, / **honored and revered** by all' (Watson 1993: 239)

'So may we in ages to come, / **Honored and revered** by all' (Reeves 2008: 308)

The issue of the sequence of binomial elements, along with the constraints governing it in English binomials, is discussed in detail in Section 9.1.

7.2.2.2 Transposition

The strategy of transposition involves "replacing one word class with another without changing the meaning of the message" (Vinay and Darbelnet [1958] 1995: 36). In Example (79), Watson (1993) translates the binomial 若坐若經行 (*ruò zuò ruò jīng xíng* 'or sit or walk') as *practices* ***sitting and walking*** *exercises* (Watson 1993: 238), where the two elements are transformed from verbs to adjectives in TT. Meanwhile, Reeves (2008) employs the present participles of the two verbs in his translation *whether sitting or walking* (Reeves 2008: 306), functioning as gerunds. Thus, in addition to the modulation strategy, both translators use transposition in translating this binomial.

Similarly, transposition is also used in the following Example (86):

(86) [...] 利益**天人**，度脫一切 (*lì yì* ***tiān rén*** *dù tuō yī qiē*) (CBETA 2024.R2, T09, no. 262, p. 13b27)

"[...] bring benefit to **heavenly and human beings**, and save them all" (Watson 1993: 61)

"[...] enrich **human and heavenly beings**, and save them all" (Reeves 2008: 117).

In this instance, 天人 (*tiān rén* 'heaven [and] human'), originally formed with nouns, is translated as *heavenly and human beings* and *human and heavenly beings* by the two translators. The former is an NP where the head noun is premodified by the adjectival binomial *heavenly and human*, while the latter is a combination of a noun and an NP.

In addition, transposition also includes instances where words are transformed into phrases, as demonstrated in the following examples.

(87) 餚饍飲食、百種湯藥，施**佛及僧** (yáo shàn yǐn shí, bǎi zhǒng tāng yào, **shī fó jí sēng**) (CBETA 2024.R2, T09, no. 262, p. 3b9-10)

“Or I see bodhisattvas / with delicious things to eat and drink / and a hundred kinds of medicinal potions, / offering them to **the Buddha and his monks**” (Watson 1993: 11)

“Or I see bodhisattvas / Who offer delicacies of food and drink, / And hundreds of kinds of herbal teas / To **the Buddha and the monks**.” (Reeves 2008: 61)

Here, the binomial formed with nouns in the ST 佛及僧 (*fó jí sēng* ‘Buddha and monk’) is rendered by both translators into binomials with noun phrases through the addition of determiners: *the* and *his* in Watson (1993), and two instances of *the* in Reeves (2008).

(88) 佛座**高遠** (*fó zuò gāo yuǎn*) (CBETA 2024.R2, T09, no. 262, p. 33c10)

“The Buddhas are seated **high up and far away**!” (Watson 1993: 176)

“The buddhas are sitting **high and far away**.” (Reeves 2008: 240)

In this instance, both translators restructured the ST 佛座**高遠** (*fó zuò gāo yuan* ‘[the] Buddha seat [is] high [and] far.’), resulting in the adjectives in the Chinese binomial being transformed into AdvPs in the TT.

(89) 我念過去世，**無量無邊**劫 (*wǒ niàn guò qù shì, **wú liàng wú biān** jié*) (CBETA 2024.R2, T09, no. 262, p. 22b5)

“I remember in a past world, / **Innumerable, unlimited** eons ago” (Reeves 2008: 180).

In ST, binomial is an extended structure formed with two NPs: 無量 (*wú liàng* ‘no amount’) and 無邊 (*wú biān* ‘no limit’) and Reeves renders the elements into two adjectives: *innumerable* and *unlimited*.

Besides, in the aforementioned Example (58), while Watson (1993) utilises a direct translation of 寶像及畫像 (*bǎo xiàng jí huà xiàng* ‘jeweled images and painted images’) as *jeweled images and painted images* (Watson 1993: 39), Reeves (2008) rephrases the two NPs as adjectives, resulting in ***jeweled or painted** images* (Reeves 2008: 93), which features a noun phrase pre-modified by an adjectival binomial.

In addition, since the transposition and modulation strategies address different aspects of the translation process – the former focusing on word class changes and the latter on form – their application often overlaps, as demonstrated by Example (79) and also by Examples (86), (88), and (89). Their utilisation in the two translations is illustrated in the figures below:

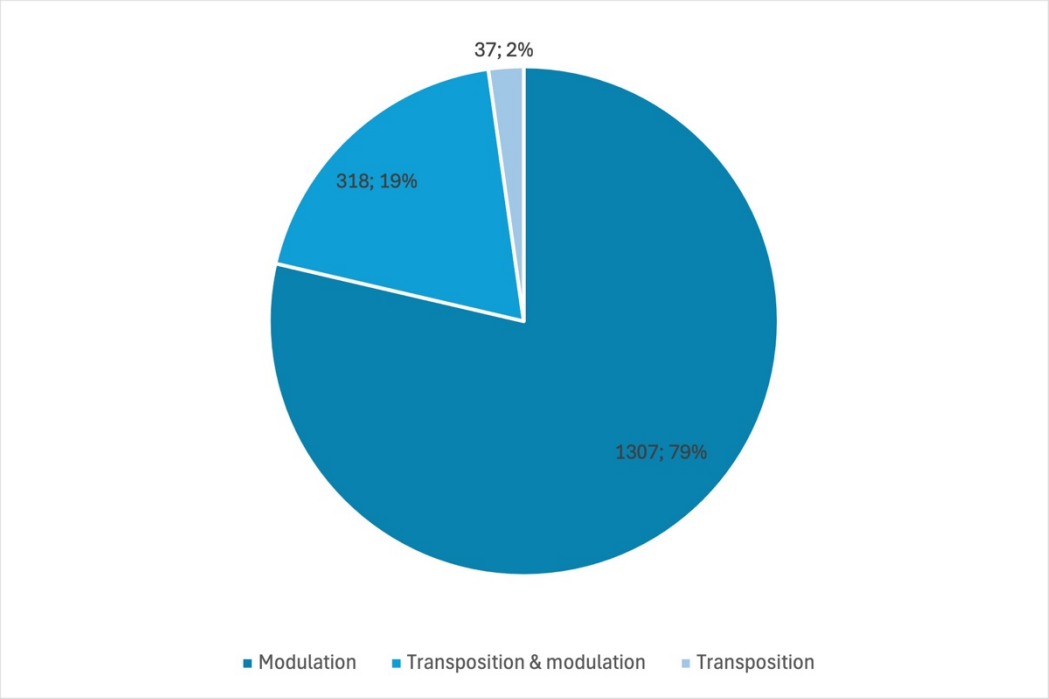

Figure 7.2.2.2.1 Distribution of transposition and modulation of binomials in Watson (1993)

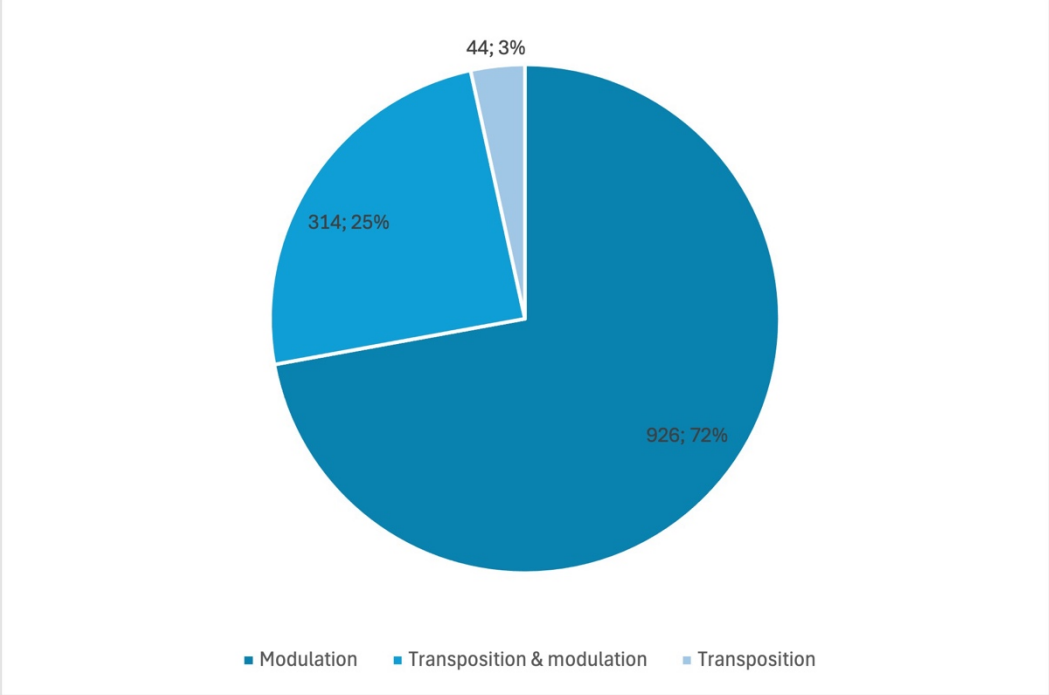

Figure 7.2.2.2.2 Distribution of transposition and modulation of binomials in Reeves (2008)

Figures 7.2.2.2.1 and 7.2.2.2.2 show that modulation is the most frequently employed strategy in both translations among oblique translation methods, accounting for over 70%. Binomials using only transposition strategy make up the smallest proportion, and it is more often used in combination with modulation. Although Reeves (2008) employs transposition slightly more frequently than Watson (1993), modulation remains the dominant strategy in his translation as well.

7.2.2.3 Equivalence

The strategy of equivalence involves achieving the TT by "using completely different stylistic and structural methods" while still "produces equivalent texts" (Vinay and Darbelnet [1958] 1995: 38). This approach is also known as 'free translation' and entails "the rendering of the meaning of a statement [...] in another language, without following the original accurately" (s.v. "free translation" *Dictionary of Linguistics*, p. 77). In other words, this strategy conveys the equivalent meaning from the ST rather than pursuing word-for-word accuracy. However, as a sub-category of oblique translation, equivalence strategy still requires the TT to retain the binomial structure present in the ST.

In Watson's and Reeves's translations of the *Lotus Sutra*, the strategy of equivalence is evident in 44 instances Watson (1993) and 38 in Reeves (2008), as illustrated by the following examples.

(90) 於此三界火宅**東西**馳走 (*yú cǐ sān jiè huǒ zhái **dōng xī** chí zǒu*)
(CBETA 2024.R2, T09, no. 262, p. 13a25)

"In this burning house which is the threefold world, they raced about to **east and west**." (Watson 1993: 59)

"In the burning house of this threefold world they run about **here and there**." (Reeves 2008: 115)

In Example (90), Reeves (2008) translates the ST binomial 東西 (*dōng xī* 'east [and] west') as the binomial *here and there*, using adverbs of places (*here*

and *there*) to represent geographical locations (*east* and *west*), thus conveying a metaphorical image of people moving about in all directions. In comparison, Watson (1993) maintains fidelity to the original meaning in the ST.

(91) 過是已後，心相體信，**入出**無難，然其所止猶在本處 (*guò shì yǐ hòu, xīn xiāng tǐ xìn, **rù chū** wú nán, rán qí suǒ zhǐ yóu zài běn chù*) (CBETA 2024.R2, T09, no. 262, p. 17a27-29)

"By the end of this time, the son felt that he was understood and trusted, and he could **come and go** at ease, but he continued to live in the same place as before." (Watson 1993: 85)

"After that, they gained confidence in each other, and the son felt he could **come and go** easily. Yet he continued to live in the same place as before." (Reeves 2008: 144)

In Example (91), the binomial 入出 (*rù chū* 'enter [and] exit') is translated as *come and go* by both translators, conveying a similar metaphorical sense of a person moving around freely, consistent with the meaning in the ST.

(92) 佛以方便力，示以三乘教，眾生**處處**著，引之令得出 (*fó yǐ fāng biàn lì, shì yǐ sān chéng jiào, zhòng shēng **chù chù** zhuó, yǐn zhī lìng dé chū*) (CBETA 2024.R2, T09, no. 262, p. 6a26-27)

"The Buddha, [...] / prying living beings loose from **this or that** attachment / and allowing them to attain release." (Watson 1993: 26)

"[...] Though all beings have **various** attachments, / He leads them to liberate themselves" (Reeves 2008: 79)

(93) 金華諸瓔，**處處**垂下 (*jīn huá zhū yīng, **chù chù** chuí xià*) (CBETA 2024.R2, T09, no. 262, p. 14c11)

"Ropes of gold twisted and twined [...] / hung down **everywhere**" (Watson 1993: 68).

"And garlands of golden flowers / Were hanging **here and there**." (Reeves 2008: 125).

Examples (92) and (93) illustrate a contrast between the two translators regarding the tautological Chinese binomial 處處 (*chù chù* 'place place'). In

Example (92), Watson (1993) translates it as *this or that*, while Reeves opts for the word *various* instead of a binomial. Conversely, in Example (93), Reeves employs an equivalent binomial *here and there* for the same ST binomial, whereas Watson translates it as *everywhere*[24]. These examples highlight the flexibility in choosing translation strategies by the translators when confronted with the same ST. Despite their differing approaches, both still aim to maintain equivalence to the ST while producing fluent and natural English translations.

To summarise this section, the use of oblique translation for binomials constitutes the majority in both translations, with a total of 1,706 instances in Watson (1993) and 1,322 instances in Reeves (2008), accounting for 89% and 88%, respectively, of which 1,497 cases in Watson and 860 in Reeves involve the addition of a connector. This significantly exceeds the percentage of direct translation, which stands at only 1% and 3% (see Section 7.2.1). In comparison, the translation of binomials in other languages demonstrates completely different trends. For instance, Khatibzadeh and Sameri report that English translations of binomials in Persian political speeches exhibit 87.2% of direct translation and less than 12.8% oblique translation (2013: 26). Similarly, Hejazi and Dastjerdi observe that in the Persian translation of English binomials in hard news, there are 699 instances of direct translation (58%) and 497 instances of oblique translation (42%) (2015: 514). In both studies, direct translation emerges as the most frequently used strategy for binomial translation; however, this is considerably less common in Chinese. These findings highlight a significant outcome resulting from the asyndetic coordination inherent in the Chinese language, emphasising a notable disparity in the structure of binomials between English and Chinese.

7.2.3 Amplification

According to Vinay and Darbelnet, the strategy of amplification is employed when "a target language unit requires more words than the source language to express the same idea" ([1958] 1995: 192). In the context of translating binomials,

[24] Translating binomials into single words is categorised under the strategy of 'economy', as discussed in Section 7.2.4.

the term is used to refer to instances where binomials and multinomials are not present in the ST but are introduced by translators in the TT. Based on the characteristics of ST, the binomials resulting from amplification can be categorised into the following five groups.

(a.) Group 1 consists of binomials formed through the amplification of coordination tags such as *and the others*. In Chinese the word 等 (*děng* 'etc'), is used "after pronouns or nouns, indicating plurality or inclusion of unnamed others of the same kind" (s.v. "等" *A Student's Dictionary of Classical and Medieval Chinese*, p. 80). The translation of phrases containing this term involves adding coordination tags to the preceding pronoun, thereby creating a binomial. There are 19 such instances in Watson (1993), while only 5 are found in Reeves (2008), including:

(94) **我等**見此，得未曾有 (***wǒ děng*** *jiàn cǐ, dé wèi céng yǒu*) (CBETA 2024.R2, T09, no. 262, p. 3c2-3)

"**I and the others** have seen this, have gained something never known before." (Watson 1993: 13).

"Beholding this, **we** gain something we never had before." (Reeves 2008: 64)

(95) **汝等**當信佛之所說，言不虛妄 (***rǔ děng*** *dāng xìn fó zhī suǒ shuō, yán bù xū wàng*) (CBETA 2024.R2, T09, no. 262, p. 7a17)

"**you and the others** must believe me. The words that the Buddhas preach are not empty or false (Watson 1993: 30)

"**You** should believe me, Shariputra, in the teachings of the buddhas nothings is empty or false (Reeves 2008: 83)

In Examples (94) and (95), the phrases 我等 (*wǒ děng* 'I, etc.) and 汝等 (*rǔ děng* 'you, etc.') are similarly rendered by Watson (1993) as the binomials *I and the others* and *you and the others*, respectively. However, Reeves (2008) takes a different approach, opting for the plural forms of the pronouns and translating them as *we* and *you*.

(96) **野干之屬**，竝已前死 (***yě gàn zhī shǔ****, bìng yǐ qián sǐ*) (CBETA 2024.R2, T09, no. 262, p. 14a27)

The jackals and their like / were already dead by this time (Watson 1993: 65),

Jackals and similar animals / Were already dead (Reeves 2008: 121).

Example (96) showcases another instance from Group 1, where the ST phrase 野干之屬 (*yě gàn zhī shǔ* 'jackals' kind') is translated by both translators as binomials also through the addition of coordination tags: *and their like* in Watson (1993), and *and similar animals* in Reeves (2008).

(b.) Group 2 comprises binomials translated from expressions indicating uncertainty in the ST, particularly those involving the word 某 (*mǒu*), an "unspecified pronoun" (s.v. "某" *A Student's Dictionary of Classical and Medieval Chinese*, p. 314). In these instances, the English translators use binomials such as *so-and-so* and *such-and-such*, as seen in Example (97).

(97) 其本字**某**。我名**某**甲 (qí běn zì **mǒu** wǒ míng **mǒu** jiǎ) (CBETA 2024.R2, T09, no. 262, p. 17b12)

"His original name is **such-and-such**, and my name is **such-and-such**." (Watson 1993: 85),

"His original name was **so-and-so**, and my name is **so-and-so**." (Reeves 2008: 145)

(c.) Group 3 comprises gender-related binomials translated from expressions involving third-person pronouns. In Chinese, gender is not explicitly marked when referring to a third person, whereas in English, third-person pronouns are gender-specific, necessitating the use of either *he* or *she*. Consequently, the translators introduce binomials such as *he or she* when translating terms that refer to people in a general sense. For example:

(98) 當知**是人**則如來使 (*dāng zhī **shì rén** zé rú lái shǐ*) (CBETA 2024.R2, T09, no. 262, p. 30c27-28)

"then you should know that **he or she** is the envoy of the Thus Come One" (Watson 1993: 162)

"then you should understand that they are emissaries of the Tathagata" (Reeves 2008: 226)

The phrase 是人 (*shì rén* 'this person') is translated as the binomial *he or she* in Watson (1993), whereas Reeves (2008) employs the gender-neutral plural pronoun *they*, consistent with his approach in Examples (94) and (95).

Additionally, there are instances where the subject is omitted in the Chinese text, and the translators reintroduce it. For example:

(99) **持是經者**，雖住於此 [...] 又聞諸天身香 [...] (***chí shì jīng zhě**, suī zhù yú cǐ* [...] *yòu wén zhū tiān shēn xiāng* [...]) (CBETA 2024.R2, T09, no. 262, p. 48b27-c3)

"One who upholds this sutra, though he dwells right here [...]. **He** will also be able to detect the scent of the bodies of heavenly beings [...]" (Watson 1993: 255-256).

"One who embraces this sutra, though living here [...]. And **he or she** will smell the scents of the bodies of gods [...]" (Reeves 2008: 326).

The subject 持是經者 (*chí shì jīng zhě* 'embracing this sutra person') is omitted in the subsequent clauses in ST. However, in Reeves' translation, the subject is supplied with a binomial containing gendered pronouns *he or she*. In comparison, Watson (1993) uses the masculine singular pronoun *he*.

(d.) Group 4 consists of binomials created through the amplification of single words in the ST. Koskenniemi refers to this phenomenon as the 'translator's dilemma', noting in her study of binomials in Old and Early Middle English prose that "one Latin word is rendered by means of two English words", suggesting that this approach reflects the translator's intent to "cover the whole semantic range of a Latin word" (1968: 116). In Watson (1993) and Reeves (2008), such binomials are often formed with synonymous elements, enhancing the meaning through repetition and clarification (for the function of synonymous binomials, see Section 6.1.5.1). The following examples illustrate this pattern.

(100) 咸以恭敬**心**，皆來至佛所 (*xián yǐ gōng jìng **xīn**, jiē lái zhì fó suǒ*) (CBETA 2024.R2, T09, no. 262, p. 10a12)

"All with reverent **hearts and minds**, / Come to the Buddha" (Reeves 2008: 100, etc.)

In Example (100), the word 心 (*xīn* 'heart') is extended into binomial *hearts and minds* by Reeves (2008).

(101) 世間所歸趣，救護於**一切** (*shì jiān suǒ guī qù, jiù hù yú **yī qiè***) (CBETA 2024.R2, T09, no. 262, p. 23c21)

"The world will hurry to him / and he will save and guard **one and all**" (Watson 1993: 125, etc.).

Here, the word 一切 (*yī qiè* 'everything') is amplified into the binomial *one and all* in Watson (1993).

(102) 我獨經行時，見佛在大眾，名聞滿十方，**廣**饒益眾生 (*wǒ dú jīng xíng shí, jiàn fó zài dà zhòng, míng wén mǎn shí fang, **guǎng** ráo yì zhòng shēng*) (CBETA 2024.R2, T09, no. 262, p. 11a1-2)

"I saw the Buddha [...] / bringing benefit **far and wide** to living beings [...]" (Watson 1993: 49, etc.).

In this example, the word 廣 (*guǎng* 'broad') is extended into a binomial *far and wide* by Watson.

(103) 於後末世法欲滅時，有**持**是法華經者 (*yú hòu mò shì fǎ yù miè shí, yǒu **chí** shì fǎ huá jīng zhě*) (CBETA 2024.R2, T09, no. 262, p. 38c4-5)

"when the Law is about to perish, **accept and embrace** the Lotus Sutra" (Watson 1993: 205)

"when the Dharma is about to die, bodhisattva great ones who **receive and embrace** this Dharma Flower Sutra" (Reeves 2008: 270).

The verb 持 (*chí* 'hold') is translated as binomials by both translators, as *accept and embrace* by Watson (1993) and *receive and embrace* by Reeves (2008)

Regarding the translation of the term 菩薩摩訶薩 (*pú sà mó hē sà* 'bodhisattva mahasattva'), the two translator demonstrate different understanding, as in the following co-text:

(104) 如是等**菩薩摩訶薩**八萬人俱 (*rú shì děng **pú sà mó hē sà** bā wàn rén jù*) (CBETA 2024.R2, T09, no. 262, p. 2a13-14)

"**Bodhisattvas and mahasattvas** such as these numbering eighty thousand were in attendance" (Watson 1993: 4)

"In all, eighty thousand such **bodhisattva great ones** were there." (Reeves 2008: 54)

In Example (104), Watson (1993) interprets the term as a binomial, while Reeves views the two elements as having a subordinate relationship, with the latter serving as an attribute – *great one* – of the headword *bodhisattva*. According to *The Princeton Dictionary of Buddhism*, 'mahāsattva' is translated as "great being" and defined as "an epithet of a bodhisattva", in line with Reeves's approach. The dictionary notes that "some commentators define mahāsattva as a bodhisattva who has attained the path of vision (darśanamārga), in which case the term would be synonymous with āryabodhisattva." However, it further explains that "in the Mahāyāna sutras (such as the *Lotus Sutra*), the term does not always carry this technical meaning and instead appears as a standard epithet of an advanced bodhisattva". (s.v. "mahāsattva" *The Princeton Dictionary of Buddhism*, p. 508). Therefore, Watson's (1993) translation reflects his individual understanding of this terminology, and the accuracy of this interpretation is left for further discussion in Buddhist studies. Regarding the translation strategy, this study follows the aforementioned dictionary definition and thus treats Watson's translation as an instance of the amplification strategy, when he introduces a binomial that is absent in the ST.

(e.) Group 5 consists of binomials derived from the translation of phrases or clauses in the ST, where the constructions are restructured into binomials while maintaining the equivalence in meaning of the structure. Examples include:

(105) 為諸菩薩說應六波羅蜜，令得阿耨多羅三藐三菩提，成一切種智 (*wèi zhū pú sà shuō yīng liù bō luó mì, lìng dé ā nòu duō luó sān miǎo sān pú tí, chéng yī qiè zhǒng zhì* 'for all Bodhisattvas teach necessary Six Pāramitās, make attain Anuttarā Samyāk Saṃbodhi, accomplish all knowledge' (CBETA 2024.R2, T09, no. 262, p. 3c24-26)

“And for the bodhisattvas he taught the six transcendental practices to lead them to attain **supreme awakening and all-inclusive wisdom**” (Reeves 2008: 65)

In Reeves’s translation, he merged the two synonymous verbs 得 (*dé* ‘to attain’) and 成 (*chéng* ‘to accomplish’) into a single verb *attain* and combined their two direct objects 阿耨多羅三藐三菩提 (*ā nòu duō luó sān miǎo sān pú tí* ‘Anuttarā Samyāk Saṃbodhi’) and 一切種智 (*yī qiè zhǒng zhì* ‘all knowledge’) into the binomial *supreme awakening and all-inclusive wisdom*.

(106) 舌常無病；口亦無病 (*shé cháng wú bìng kǒu yì wú bìng* ‘tongue often no illness; mouths also no illness’) (CBETA 2024.R2, T09, no. 262, p. 47a12)

“**Neither their tongues nor their mouths** will ever become diseased” (Reeves 2008: 317)

In Example (106), Reeves combined the distinct subjects 舌 (*shé* ‘tongue’) and 口 (*kǒu* ‘mouth’) from two clauses sharing the same predicate 無病 (*wú bìng* ‘no illness’) by adding a correlative connector, resulting in the binomial *neither their tongues nor their mouths*.

(107) 隨順是師學，得見恒沙佛 (*suí shùn shì shī xué, dé jiàn héng shā fó* ‘follow [and] yield to this teacher learn, achieve see Ganges sand Buddha’) (CBETA 2024.R2, T09, no. 262, p. 32b15)

“By **following and learning from** these teachers / he will see Buddhas as numerous as Ganges sands” (Watson 1993: 169)

In this example, the two predicates 隨順 (*suí shùn* ‘to follow’) and 學 (*xué* ‘to learn’) both take the same object 是師 (*shì shī* ‘this teacher’), but are positioned before and after it. Watson combines the two verbs into the binomial *following and learning from*, treating the shared object as part of this unified construction.

(108) 父知子意漸已通泰，成就大志 (*fù zhī zǐ yì jiàn yǐ tōng tài, chéng jiù dà zhì* ‘father know son mind gradually already smooth assured, achieve accomplish great aspiration’) (CBETA 2024.R2, T09, no. 262, p. 17b7-8)

"the father perceived that his son was bit by bit becoming more **self-assured and magnanimous**" (Watson 1993: 85)

"the father saw that his son was gradually becoming more **confident and accomplished**" (Reeves 2008: 145)

In this example, both translators use adjectival binomials to summarise the clauses in the ST, 意漸已通泰，成就大志 (*yì jiàn yǐ tōng tài, chéng jiù dà zhì* 'mind gradually unimpeded, accomplish great ambitions'), abandoning the original structure while preserving the essence of the original message.

The distribution of the five groups in the two translations is presented in the following figure:

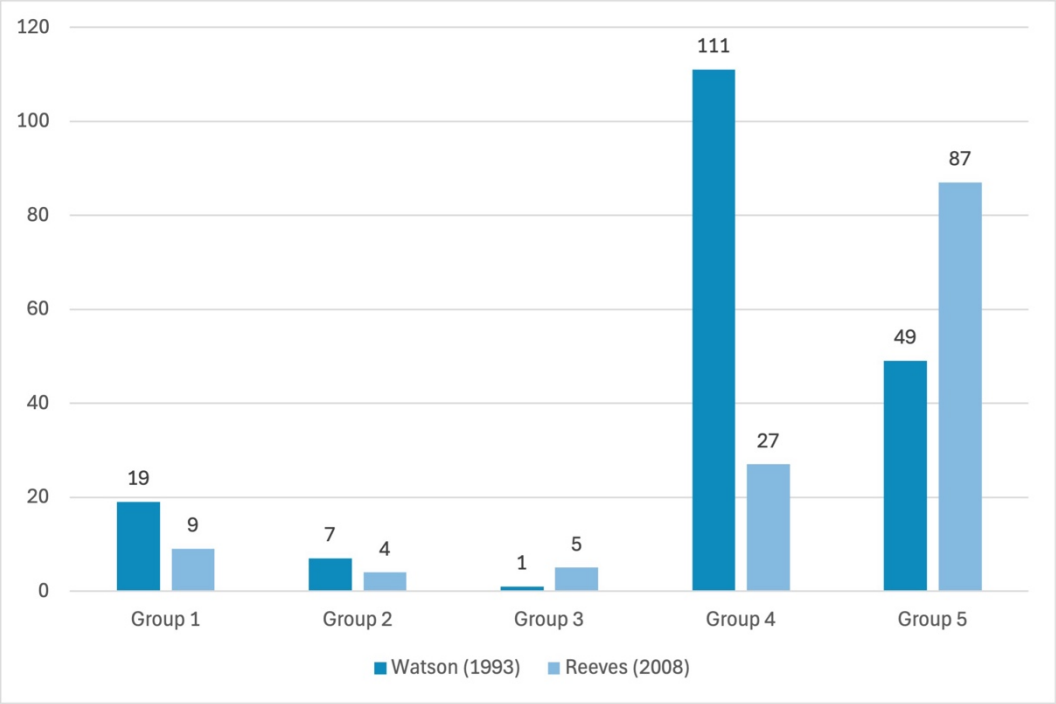

Figure 7.2.3 Distribution of five groups of the employment of amplification strategy by Watson (1993) and Reeves (2008)

Figure 7.2.3 shows that Group 4 in Watson (1993) contains the most instances, including 68 occurrences of binomial *bodhisattva and / or mahasattva* (Watson 1993: 164, etc.), as Example (104). Watson (1993) exhibits a higher number of instances in Groups 1 and 2, whereas Reeves (2008) contains more instances in Groups 3 and 5, with the latter surpassing all others. However, the

overall use of the amplification strategy is significantly less frequent than oblique translation, though it exceeds the translators' use of direct translation.

7.2.4 Economy

In contrast to amplification, the strategy of economy refers to situations where "a relatively smaller quantity of expression is required in one language to convey the same content that is expressed with more words in another language" (Vinay and Darbelnet [1958] 1995: 193). In the translation of binomials, this occurs when binomials in the ST are rendered as different constructions in the TT, for example, when an element of binomials in the ST is omitted in the TT from the given co-text, as in:

(109) 若有**善男子、善女人**，[...] 行五波羅蜜 [...] 。若**善男子、善女人**，有如是功德，於阿耨多羅三藐三菩提退者，無有是處。(*ruò yǒu* ***shàn nán zǐ, shàn nǚ rén****, [...] xíng wǔ bō luó mì [...] . ruò* ***shàn nán zǐ, shàn nǚ rén****, yǒu rú shì gōng dé, yú ā nòu duō luó sān miǎo sān pú tí tuì zhě, wú yǒu shì chù*) (CBETA 2024.R2, T09, no. 262, p. 44c21-29)

"Suppose there are **good sons or good daughters** [...] practice the five paramitas [...]. For **good men** who have gained such benefits as those [mentioned previously] to fall back without readhing the goal of Anuttara-samyak-sambodhi is utterly unimaginable." (Watson 1993: 237)

"Suppose there are **good sons or good daughters** [...] follow the five transcendental practices [...]. If any **good sons** have such a blessing as this, they cannot fail to, they cannot fail to obtain supreme awakening." Reeves 2008: 305)

In this example, the second occurrence of the binomial 善男子、善女人 (*shàn nán zǐ shàn nǚ rén* 'good men [and] good women') is translated by Watson (1993) and Reeves (2008) as *good men* and *good sons*, respectively, since the complete translation appears in the earlier clause. Consequently, this economy strategy adopted here is unlikely to lead to misunderstandings for readers.

(110) 若坐若經行，及**讀誦**經法 [...] 菩薩志堅固，坐禪若**讀誦**，或為人說法 (*ruò zuò ruò jīng xíng, jí **dú sòng** jīng fǎ [...] pú sà zhì jiān gù, zuò chán ruò **dú sòng**, huò wéi rén shuō fǎ*) (CBETA 2024.R2, T09, no. 262, p. 49b4-8)

"whether sitting or walking around / or **reading or reciting** the sutra teachings / [...] Bodhisattvas firm and unbending in will, / sitting in meditation or **reading** the sutras / or preaching the Law for others" (Watson 1993: 259)

"Whether sitting or walking around, / **reading or reciting** a sutra / [...]. Whether firm-willed bodhisattvas / Are in meditation, **reading** a sutra, / Or preaching the Dharma to others" (Reeves 2008: 329)

Similarly, in Example (110), the second occurrence of 讀誦 (*dú sòng* 'read [and] recite') is translated by both translators as *reading*, due to the earlier appearance of the complete binomial *reading or reciting*.

There are also instances where a construction is typically rendered as a binomial, yet at times the translators opt for alternative forms, as seen in the following examples:

(111) 我等諸宮殿，光明昔未有，此是何**因緣**，宜各共求之 (*wǒ děng zhū gōng diàn, guāng míng xī wèi yǒu, cǐ shì hé **yīn yuán**, yí gè gòng qiú zhī*) (CBETA 2024.R2, T09, no. 262, p. 23a23-24)

"Our palaces have a brilliance / never known in the past. / What is the **cause** of this? / Each of us seeks an answer." (Watson 1993: 122)

"Out palaces are illuminated / As never before. / **Why is this?** / Let's look into it." (Reeves 2008: 184)

The term 因緣 (*yīn yuán* 'cause [and] condition') is frequently rendered as *causes and conditions* (Watson 1993: 15) and *causes and circumstances* (Reeves 2008: 66), as illustrated in Example (64)[25]. However, in Example (111), Watson (1993) opts to simplify this term to the single word *cause*, while Reeves (2008)

[25] Reeves (2008) also contain frequent occurrences of the alternative translation *cause and condition* (Reeves 2008: 391, etc.). This binomial is classified among the formulaic binomials present in both translations (see Section 8.1).

transforms the declarative statement into a question. In both cases, the translators abandon the binomial form in the TT.

(112) 是無量菩薩，云何於少時，**教化**令發心，而住不退地？ (*shì wú liàng pú sà, yún hé yú shào shí,* ***jiào huà*** *lìng fā xīn, ér zhù bù tuì dì*) (CBETA 2024.R2, T09, no. 262, p. 42a27-28)

"Did you **teach** them, cause them to have aspiring minds, / and to dwell in the stage of no regression?" (Watson 1993: 223)

"How have these innumerable bodhisattvas / In such a short time / Been **taught, transformed** and led to have aspiration, / And reached the stage of never backsliding?" (Reeves 2008: 190)

Similarly, the term 教化 (*jiào huà*) is translated as *teach and convert* (Watson 1993: 31) and *teach and transform* (Reeves 2008: 83) in Examples (55) and (69), with a total of 38 and 30 occurrences in the two translations respectively. However, in Example (112), Watson (1993) chooses to retain only one element, *teach*, thus rendering the binomial into a single word.

(113) 諸佛世尊，欲令眾生開佛知見，使得**清淨**故，出現於世 (*zhū fó shì zūn, yù lìng zhòng shēng kāi fó zhī jiàn, shǐ dé* ***qīng jìng*** *gù, chū xiàn yú shì*) (CBETA 2024.R2, T09, no. 262, p. 7a23-25)

"The Buddhas, the World-Honored Ones, wish to open the door of Buddha wisdom to all living beings, to allow them to attain **purity**. That is why they appear in the world." (Watson 1993: 31)

"The buddhas, the world-honored ones, appear in the world because they want living beings to open a way to the buddhas' insight, and thus become **pure**." (Reeves 2008: 83)

The phrase 清淨 (*qīng jìng* 'purity [and] cleanness') is translated as *purity* and *pure* by both translators, however, on many other occasions it is treated as a binomial, as in the following example:

(114) 散諸寶華，周遍**清淨** (*sàn zhū bǎo huá, zhōu biàn* ***qīng jìng***) (CBETA 2024.R2, T09, no. 262, p. 20c7)

“Jeweled flowers will be scattered around, and everywhere will be **pure and clean**.” (Watson 1993: 108)

“It will have precious flowers scattered over it. And the whole place will be **pure and clean**.” (Reeves 2008: 168)

Regardless of the word class, in Example (114), the fact that both translators see the phrase 清淨 (*qīng jìng*) as a binomial is evident. This treatment is quite common, with 18 and 12 instances found in the two translations, respectively. Based on this observation, the instance in Example (113) is considered a result of employing an economy strategy.

In addition, Examples (111) to (113) illustrate that the classification of the employment of economy strategy is contingent upon their identification as binomials in the ST, which, as discussed in Section 7.1, presents considerable complexity given the diachronic lexicalisation of certain binomials from Middle Chinese into Modern Chinese. The constructions exemplified in (111) to (113) have since been lexicalised and are now recognised as independent lexical entries in Modern Chinese, as evidenced by their inclusion in the *Xiandai Hanyu Cidian* ‘Modern Chinese Dictionary’ (s.v. “因缘”, p. 1559; “教化”, p. 659; “清净”, p. 1065).

7.3 Translation strategies of multinomials

7.3.1 Direct translation

The asyndetic coordination discussed in the previous section is also evident in Chinese multinomials, which also results in a reduced use of direct translation for multinomials. Specifically, there are 30 instances in Watson (1993) and 18 in Reeves (2008), representing approximately 7% and 4% of their total translated multinomials. Comparing to the employment of this strategy for binomials, which constituting only 1% and 3%, respectively (see Section 7.2.1), Watson (1993) employs this strategy more frequently for multinomials, while Reeves (2008) does so to a slightly lesser extent, highlighting a divergence in their approaches to the

translation of binomials and multinomials. This strategy is illustrated in the following examples:

(115) **駝驢猪狗**，是其行處 (***tuó lǘ zhū gǒu****, shì qí xíng chù*) (CBETA 2024.R2, T09, no. 262, p. 16a1)

"**Camel, donkey, pig, dog** – / these will be the forms he will take on" (Watson 1993: 77)

(116) 以**深淨妙**聲，於大眾說法 (*yǐ* ***shēn jìng miào*** *sheng, yú dà zhòng shuō fǎ*) (CBETA 2024.R2, T09, no. 262, p. 49c7)

"With **pure, deep, wonderful** voices / They will teach the Dharma in the assembly." (Reeves 2008: 331).

There are also instances where the ST contains connectors that are retained in the TT, as demonstrated in the following examples:

(117) 起萬億種塔，**金銀及頗梨** (*qǐ wàn yì zhǒng tǎ,* ***jīn yín jí pō lí***) (CBETA 2024.R2, T09, no. 262, p. 8c18)

"raising ten thousand or a million kinds of towers / using **gold, silver and crystal**" (Watson 1993: 38)

"Building many trillions of kings of stupas / Of **gold, silver and crystal**." (Reeves 2008: 92)

In this example, the connector 及 (*jí* 'and') is retained in the two translations into *and*.

(118) 舌不乾黑短，鼻**高修且直** (*shé bù gān hēi duǎn, bí* ***gāo xiū qiě zhí***) (CBETA 2024.R2, T09, no. 262, p. 47b19)

"a tongue not dry, black or too short / nose **high, long and straight**." (Watson 1993: 250)

"Their tongues will not be dry, black, or short. / Their noses will be **high, long and straight**." (Reeves 2008: 319)

In Example (118) the connector 且 (*qiě* 'and') is also kept in the two translations by *and*.

7.3.2 Oblique Translation

The oblique translation of multinomials involves modulation and transposition; however, unlike binomials, the equivalence strategy is not observed.

7.3.2.1 Modulation

7.3.2.1.1 Alteration of the connectors

As with binomials, when translating multinomials, the two English translators often need to insert the missing connectors in the TT. These connectors are typically placed before the final element, in accordance with the conventions of English writing (Strunk and White [1918] 1999: 14), as exemplified by the following translations:

(119) 如此種種**羊車、鹿車、牛車**，今在門外，可以遊戲 (*rú cǐ zhǒng zhǒng* ***yáng chē, lù chē, niú chē****, jīn zài mén wài, kě yǐ yóu xì*) (CBETA 2024.R2, T09, no. 262, p. 12c9-10)

"For example, things like these **goat-carts, deer carts, and ox-carts**. They are outside the gate now where you can play with them" (Watson 1993: 57)

"A variety of **goat carriages, deer carriages and ox carriages** are now outside the gate for you to play with" (Reeves 2008: 113)

(120) 得是常眼清淨，**耳、鼻、舌、身、意**諸根清淨 (*dé shì cháng yǎn qīng jìng,* ***ěr, bí, shé, shēn, yì*** *zhū gēn qīng jìng*) CBETA 2024.R2, T09, no. 262, p. 51a16-17)

"Immediately he gained the kind of purity of vision and purity of the faculties of the **ears, nose, tongue, body and mind**" (Watson 1993: 267)

"Immediately he obtained the purity of vision and of the faculties of the **ears, nose, tongue, body, and mind**" (Reeves 2008: 339)

In Examples (119) and (120), the connectors *and* and *or* are supplemented in TT before the final element.

There are 200 instances in Watson (1993) and 189 in Reeves (2008) where connectors are added in multinomials, representing 50% and 46% of the respective totals. In comparison with binomials, where this strategy accounts for 73% in Watson and 50% in Reeves (see Section 7.2.2.1.1), the addition of

connectors to multinomials is comparatively less frequent in both translations. Nevertheless, Watson continues to employ this strategy more consistently than Reeves.

There are cases where the connector in ST is altered in English:

(121) 是善男子、善女人，**若坐、若立、若行處**，此中便應起塔 (*shì shàn nán zǐ, shàn nǚ rén,* ***ruò zuò, ruò lì, ruò xíng chù****, cǐ zhōng biàn yīng qǐ tǎ*) (CBETA 2024.R2, T09, no. 262, p. 45c29-46a1)

"Wherever these good men and good women **sit or stand or circle about** in exercises, there one should erect a tower" (Watson 1993: 242)

"Wherever those good sons or good daughters **sit or stand or walk**, in that place a stupa should be erected" (Reeves 2008: 310).

In the ST of Example (121), the connector 若 (*ruò* 'or') appears before each of the three element, and in the TT, the first connector is omitted.

(122) 其所住止處，**經行若坐臥**，乃至說一偈 (*qí suǒ zhù zhǐ chù,* ***jīng xíng ruò zuò wò****, nǎi zhì shuō yī jì*) (CBETA 2024.R2, T09, no. 262, p. 46b9-10)

"In the place where such a person resides, / where he **walks, sits, or lies down**, / or recites even one verse of scripture" (Watson 1993: 244)

"Wherever such a teacher lives or stays, / **walks, sits or lies down**, / or teaches even a verse" (Reeves 2008: 313).

(123) 額**廣而平正** (***é guǎng ér píng zhèng***) (CBETA 2024.R2, T09, no. 262, p. 47b20)

"forehead **broad, smooth and well shaped**" (Watson 1993: 250)

Examples (122) and (123) illustrate changes in the position of the connectors. In the ST 經行若坐臥 (*jīng xíng ruò zuò wò* 'walk or sit, lie') and 廣而平正 (*guǎng ér píng zhèng* 'broad and flat, proper'), both connectors appear after Element 1. However, in the translations, the connectors are moved to follow the style conventions of English, appearing before the last element.

7.3.2.1.2 Alteration of the elements

In the translation of elements, there are a few instances where the sequence of elements differs from that of the ST. However, unlike binomials (see Section 7.2.2.1.2), such occurrences are far less common. Examples include:

(124) 於某**年日月**，以無價寶珠繫汝衣裏 (*yú mǒu **nián rì yuè**, yǐ wú jià bǎo zhū jì rǔ yī lǐ*) (CBETA 2024.R2, T09, no. 262, p. 29a12-13)

"on such-and-such a **day and month and year** I took a priceless jewel and sewed it in the lining of your robe" (Watson 1993: 151)

"in such and such a **year, month, and day**, I sewed a priceless jewel into the lining of your robe" (Reeves 2008: 215)

In the ST 年日月 (*nián rì yuè* 'year day month'), the word 年 (*nián* 'year') is positioned as Element 1. This sequence is preserved in Reeves' (2008) translation, whereas in Watson (1993) , *year* is shifted to Slot 3 and *day* is placed in Slot 1.

Additionally, a more frequent and distinctive phenomenon in the translation of multinomials is that translators occasionally reorganise the structure by dividing the complete construction into combinations of smaller segments, as demonstrated in the following examples.

(125) 并見彼諸**比丘、比丘尼、優婆塞、優婆夷**，諸修行得道者 (*bìng jiàn **bǐ zhū bǐ qiū, bǐ qiū ní, yōu pó sāi, yōu pó yí**, zhū xiū xíng dé dào zhě*) (CBETA 2024.R2, T09, no. 262, p. 2b20-21)

"At the same time one could see the **monks, nuns, laymen and laywomen** who had carried out religious practices and attained the way." (Watson 1993: 6)

"**Monks and nuns, laymen and laywomen**, who had attained the Way through practice, could also be seen." (Reeves 2008: 55)

(126) 何況**受持、讀誦**，正憶念，解其義趣 (*hé kuàng **shòu chí, dú sòng**, zhèng yì niàn, jiě qí yì qù*) (CBETA 2024.R2, T09, no. 262, p. 61c7-8)

"How much more so, then, if they **accept, uphold, read and recite** the sutra, memorize it correctly, understand its principles" (Watson 1993: 321)

“How much more so those who **receive and embrace** it, **read and recite** it, remember it correctly, understand its meaning” (Reeves 2008: 396)

In Examples (125) and (126), Watson (1993) keeps the original form as quadrinomials, whereas Reeves (2008) restructures them into two binomials.

(127) **草木叢林**，隨分受潤 (***cǎo mù cóng lín****, suí fèn shòu rùn*) (CBETA 2024.R2, T09, no. 262, p. 19c24-25)

“but the **plants and trees, thickets and groves**, / each accept the moisture that is appropriate to its portion.” (Watson 1993: 98)

“**Plants, trees, thickets, and forests**, / According to their need, receive moisture.” (Reeves 2008: 163).

(128) 假使**國城、妻子**布施，亦所不及 (*jiǎ shǐ* ***guó chéng, qī zǐ*** *bù shī, yì suǒ bù jí*) (CBETA 2024.R2, T09, no. 262, p. 53b14-15)

“Though one may make donations of his **realm and cities**, his **wife and children**, he is no match for this!” (Watson 1993: 282)

“Even offering **town, countries and wives and children** cannot match this!” (Reeves 2008: 355).

The multinomials in Examples (127) and (128) showcases when Watson (1993) divides the quadrinomials into two binomials and Reeves retains the original form.

(129) **來往行坐臥**，聞香悉能知 (***lái wǎng xíng zuò wò****, wén xiāng xī néng zhī*) (CBETA 2024.R2, T09, no. 262, p. 49a25)

“**coming and going, walking, sitting, lying down** – / detecting their scent, he knows them all” (Watson 1993: 258)

“**Coming, going, walking, sitting, or lying down**, / Can all be known by scent.” (Reeves 2008: 329).

Example (129) showcases Watson (1993) breaking up a quintuplet into a binomial followed by a trinomial while Reeves (2008) keeps the original form.

It is generally observed that Watson (1993) consistently adheres to the original form in ST, whereas Reeves (2008) opts for restructuring such as these,

with 26 and 59 instances in the two works respectively. The motivation behind these differing approaches is further examined in Chapter 9 (see Section 9.2).

7.3.2.2 Transposition

Alteration of the word class or phrase type of elements in multinomials is also observed in both translations. Similar to the case with binomials (see Section 7.2.2.2), transposition is also often used alongside modulation in translating multinomials, as illustrated by the following examples:

(130) 為求聲聞者說應四諦法，度**生老病死**，究竟涅槃 (*wéi qiú shēng wén zhě shuō yīng sì dì fǎ, dù* ***shēng lǎo bìng sǐ****, jiū jìng niè pán*) (CBETA 2024.R2, T09, no. 262, p. 3c22-23)

"For the sake of those seeking to be voice-hearers he responded by expounding the Law [...] so that they could transcend **birth, old age, sickness and death** and attain nirvana." (Watson 1993: 14, etc.)

"For those who sought to be shravakas he taught the Dharma of the four truths for overcoming **birth, old age, disease and death** and for attaining nirvana." (Reeves 2008: 65, etc.).

Here, Element 2 in the ST 老 (*lǎo* 'old-ness') is altered from a noun into an NP *old age* in both translations.

(131) 羅列寶物，**出內取與** (*luó liè bǎo wù,* ***chū nèi qǔ yǔ***) (CBETA 2024.R2, T09, no. 262, p. 16c16)

"precious objects were ranged here and there, **brought out, put away, handed over and received**." (Watson 1993: 82).

In Example (131), the first three verbs in the ST 出 (*chū* 'to extract'), 內 *nèi* 'to store'), 取(*qǔ* 'to take') are rendered into verb phrases: *brought out*, *put away* and *handed over* by Watson (1993).

(132) 又復別知眾生之香——象香、馬香、牛羊等香，**男香、女香、童子香、童女香**，及草木叢林香 (*yòu fù bié zhī zhòng shēng zhī xiāng – xiàng xiāng, mǎ xiāng, niú yáng děng xiāng, nán xiāng, nǚ xiāng, tóng zǐ xiāng, tóng nǚ xiāng, jí cǎo mù cóng lín xiāng*) (CBETA 2024.R2, T09, no. 262, p. 48b24-26)

"Moreover he will be able to distinguish and identify the odors of living beings, of elephants, horses, oxen, sheep, and so forth, the odor of **a man, a woman, a boy child, a girl child**, and the odors of plants, trees, thickets and forests." (Watson 1993: 255)

"What's more, he or she will be able to distinguish the odors of living beings, of elephants, horses, oxen, sheep, of **men, women, boys, and girls**, and of plants, trees, bushes, and woods." (Reeves 2008: 325)

In this example, when translating 男香、女香、童子香、童女香 (*nán xiāng, nǚ xiāng, tóng zǐ xiāng, tóng nǚ xiāng* 'man scent, woman scent, boy child scent, girl child scent'), both translators group the modifiers independently into a multinomial, which collectively serves as the post-modifier to the head word 香 (*xiāng* 'scent').

7.3.3 Amplification

The amplification strategy is least frequently employed in the translation of multinomials, which aligns with the trend observed in the translation of binomials (see Section 7.2.3). Examples include:

(133) 若人以一惡言，毀呰**在家、出家**讀誦法華經者 (*ruò rén yǐ yī è yán, huǐ zǐ **zài jiā, chū jiā** dú sòng fǎ huá jīng zhě*) (CBETA 2024.R2, T09, no. 262, p. 31a2-3)

"but if there were a person who spoke only one evil word to curse or defame the **laypeople or monks or nuns** who read and recite the Lotus Sutra" (Watson 1993: 162)

"But if anyone, even with a single ill word, curses or denigrates **laypeople or monks or nuns** who read and recite the Dharma Flower Sutra" (Reeves 2008: 226)

In the ST, 出家 (*chū jiā* 'to leave home'), referring to the Buddhist followers who leave home to focus on religious practice (s.v. "出家" *Foguang Da Cidian,* p. 1558). In their translations, both translators render it as *monks or nuns*, supplementing gender information using the amplification strategy. This approach

mirrors the amplification of binomials discussed in Example (98) (see Section 7.2.3).

(134) 則為已供養，一切**三世**佛 (*zé wéi yǐ gòng yǎng, yī qiè **sān shì** fó*) (CBETA 2024.R2, T09, no. 262, p. 10b2)

"Has already made an offering to / All the buddhas of the **past, present and future**" (Reeves 2008: 100)

In this example, Reeves interprets the denotations of the concept of 'three existences' in Buddhism the ST 三世 (*sān shì* 'three existences') with a multinomial: *past, present and future*, facilitating understanding for readers with little background knowledge in Buddhism. In comparison, Watson (1993) uses direct translation as *three existences* (Watson 1993: 45).

In addition, similar to Examples (105) to (108) of the fifth group in Section 7.2.3, there are also multinomials in the TT appeared with the alteration of the sentence structure in the ST, such as:

(130) 不復為**貪欲**所惱，亦復不為**瞋恚愚癡**所惱 (*bù fù wéi **tān yù** suǒ nǎo, yì fù bù wéi **chēn huì yú chī** suǒ nǎo* 'not again troubled by **greed** [and] **desire**, and again not troubled by anger, rage, stupidity [and] ignorance) (CBETA 2024.R2, T09, no. 262, p. 54c3-4)

"He will no longer know the torments of **greed, desire, anger, rage, stupidity or ignorance**" (Watson 1993: 287)

In the ST, 貪欲 (*tān yù* 'greed [and] desire') and 瞋恚愚癡 (*chēn huì yú chī* 'anger, rage, stupidity [and] ignorance') serve as objects of the verb 惱 (*nǎo* 'to trouble') in the two clauses, which Watson combines into a list *greed, desire, anger, rage, stupidity or ignorance*.

(131) 齒白齊密常有光明 (*chǐ bái qí mì cháng yǒu guāng míng* 'teeth white even dense always have light') (CBETA 2024.R2, T09, no. 262, p. 60c17)

"His teeth are **white, even, close together, and always shining**" (Reeves 1993: 391)

In Example (131), Reeves modifies the phrase 常有光明 (*cháng yǒu guāng míng* 'always have light') to an AP *always shining* and connects it with the

preceding adjectival trinomial 白齊密 (*chǐ bái qí mì* 'white even dense). This results in a quadrinomial in his translation.

7.3.4 Economy

The application of the economy strategy occurs when a multinomial in the source text is rephrased into a phrase or clause in the target text. Although the translation maintains a parallel structure, it no longer conforms to the working definition employed in this study and is therefore classified as an instance of the economy strategy. For example:

(132) 但以智慧方便，於三界火宅拔濟眾生，為說三乘——**聲聞、辟支佛、佛**乘 (*dàn yǐ zhì huì fāng biàn, yú sān jiè huǒ zhái bá jì zhòng shēng, wèi shuō sān chéng* – ***shēng wén, pì zhī fó, fó*** *chéng*) (CBETA 2024.R2, T09, no. 262, p. 13b8–9)

"He merely employs wisdom and expedient means [...], expounding to them the three vehicles, **the vehicle of the voice-hearer, that of the pratyekabuddha, and that of the Buddha**." (Watson 1993: 60)

"but only by wisdom and skillful means [...], teaching the three vehicles to them, the **shravaka, pratyekabuddha and buddha** vehicles." (Reeves 2008: 116).

In Watson (1993), the translated phrases are constructed with elements that include postmodifiers using *of* constructions, which is essentially a 'determiner + headword' combination. According to the working definition, phrases of this nature are excluded from multinomials in this study. In contrast, Reeves (2008) retains the construction as a multinomial, as exemplified by *shravaka, pratyekabuddha and buddha vehicles*.

(133) 若四百萬億阿僧祇世界，六趣四生眾生——**卵生、胎生、濕生、化生** (*ruò sì bǎi wàn yì ā sēng qí shì jiè, liù qù sì shēng zhòng sheng* – ***luǎn shēng, tāi shēng, shī shēng, huà shēng***) (CBETA 2024.R2, T09, no. 262, p. 46c6-7)

“Imagine all the beings in the six paths [...] **those born from the egg, those born from the womb, those born from dampness, and those born by transformation**” (Watson 1993: 246)

“Think of all the living beings in the six states [...] born in the four ways, **from an egg, from a womb, from moisture, or by metamorphosis**” (Reeves 2008: 316)

Similarly, in this instance, Watson employs four attributive clauses for each element, which are also excluded from consideration in this study. Meanwhile, Reeves translates it into a multinomial: *born from an egg, from a womb, from moisture, or by metamorphosis* (Reeves 2008: 316), by positioning the headword *born* at the front.

(134) 若有眾生從佛世尊聞法信受，勤修精進，求**一切智、佛智、自然智、無師智**（*ruò yǒu zhòng shēng cóng fó shì zūn wén fǎ xìn shòu, qín xiū jīng jìn, qiú **yī qiè zhì, fó zhì, zì rán zhì, wú shī zhì***) (CBETA 2024.R2, T09, no. 262, p. 13b24-26)

“If there are living beings who attend the Buddha, [...] seeking **comprehensive wisdom, Buddha wisdom, wisdom that comes of itself, teacherless wisdom** [...]” (Watson 1993: 61)

“If there are living beings who, following the Buddha, seeking **comprehensive wisdom, buddha wisdom, natural wisdom, the wisdom that needs no teacher** and seeking [...]” (Reeves 2008: 117).

In Example (134), both translations contain an element of clause. Watson (1993) uses wisdom that comes of itself” to translate 自然智 (*zì rán zhì* ‘natural wisdom’). In Reeves’s translation, he uses *the wisdom that needs no teacher* to render 無師智 (*wú shī zhì* ‘teacherless wisdom’). Both instances are excluded from this study.

Additionally, another case of economy is noticed in Watson (1993) where an element is omitted from the translation

(135) 鼻**修高直**，面貌圓滿（*bí **xiū gāo zhí**, miàn mào yuán mǎn*) (CBETA 2024.R2, T09, no. 262, p. 47a18-19)

“His nose will be **long and high**, his face round and full” (Watson 1993: 248)

“their noses **long, high and straight**, their faces round and full” (Reeves 2008: 317).

Here, Watson (1993) omits the element 直 (*zhí* ‘straight’), resulting in the binomial *long and high*, whereas Reeves’s translation, *long, high and straight*, better aligns with the ST.

There are also instances of multinomials where certain elements are simplified as a result of later lexicalisation process, similar to the binomials in Examples (111) to (113). Examples of such multinomials include:

(136) 如是諸世尊，種種**緣譬喻**，無數方便力，演說諸法相 (*rú shì zhū shì zūn, zhǒng zhǒng **yuán pì yù**, wú shù fāng biàn lì, yǎn shuō zhū fǎ xiàng*) (CBETA 2024.R2, T09, no. 262, p. 8c4-5)

“such World-Honored Ones, / using different types of **causes, similes, and parables,** / the power of countless expedient means, / have expounded the characteristics of teachings (Watson 1993: 38)

“All such world-honored ones / By various **explanations and parables**, / And the power of countless skillful means, / Have preached characteristics of the Dharma” (Reeves 2008: 91).

In this case, the trinomial 緣譬喻 (*yuán pì yù* ‘causes, similes and parables’) is translated as a binomial *explanations and parables* in Reeves (2008). The phrase 譬喻 (*pì yù* ‘similes and parables’) is included in the *Xiandai Hanyu Cidian* ‘Modern Chinese Dictionary’ (s.v. “譬喻”, p. 996), where it is defined as “using something easy to understand about A to explain something difficult to understand about B”. This contextualises Reeves’ choice of economy strategy. Watson, by contrast, opts to retain the original trinomial structure, supplementing it with the connector *and*.

(137) 舍利弗！如來知見，**廣大深遠** (*shě lì fú! rú lái zhī jiàn, **guǎng dà shēn yuǎn***) (CBETA 2024.R2, T09, no. 262, p. 5c4-5)

"Shariputra, the wisdom of the Thus Come One is **expansive and profound**." (Watson 1993: 24)

"Shariputra, the insight of the Tathagata is **broad and great, profound and far-reaching**." (Reeves 2008: 75)

In Example (137), Watson (1993) translate the quadrinomial 廣大深遠 (*guǎng dà shēn yuǎn*) into a binomial *expansive and profound*, applying the economy strategy to both parts of the construction. In contrast, Reeve (2008) adheres more closely to the ST and restructures the phrase into a combination of two binomials *broad and great* and *profound and far-reaching*. Both expressions, 廣大 (*guǎng dà*) and 深遠 (*shēn yuǎn*) are included in the *Xiandai Hanyu Cidian* 'Modern Chinese Dictionary' (s.v. "广大", p. 488; "深远", p. 1161), providing insight into Watson's decision to condense the expression, as well as Reeves's approach of restructuring it.

(138) 此塔，應以一切華、香、[...] 供養**恭敬，尊重讚歎** (*cǐ tǎ, yīng yǐ yī qiè huā, xiāng,* [...] *gòng yǎng* ***gōng jìng, zūn zhòng zàn tàn***) (CBETA 2024.R2, T09, no. 262, p. 31b29-c1)

"All kinds of flowers, incense [...] should be offered as alms to these towers and they should be accorded **reverence, honor and praise**" (Watson 1993: 165),

"Such a stupa should be **revered, honored, and praised** with offerings of all kinds of flowers, incense [...]" (Reeves 2008: 230)

In Example (138), aside from the word 供養 (*gòng yǎng*), which both translators render as independent from the rest, the three remaining binomials are all lexicalised in modern Chinese and have independent entries in the *Xiandai Hanyu Cidian* 'Modern Chinese Dictionary' (s.v. "恭敬", p. 456; "尊重", p. 1754; "赞叹", p. 1631). Consequently, rather than translating the entire expression as a list of six elements, both translators have economised it into a trinomial.

Similar to the previous discussion in Section 7.1, the application of the economy strategy in the translation of multinomials also presents a complex issue. Given their level of lexicalisation in modern Chinese, the expressions in Examples (136) to (138) should be regarded as individual words, which are directly

translated in the TT. However, to understand the extent to which they should be interpreted as multinomials in the ST of Middle Chinese necessitates further research in historical linguistics, alongside a comparative study with the Sanskrit original text, which again falls beyond the capacity of the current study.

7.4 Summary

This chapter examines the translation strategies employed by Watson (1993) and Reeves (2008) by analysing specific cases involving binomials and multinomials in Chinese ST. The strategies are generally classified into four categories: direct translation, oblique translation (which includes modulation, transposition, and equivalence), amplification, and economy. Asyndetic coordination is a prevailing feature of the SL, Classical Chinese, whereas the TL, English, typically favours the employment of connectors. This structural divergence contributes to the relatively low frequency of direct translation in both English translations, with oblique translation emerging as the predominant strategy, most notably through the addition of connectors to binomials and multinomials. This contrasts with findings from studies on other languages, such as Persian where direct translation strategy tends to predominate.

In translating binomials, modulation, transposition, and equivalence are evident strategies. Modulation involves modifications to both connectors and the sequence of elements. Both translators frequently add connectors, which are sometimes altered or omitted in the TT. Regarding the sequence of elements, Watson adheres more closely to the original Chinese word order, while Reeves exhibits greater flexibility. Transposition involves changing the word class during the translation process. Binomials that exclusively employ transposition constitute the smallest proportion in both translations and are more commonly combined with modulation. The application of equivalence is evident when the translator focuses on conveying meaning from the ST to the TT rather than achieving literal formal accuracy. Amplification in binomials can be further categorised into five

types, with the most common being the expansion of an English binomial from a single word or phrase.

With regard to multinomials, direct translation is also less prevalent than oblique translation, although it occurs more frequently than in the case of binomials. Oblique translation in multinomials often involves changes to connectors, including the insertion of *and* or *or* before the final element. Translators occasionally restructure multinomials by breaking them down into smaller combinations of elements, a practice more commonly observed in Reeves's translations compared to Watson's. Unlike binomials, the equivalence strategy is not employed in the translation of multinomials. Amplification is also the least utilised technique for translating multinomials.

The application of the economy strategy in the translation of both binomials and multinomials warrants further investigation within the framework of Chinese historical linguistics. This is particularly relevant in relation to the lexicalisation of Chinese binomials introduced by early Buddhist translators, such as Kumārajīva, during the Middle Chinese period.

Chapter 8 Formulaic binomials and multinomials

This chapter focuses on the recurrent binomials and multinomials in Watson (1993) and Reeves (2008). Biber et al. observes that "a number of binomial phrases that are recurrent and can be regarded as a special category of lexical bundle" (2021: 1024). In this study, these recurrent instances are termed 'formulaic', following the terminology proposed by Sauer and Schwan, who suggest two criteria for formulaicity: "a (historical) criterion, which posits that these expressions have been in continuous use for a significant period, often dating back to Old English or Middle English; and a (synchronic) criterion, based on frequency of use" (2017: 199). Given the specific scope of this research – binomials and multinomials in the translations under investigation – the study centres on the synchronic criterion, analysing the formulaic use of these expressions within the works of Watson (1993) and Reeves (2008). In contrast, expressions that occur only once or are "created on the spur of the moment" (2017: 201) are classified as 'non-formulaic' in this analysis.

Following the identification of formulaic binomials and multinomials, this chapter further compares their usage with that in other translations of the *Lotus Sutra*, as well as with English corpora such as the BNC and COCA.

8.1 Formulaic binomial and multinomials in Watson (1993) and Reeves (2008)

The conventional assessment of formulaic constructions adopts a usage-based methodology that relies on the frequency of their occurrence. Buerki posits that an expression is considered frequent if it appears at least twice per million words. (2016: 22). Applying this methodological framework, the frequencies of the binomials and multinomials in the two translations are counted. Notably, this study is conducted at the lemma level, excluding grammatical inflections, but the differentiation of connectors and the sequence of elements generates different types, similar to the approach when studying the number of types and tokens (see Section 5.1).

Based on the definitions provided, the frequencies of binomials and multinomials used in Watson (1993) and Reeves (2008) have been tallied, and the

following figure illustrates the distributions of formulaic and non-formulaic binomials and multinomials found in the two translations.

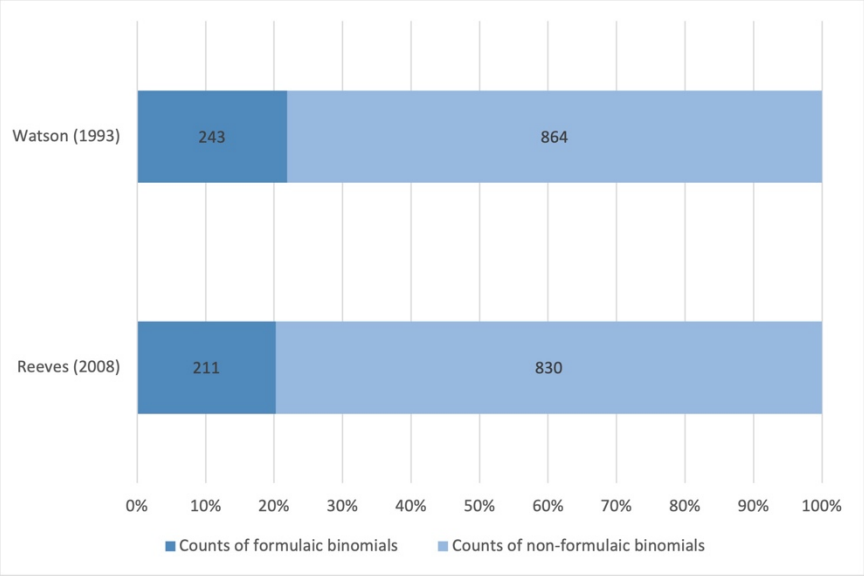

Figure 8.1.1 Distribution of formulaic and non-formulaic binomials in Watson (1993) and Reeves (2008)

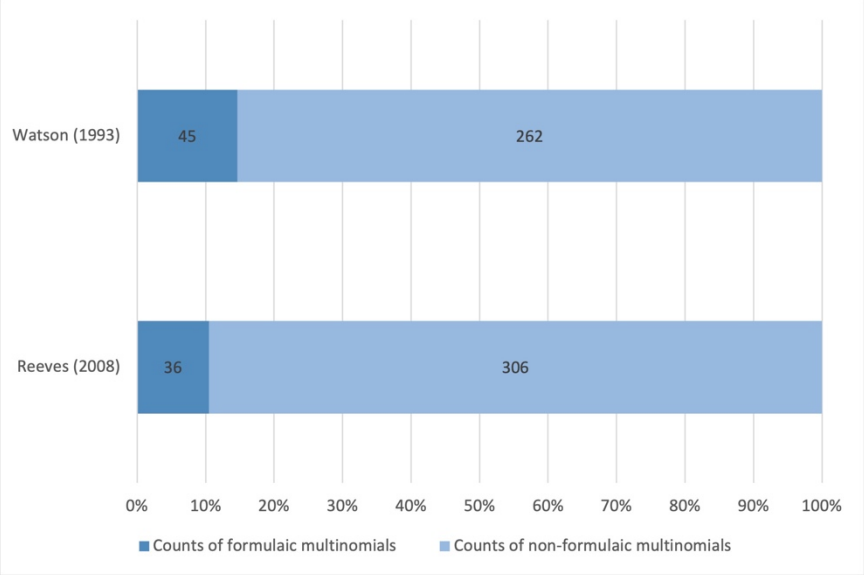

Figure 8.1.2 Distribution of formulaic and non-formulaic multinomials in Watson (1993) and Reeves (2008)

The figures indicate that formulaic binomials and multinomials constitute a relatively small portion in both translations. In Watson (1993), there is a higher presence of formulaic binomials and multinomials, whereas in Reeves (2008), a slightly greater number of binomials and multinomials occur only once. This

conclusion aligns with the previous findings derived from the Type-Token Ratio (TTR) analysis conducted on the two works (see Section 5.1).

The following table lists the formulaic binomials that appear with a frequency of 10 or more in Watson (1993) and Reeves (2008).

No.	Binomials	Raw frequency
1	*heavenly and human being* (p. 19, etc.)	65
2	*bodhisattva and mahasattva* (p. 164, etc.)	60
3	*teach and convert* (p. 31, etc.)	38
4	*accept and uphold* (p. 180, etc.)	36
5	*cause and condition* (p. 317, etc.)	34
6	*right and universal* (p. 51, etc.)	20
7	*clarity and conduct* (p. 51, etc.)	20
8	*read and recite* (p. 16, etc.)	16
9	*believe and accept* (p. 33, etc.)	16
10	*good man or good woman* (p. 300, etc.)	15
11	*immeasurable, boundless* (p. 97, etc.)	14
12	*good man and good woman* (p. 161, etc.)	14
13	*simile and parable* (p. 31, etc.)	14
14	*guard and protect* (p. 168, etc.)	13
15	*man and woman* (p. 9, etc.)	12
16	*birth and death* (p. 18, etc.)	11
17	*far and wide* (p. 49, etc.)	11
18	*shield and guard* (p. 308, etc.)	11
19	*believe and understand* (p. 100, etc.)	11
20	*subtle and wonderful* (p. 18, etc.)	10
21	*immeasurable and boundless* (p. 225, etc.)	10
22	*immeasurable and countless* (p. 219, etc.)	10

Table 8.1.1 Formulaic binomials in Watson (1993) (raw frequency over 10)

No.	Binomials	Raw frequency

1	*receive and embrace* (p. 138, etc.)	55
2	*human and heavenly being* (p. 67, etc.)	40
3	*read and recite* (p. 226, etc.)	39
4	*teach and transform* (p. 83, etc.)	30
5	*good son or good daughter* (p. 373, etc.)	26
6	*heavenly being and people* (p. 65, etc.)	18
7	*cause and condition* (p. 391, etc.)	15
8	*monk and nun* (p. 55, etc.)	15
9	*peace and comfort* (p. 96, etc.)	14
10	*innumerable, unlimited* (p. 179, etc.)	12
11	*male and female* (p. 59, etc.)	10
12	*leader and teacher* (p. 56, etc.)	10

Table 8.1.2 Formulaic binomials in Reeves (2008) (raw frequency over 10)

In Watson's translation (1993), the presence of 22 binomials, compared to only 12 in Reeves's translation (2008), suggests that Watson adheres more closely to consistent binomial choices when translating certain terms. Notably, instances arise in the translations where two distinct binomials corresponding to the same ST both exhibit high frequencies. In Watson's translation of 善男子善女人 (*shàn nán zǐ shàn nǚ rén* 'good man [and] good woman'), the rendering could be either *good man **or** good woman* (No.10) or *good man **and** good woman* (No. 12), depending on the supplemented connector using the translation strategy of modulation (see Section 7.2.2.1). Meanwhile, Reeves's translation of 天人 (*tiān rén* 'heaven [and] human') offers two variants: *human and heavenly being* (No. 2) and *heavenly being and people* (No. 6), with the former, which reverses the sequence of elements in the ST, occurring more frequently than the latter, with 40 and 18 occurrences respectively.

When translating the same binomial in the ST, the two translators tend to use different wording. For example, for the term 教化 (*jiào huà* 'teach [and] convert'), Watson demonstrates stronger preference to *teach and **convert*** (Watson

1993: 31, etc.) , while Reeves opts for *teach and* ***transform*** (Reeves 2008: 83, etc.), signifying the use of different synonyms for the same concept 化 (*huà* 'to convert').

Only two identical formulaic binomials are found in both translations: *read and recite* (Watson 1993: 16, Reeves 2008: 226, etc.) and *cause and condition* (Watson 1993: 6, Reeves 2008: 55, etc.), both of which are concepts within the Buddhist context: 讀誦 (*dú sòng* 'read [and] recite') refers to the practice of studying Buddhist scriptures, particularly as emphasised in the *Lotus Sutra*, and 因緣 (*yīn yuán* 'cause [and] condition'), in Sanskrit *hetupratyaya*, represents one of the cardinal teachings of Buddhism, applicable to all aspects of the physical, emotional, and spiritual realms (s.v. "hetupratyaya" *The Princeton Dictionary of Buddhism*, p. 348). Both translators employ formulaic binomials for these recurrent phrases.

The following tables list multinomials that appear with a raw frequency of more than 4.

No.	Multinomials	Raw frequency
1	*accept, uphold, read and recite* (p. 241, etc.)	12
2	*monks, nuns, laymen and laywomen* (p. 6, etc.)	11
3	*birth, old age, sickness and death* (p. 14, etc.)	7
4	*protect, uphold, aid and proclaim* (p. 145, etc.)	5
5	*immeasurable, boundless, inconceivable* (p. 14, etc.)	5
6	*profound, subtle and wonderful* (p. 24, etc.)	5
7	*heavenly and human being and asuras* (p. 29, etc.)	5
8	*calculation, simile or parable* (p. 203, etc.)	4
9	*heavenly beings, dragon kings, gandharvas, kimnaras, mahoragas, human and non human beings* (p. 129, etc.)	4

Table 8.1.3 Formulaic multinomials in Watson (1993) (raw frequency over 4)

No.	Multinomials	Raw frequency
1	*monk, nun, layman or laywoman* (p. 367, etc.)	8
2	*revere, honor and praise* (p. 67, etc.)	7
3	*human and heavenly beings and asuras* (p. 81, etc.)	5
4	*birth, old age, disease and death* (p. 65, etc.)	5
5	*profound, fine and wonderful* (p. 76, etc.)	4
6	*plants, trees, thickets, forests and medicinal herbs* (p. 159, etc.)	4
7	*heavenly beings, dragon kings, centaurs, chimeras, pythons, and other human and nonhuman beings* (p. 185, etc.)	4

Table 8.1.4 Formulaic multinomials in Reeves (2008) (raw frequency over 4)

Similar to binomials, the number of formulaic multinomials is also higher in Watson's translation (1993) than in Reeves's (2008), with 9 and 7 instances respectively. For example, the multinomial 比丘、比丘尼、优婆塞、优婆夷 (*bǐ qiū, bǐ qiū nī, yōu pó sā, yōu pó yī* 'monks, nuns, laymen, laywomen') in Watson's translation is rendered as *monks, nuns, laymen **and** laywomen* (Watson 1993: 6, etc.), while in Reeves's translation it is often translated as *monk, nun, layman **or** laywoman* (Reeves 2008: 110, etc.), with the difference lying solely in the choice of supplemented connectors.

Additionally, two multinomials differ by the choice of a single element by the translators: Watson's *birth, old age, **sickness** and death* (Watson 1993: 14, etc.), contrasts with Reeves's *birth, old age, **disease** and death* (Reeves 2008: 65, etc.), corresponding to the ST 生老病死 (*shēng lǎo bìng sǐ* 'birth, old-ness, disease, death'), while an instance of *birth, old age, **sickness** and death* (Reeves 2008: 378, etc.) is also found in Reeves (2008). Furthermore, Watson's *profound, **subtle** and wonderful* (Watson 1993: 24, etc.) diverges from Reeves's *profound, **fine** and wonderful* (Reeves 2008: 76, etc.) in the translation of 甚深微妙 (*shèn shēn wēi miào* 'very deep, subtle, wonderful')

The only formulaic list 諸天、龍王、乾闥婆、緊那羅、摩睺羅伽、人非人等 (*zhū tiān, lóng wáng, qián tà pó, jǐn nà luó, mó hóu luó jiā, rén fēi rén děng* 'heavens, dragon kings, gandharvas, kimnaras, mahoragas, humans, nonhumans, etc.'), which refers to the groups gather to listen to Buddha's preaching, also reflects differing choices by the translators. Watson retains the Sanskrit forms, translating as *heavenly beings, dragon kings,* ***gandharvas****,* ***kimnaras****,* ***mahoragas****, human and nonhuman beings* (Watson 1993: 123, etc), while Reeves borrows names of gods from Greek mythology, rendering it as *heavenly beings, dragon kings,* ***centaurs****,* ***chimeras****,* ***pythons****, and other human and nonhuman beings* (Reeves 2008: 185, etc). This approach is discussed regarding the etymological structures of the elements in binomials (see Section 6.1.3.4).

Only two identical multinomials are formulaic in both translations: *superior, middling or inferior* (Watson 1993: 98, Reeves 2008: 160, etc.) and *branches, leaves, flowers and fruit* (Watson 1993: 173, Reeves 2008: 238, etc.), which are translations of 上中下 (*shàng zhōng xià* 'superior, middling, inferior') and 枝葉華果 (*zhī yè huá guǒ* 'branches, leaves, flowers, fruit'). Unlike the identical formulaic binomials, these identical multinomials represent universal concepts, rather than terms specific to the Buddhist context.

8.2 Formulaic binomials and multinomials in other English translations of the *Lotus Sutra*

When examining the translations of the *Lotus Sutra*, it is essential to recognise the potential impact of prior translations on the current translations. Both Watson and Reeves demonstrate an awareness of previous renditions before presenting their own distinct and innovative versions. Reeves explicitly acknowledges his debt to earlier translators in his "Translator's Note", citing the influence of Kato's (1975) translation, which was itself partially derived from Soothill's (1930) translation. Nonetheless, he also clearly states his intention to offer a different version:

> "I have consulted and been informed by earlier translations at every point along the way. The earliest of these is the one still in use by Rissho Kosei-kai called *The Threefold Lotus Sutra*, in which the translation of the *Lotus Sutra* itself was done by Bunnō Katō, based in

> part on work previously done by W.E. Soothill. While the present version is significantly different from Katō's, I remain enormously indebted to him for initially arousing my interest in the sutra and prompting me to try to improve on his translation." (Reeves 2008: xi)

In contrast, Watson does not specify particular sources of influence but does mention that his translation efforts began in 1973. He comments on some earlier translations, notably referring to Hurvitz's work from 1976 as "an invaluable contribution to scholarship" (Watson 1993: xxix).

In this section, a comparative analysis is conducted to assess the extent of influence that prior translations exert on the use of formulaic binomials and multinomials in Watson (1993) and Reeves (2008). The translations selected for comparison are: *The Lotus of the Wonderful Law or The Lotus Gospel* by W. E. Soothill in 1930 (revised edition in 1995), *The Threefold Lotus Sutra* by Bunno Kato et al in 1975 and *Scripture of the Lotus Blossom of the Fine Dharma (The Lotus Sutra)* by Leon Hurvitz (1976). Like Watson's and Reeves's translations, these three versions are also based on Kumarajiva's Chinese rendition, providing a common foundation for a meaningful comparison.

To begin, a preliminary comparative analysis of all five translations is performed using the "compare corpora" function provided by Sketch Engine (Kilgarriff 2001). The resulting score, as illustrated in the following figure, reveals the extent of similarity or divergence between the corpora. A higher score indicates greater differentiation among the texts, while a score of 1 denotes identical texts.

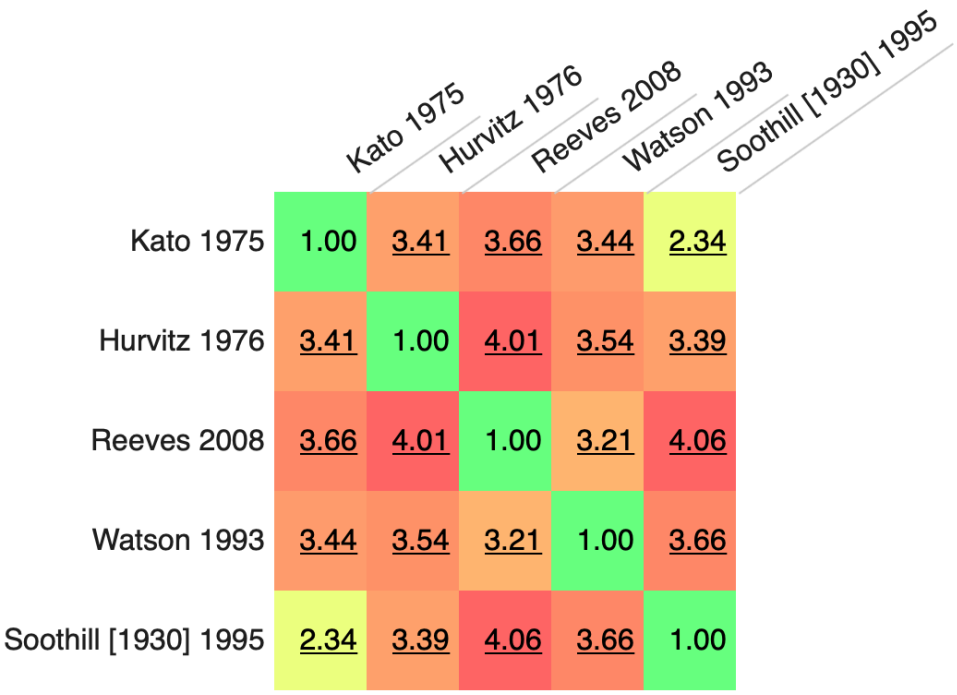

Figure 8.2 Result of corpora comparison between Soothill ([1930] 1995), Kato (1975), Hurvitz (1976), Watson (1993) and Reeves (2008)

The derived values indicate that Reeves's translation demonstrates a higher level of originality, as evidenced by the highest score of 4.06 when compared to Soothill ([1930] 1995) and a score of 4.01 when compared to Hurvitz (1976). This distinction is highlighted by the fact that Reeves's vocabulary aligns more closely with Watson's translation, potentially due to its more recent composition.

Conversely, Watson's translation shows a relatively stronger connection to earlier translations, with all scores remaining below 4. Notably, his translation also exhibits the least resemblance to Soothill's work, similar to Reeves's case. This divergence may be attributed to the temporal gap between Soothill's translation, completed in 1930, and the more contemporary works of others.

8.2.1 Formulaic binomials in other English translations

Upon closer examination, the subsequent tables present the frequency of the formulaic binomials listed in Table 8.1.1 and Table 8.1.2. This comparison includes the four other translations, encompassing Watson's and Reeves's translations as well. The search is also based on lemma instead of words, and

different sequence of elements and connectors are also counted as different tokens.

Binomials	Frequency in Watson (1993)	Frequency in Soothill ([1930] 1995)	Frequency in Kato (1975)	Frequency in Hurvitz (1976)	Frequency in Reeves (2008)
heavenly and human being (p. 19, etc.)	65	0	0	0	0
bodhisattva and mahasattva (p. 164, etc.)	60	0	0	0	0
teach and convert (p. 31, etc.)	38	3	5	31	0
accept and uphold (p. 180, etc.)	36	0	0	0	0
cause and condition (p. 317, etc.)	34	0	0	28	15
right and universal (p. 51, etc.)	20	0	0	20	0
clarity and conduct (p. 51, etc.)	20	0	0	20	0
read and recite (p. 16, etc.)	16	24	56	50	57

believe and accept (p. 33, etc.)	16	0	0	10	6
good man or good woman (p. 300, etc.)	15	0	0	26	0
immeasurable, boundless (p. 97, etc.)	14	0	1	0	0
good man and good woman (p. 161, etc.)	14	0	0	3	0
simile and parable (p. 31, etc.)	14	0	0	0	0
guard and protect (p. 168, etc.)	13	5	6	5	5
man and woman (p. 9, etc.)	12	4	8	5	6
birth and death (p. 18, etc.)	11	0	9	13	6
far and wide (p. 49, etc.)	11	1	1	1	0
shield and guard (p. 308, etc.)	11	0	0	0	0
believe and understand (p. 100, etc.)	11	0	1	10	4

subtle and wonderful (p. 18, etc.)	10	0	0	0	0
immeasurable and boundless (p. 225, etc.)	10	0	0	0	0
immeasurable and countless (p. 219, etc.)	10	0	0	0	0

Table 8.2.1.1 Formulaic binomials in Watson (1993) and their occurrences in other translations

Binomials	Frequency in Reeves (2008)	Frequency in Soothill ([1930] 1995)	Frequency in Kato (1975)	Frequency in Hurvitz (1976)	Frequency in Watson (1993)
receive and embrace (p. 138, etc.)	55	0	0	0	1
human and heavenly being (p. 67, etc.)	40	0	0	0	3
read and recite (p. 226, etc.)	39	24	56	50	16
teach and transform (p. 83, etc.)	32	0	1	0	0
good son or good daughter (p. 373, etc.)	26	7	29	0	0

heavenly being and people (p. 65, etc.)	18	0	0	0	0
cause and condition (p. 391, etc.)	15	0	0	28	33
monk and nun (p. 55, etc.)	15	6	0	1	4
peace and comfort (p. 96, etc.)	14	0	0	0	2
innumerable, unlimited (p. 179, etc.)	12	0	1	0	0
male and female (p. 59, etc.)	10	8	11	0	2
leader and teacher (p. 56, etc.)	10	0	0	0	5

Table 8.2.1.2 Formulaic binomials in Reeves (2008) and their frequencies in other translations

The analysis reveals that both Watson's and Reeves's translations exhibit a limited number of binomials in common with other versions. In Watson (1993), three binomials are present across all five versions: *read and recite* (Watson 1993: 16, Reeves 2008: 226, Soothill [1930] 1995: 23, Kato 1975: 45 , Hurvitz 1976: 174, etc.); *guard and protect* (Watson 1993: 16, Reeves 2008: 226, Soothill 1930: 159, Kato 1975: 230, Hurvitz 1976: 28, etc.); *man and woman* (Watson 1993: 16, Reeves 2008: 226, Soothill [1930] 1995: 85, Kato 1975: 277, Hurvitz 1976: 7, etc.). In contrast, none of the formulaic binomials in Reeves (2008) are found in

other translations, apart from the previously mentioned *read and recite*, suggesting that Watson (1993) has a closer connection with earlier translations.

Among the three previous translations, Watson's rendering of binomials shows particular reference to Hurvitz (1976). Six binomials appear exclusively in Hurvitz (1976): *cause and condition* (Watson 1993: 6, Hurvitz 1976: 2, etc.), *right and universal* (Watson 1993: 51, Hurvitz 1976: 12, etc.), *clarity and conduct* (Watson 1993: 51, 12, etc.), *believe and accept* (Watson 1993: 33, Hurvitz 1976: 2, etc.), *good man or good woman* (Watson 1993: 162, Hurvitz 1976: 2, etc.), *good man and good woman* (Watson 1993: 161, Hurvitz 1976: 17, etc.). In addition, *believe and understand* (Watson 1993: 139, Hurvitz 1976: 27, etc.) also appears in Kato (1975), but with only one instance. The binomial *teach and convert* (Watson 1993: 31, Hurvitz 1976: 54, Kato 1975: 80, Soothill [1930] 1995: 128, etc.) also appears most frequently in Hurvitz's translation (1976), with 31 occurrences, compared to just 3 and 5 instances in Soothill ([1930] 1995) and Kato (1975) respectively. These instances suggest a notable influence of Hurvitz (1976) on subsequent translations.

In Reeves (2008), the use of *cause and condition* (Reeves 2008: 55, Watson 1993: 6, Hurvitz 1976: 2, etc.), and *leader and teacher* (Reeves 2008: 56, Watson 1993: 21, etc.) reflects the influence of Watson (1993). Additionally, the binomial *good son or good daughter* (Reeves 2008: 373, Soothill [1930] 1995: 138, Kato 1975: 22, etc.) appears with 29 occurrences in Kato (1975) and 7 in Soothill ([1930] 1995), indicating their influence on Reeves's translation.

Several of the formulaic binomials are uniquely crafted by the two translators. Watson introduces distinctive binomials such as *heavenly and human being* (Watson 1993: 19, etc.), *bodhisattva and mahasattva* (Watson 1993: 171 etc), *accept and uphold* (Watson 1993: 180, etc.), *simile and parable* (Watson 1993: 31, etc.), *shield and guard* (Watson 1993: 308, etc.), *subtle and wonderful* (Watson 1993: 215 etc), *immeasurable and boundless* (Watson 1993: 225, etc.) and *immeasurable and countless* (Watson 1993: 219, etc.). Similarly, Reeves presents unique binomials including *heavenly beings and people* (Reeves 2008:

65, etc.). The most formulaic binomials, such as *receive and embrace* (Reeves 2008: 138, Watson 1993: 133, etc.), *human and heavenly being* (Reeves 2008: 67, Watson 1993: 15, etc.), *teach and transform* (Reeves 2008: 83, Kato 1975: 251, etc.), *peace and comfort* (Reeves 2008: 96, Watson 1993: 41, etc.) and *innumerable, unlimited* (Reeves 2008: 179, Kato 1975: 146, etc.), have appeared only infrequently in previous translations. These instances highlight the creative endeavour and originality of the two translators, reflecting their individual interpretive strategies while also adding depth and variation to the translated texts.

8.2.2 Formulaic multinomials in other English translations

The examination of formulaic multinomials within the other translations yielded no results. The multiple elements in the constructions reduce the possibility of remaining identical across various translations. This reaffirms the earlier conclusion that multinomials are less formulaic than binomials and exhibit greater distinctiveness within each translation.

In summary, the findings of the comparisons indicate that the influence of previous translations, even within a specialized area like Buddhism, is not as significant as one might have initially assumed. Although Watson (1993) shows greater influence from prior translations, particularly that of Hurvitz (1976), both Watson (1993) and Reeves (2008) demonstrate originality in their translational approach, exhibiting a tendency to introduce their own distinctive binomials and multinomials, thereby contributing creatively to the translation process.

8.3 Formulaic binomials and multinomials in English corpora

To contextualise the analysis of formulaic binomials and multinomials within the broader scope of the English language, two balanced corpora are selected for comparative purposes: the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA), encompassing variations of both British and American English. The BNC is a 100-million-word collection of written and spoken language samples from a diverse range of sources. It provides a comprehensive representation of British English, capturing both spoken and

written forms from 1980s to 1993 (Davies 2004). Meanwhile, the COCA is a balanced corpus of American English, comprising over one billion words of text (more than 25 million words per year from 1990 to 2019) across eight genres（Davies 2008–).

8.3.1 Formulaic binomials in BNC and COCA

The following tables present the frequencies of formulaic binomials in Watson (1993) and Reeves (2008) as found in the BNC (Davies 2004) and COCA (Davies 2008–). Similarly, for the search criteria, lemma is used rather than word.

Binomials	Raw frequency in Watson (1993)	Raw frequency in BNC	Raw frequency in COCA
heavenly and human being (p. 19, etc.)	65	0	0
bodhisattva and mahasattva (p. 164, etc.)	60	0	0
teach and convert (p. 31, etc.)	38	0	1
accept and uphold (p. 180, etc.)	36	0	3
cause and condition (p. 317, etc.)	34	0	18
right and universal (p. 51, etc.)	20	0	0
clarity and conduct (p. 51, etc.)	20	0	0
read and recite (p. 16, etc.)	16	0	13
believe and accept (p. 33, etc.)	16	3	13
good man or good woman (p. 300, etc.)	15	0	1
immeasurable, boundless (p. 97, etc.)	14	0	0
good man and good woman (p. 161, etc.)	14	0	2
simile and parable (p. 31, etc.)	14	0	0

guard and protect (p. 168, etc.)	13	3	38
man and woman (p. 9, etc.)	12	2131	25882
birth and death (p. 18, etc.)	11	71	435
far and wide (p. 49, etc.)	11	97	967
shield and guard (p. 308, etc.)	11	0	0
believe and understand (p. 100, etc.)	11	0	13
subtle and wonderful (p. 18, etc.)	10	0	6
immeasurable and boundless (p. 225, etc.)	10	0	0
immeasurable and countless (p. 219, etc.)	10	0	0

Table 8.3.1.1 Formulaic binomials in Watson (1993) and their frequencies in BNC and COCA

Binomials	Raw frequency in Reeves (2008)	Raw frequency in BNC	Raw frequency in COCA
receive and embrace (p. 138, etc.)	55	0	4
human and heavenly being (p. 67, etc.)	40	0	0
read and recite (p. 226, etc.)	39	0	13
teach and transform (p. 83, etc.)	32	0	3
good son or good daughter (p. 373, etc.)	26	0	0
heavenly being and people (p. 65, etc.)	18	0	0
cause and condition (p. 391, etc.)	15	0	18
monk and nun (p. 55, etc.)	15	20	102

peace and comfort (p. 96, etc.)	14	4	72
innumerable, unlimited (p. 179, etc.)	12	0	0
male and female (p. 59, etc.)	10	441	6652
leader and teacher (p. 56, etc.)	10	0	42

Table 8.3.1.2 Formulaic binomials in Reeves (2008) and their frequencies in BNC and COCA

The tables above illustrate the relative rarity of formulaic binomials within both translations across the two examined corpora. In Watson (1993), 5 out of the 22 binomials are found in both corpora: *believe and accept* (Watson 1993: 33, etc.), *guard and protect* (Watson 1993: 168, etc.), *man and woman* (Watson 1993: 141, etc.), *birth and death* (Watson 1993: 18, etc.) and *far and wide* (Watson 1993: 49, etc.). Seven binomials are attested only in COCA but not in BNC: *teach and convert* (Watson 1993: 31, etc.), *accept and uphold* (Watson 1993: 180, etc.) *cause and condition* (Watson 1993: 6, etc.), *read and recite* (Watson 1993: 16, etc.), *good man or / and good woman* (Watson 1993: 300, etc.), *believe and understand* (Watson 1993: 100, etc.) and *subtle and wonderful* (Watson 1993: 18, etc.)

In comparison, Reeves (2008) features three binomials present in both corpora: *monk and nun* (Reeves 2008: 233, etc.), *peace and comfort* (Reeves 2008: 96, etc.), and *male and female* (Reeves 2008: 59, etc.). Five binomials are found only in COCA: *receive and embrace* (Reeves 2008: 138, etc.), *read and recite* (Reeves 2008: 226, etc.), *teach and transform* (Reeves 2008: 83, etc.), *cause and condition* (Reeves 2008: 55, etc.) and *leader and teacher* (Reeves 2008: 56, etc.), among which *read and recite* and *cause and condition* also appear in Watson's translation. No formulaic binomials are found exclusively in BNC but not in COCA. This is likely due to the size difference between the two corpora, with COCA containing ten times more word samples than BNC, covering a wider range of registers. Additionally, the fact that both translators are American and write in American English may also influence the results.

Among these binomials, those with universal concepts, such as *man and woman* (Watson 1993: 141, etc.), *birth and death* (Watson 1993: 18, etc.) *far and wide* (Watson 1993: 49, etc.), and *male and female* (Reeves 2008: 59, etc.) consistently exhibit the highest frequencies across both the BNC and COCA. These binomials transcend specific cultural or religious domains due to their fundamental and widely applicable meanings. Conversely, many of the remaining binomials are frequently associated with religious contexts, such as *monk and nun* (Reeves 2008: 55, etc.). These contexts are not limited to Buddhism. For instance, the binomial *read and recite* (Watson 1993: 16, Reeves 2008: 226, etc.) appears in texts relating to Christianity, Islam, as well as Buddhism, as illustrated in the following sentences:

(139) "I also **read and recited** once again the story of Abraham and Sarah. When they were called by God, they obeyed [...]" (COCA, 2015, MAG, Christianity Today)

"[...] he will be respected because he has learned to **read and recite** the holy book of Islam" (COCA, 2008, ACAD, African Arts Summer 2008, 41.2: 50-59, 10p)

"That monk did not devote himself to **reading and reciting** the sutras, but only to paying respect [...]" (COCA, 2012, WEB, http://www.unification.net/ws/theme145.htm).

Similarly, the binomial *leader and teacher* is also observed in religious contexts, including:

(140) "the brother of my **leader and teacher**, the honorable Elijah Muhammad, is here with me and with us." (COCA, 2012, WEB http://www-cgi.cnn.com/US/9510/megamarch/10-16/transcript/index.html)

"Moses was the greatest prophet, **leader and teacher** that Judaism has ever known." (COCA, 2012, BLOG http://www.apologeticalliance.com/blog/2012/11/a-look-at-messianic-prophecy-who-is-the-prophet-of-deuteronomy-1815-18/)

The binomial *guard and protect* (Watson 1993: 168, etc.) is also found in religious texts, as seen in (141):

(141) "With these techniques the shaman **guards and protects** his human flock, interceding, when necessary, with the gods on their behalf" (BNC, 1992, Social anthropology in perspective. Lewis, I M. Cambridge: CUP, 1992, pp. 5-130. 1481 s-units.)

However, in COCA, the latter two binomials also appear in context related to general topic, reflecting their broader applicability. For example:

(142) “In turn, this can lead to the empowerment of the profession's **leaders and teachers**” (COCA, 1993 (Winter), ACAD: Physical Educator Early Winter 93, 50.4: 170, 7p)

“The Boston Police Department will stringently **guard and protect** the identities of all those [...]” (COCA, 2012, BLOG: http://www.bpdnews.com/2012/10/31/update-arrest-for-fatal-shooting-in-the-area-of-14-lyndhurst-street/)

Besides, the binomial *peace and comfort* (Reeves 2008: 96 etc) is more often used in general context, as in:

(143) “Moreover throughout his life he continued to stress very heavily in his voluminous writings the moral obligation of the ruler to use his powers selflessly, unsparing of his own **peace and comfort**, for the good of the State.” (BNC, 1987, Europe in the eighteenth century 1713–1783. Anderson, M S. Harlow: Longman Group UK Ltd, 1987: 160-254. 1328 s-units.)

“He wanted his lover to have the **peace and comfort** of dying at home.” (COCA, 1993, NEWS: Houston Chronicle LIFESTYLE; Pg. 1)

These findings suggest that, in comparison to universal concepts, binomials related to Buddhism are more frequently formulaic in both Watson (1993) and Reeves (2008). Additionally, cases from other religious texts are introduced when necessary. This indicates that these binomials possess the ability to function within both specific religious contexts and broader, universal frameworks, depending on the context.

8.3.2 Formulaic binomials from BNC and COCA in Watson (1993) and Reeves (2008)

Furthermore, it is valuable to supplement the analysis by examining the search results for formulaic binomials within both the BNC and COCA in Watson’s and Reeves’s translations. By employing the search expressions ‘N and|or N’, ‘ADJ and|or ADJ’, ‘VERB and|or VERB’, ‘ADV and|or ADV’, and ‘PRON and|or PRON’ in BNC (Davies 2004) and COCA (Davies 2008–), the top 15 binomials overall are identified and presented in the following tables.

Binomials	Raw frequency in BNC	Raw frequency in Watson (1993)	Raw frequency in Reeves (2008)
more or less	2530	0	0
more and more	2470	0	0
up and down	2210	2	3
man and woman	2131	12	6
he or she	1710	2	4
black and white	1119	0	0
economic and social	1040	0	0
health and safety	1040	0	0
trade and industry	824	0	0
go and get	802	0	0
social and economic	746	0	0
research and development	738	0	0
go and see	668	0	0
again and again	648	1	1
Mr and Mrs	638	0	0

Table 8.3.2.3 Top 15 most frequent binomials in BNC and their frequencies in Watson (1993) and Reeves (2008)

Binomials	Raw frequency in COCA	Raw frequency in Watson (1993)	Raw frequency in Reeves (2008)
more and more	62911	0	0
on and on	36593	0	1
man and woman	25882	12	6
over and over	18482	0	0
up and down	18171	2	3
you and I	15037	2	2

back and forth	17513	1	0
more or less	12970	0	0
he or she	12621	2	4
lady and gentleman	10545	0	0
black and white	9462	0	0
again and again	8873	1	1
now and then	7557	0	0
family and friend	6687	0	0
friend and family	6536	0	0

Table 8.3.2.4 Top 15 most frequent binomials in COCA and their frequencies in Watson (1993) and Reeves (2008)

The provided lists further highlight the limited coverage across the four corpora. Specifically, only five formulaic binomials — *man and woman*, *up and down*, *again and again*, *he or she* and *you and I*— are attested in the translations by both Watson (1993) and Reeves (2008). Additionally, in COCA, the binomial formed with the pronouns *you and I* is also found in both translations. The adverbial binomial *back and forth* appears once in Watson (1993), as in:

(144) "after the Thus Come One has entered extinction we will travel here and there, **back and forth** through the worlds [...]" (Watson 1993: 193).

Similarly, the adverbial binomial *on and on* is found once in Reeves (2008), as in:

(145) "Since the road before us goes **on and on**, now we want to turn back" (Reeves 2008: 198).

These binomials represent universal concepts related to gender differentiation (e.g., *man and woman*), spatial direction or movement (e.g., *up and down*, *back and forth*), repetition (e.g., *again and again*, *on and on*), and personal pronouns (e.g., *you and I*, *he or she*). They reflect fundamental concepts embedded in human cognition, transcending specific registers and databases. However, their relative infrequency in both Watson (1993) and Reeves (2008),

with the exception of *man and woman*, suggests that the context significantly influences the use of binomials.

8.3.3 Formulaic multinomials in BNC and COCA

Consistent with the findings in Section 8.2.2, formulaic multinomials found in Watson (1993) and Reeves (2008) do not appear in either the BNC or COCA. This result is not surprising, given that multinomials are generally less formulaic in broad English corpora and are used relatively infrequently, unless they fulfil a specific role within a specialised context.

8.4 Summary

This chapter examined the formulaic binomials and multinomials in the translations by Watson (1993) and Reeves (2008), as evidenced by the frequency of their occurrences in these works. Watson's (1993) translation is characterised by a higher degree of formulaic expression, while Reeves's translation demonstrates greater variation.

When compared with three other translations of the *Lotus Sutra*, namely Soothill ([1930] 1995), Kato (1975), and Hurvitz (1976), binomials show a higher degree of formulaicity than multinomials. However, within binomials, only a limited subset of constructions is consistently formulaic across different translations. In Watson (1993), the influence of Hurvitz (1976) is more pronounced than that of other translations, whereas in Reeves (2008), the influence from earlier translations is less evident. Both Watson (1993) and Reeves (2008) feature more formulaic binomials innovated by the translators themselves, suggesting that the translators' personal interpretations and creative choices significantly shape the linguistic characteristics of their translations, which overshadows the direct impact of previous translations in this regard.

In comparison with the English corpora BNC and COCA, binomials also exhibit a higher degree of formulaicity than multinomials. The formulaic binomials present in Watson's (1993) and Reeves's (2008) translations exhibit limited overlap with those in the BNC and COCA. This discrepancy arises

because many of the formulaic binomials in Watson (1993) and Reeves (2008) are specific to religious texts and those in the BNC and COCA are relating to universal concepts, such as gender and spatial directions, highlighting the dual function of binomials: the ability to operate within both specific religious and broader, universal frameworks, depending on the context. In comparison, the use of multinomials is less universal, as the formulaic multinomials in Watson (1993) and Reeves (2008) are not observed either in other translations or in English corpora.

The formulaic use of binomials and multinomials, particularly the former, highlights the need for specialised glossaries or dictionaries that contextualise these expressions within specific fields, such as Buddhism, to enhance clarity and support reader comprehension. Gabrovšek (2011) advocates for the inclusion of fixed binomials in English phraseology, emphasising the importance of their consistent listing and definition in dictionaries. Similarly, Sauer and Schwan also note that "many authors and texts do not even provide lists of the binomials they employ, let alone analyse them according to the criteria we have just discussed" (2017: 202). However, prior lexical studies of Buddhist scriptures, such as Seishi Karashima's seminal works *A Glossary of Kumārajīva's Translation of the Lotus Sutra* (2001) and *A Glossary of Dharmarakṣa's Translation of the Lotus Sutra* (1998) include essential Chinese terms and their Sanskrit correspondences, "focusing on medieval vernacular words and usages, semantic peculiarities, Buddhist technical terms, and transliterations" (2001a: 2), yet do not address the presence of binomials. Similarly, the appendix glossaries provided by translators Watson (1993: 325–342) and Reeves (2008: 431–474) include Buddhist terms but also fail to specifically address binomials. Thus, it would be advantageous to develop a glossary or dictionary from a linguistic perspective that specifically addresses formulaic binomials within this sutra, with the potential to extend this focus to other Buddhist texts. Such a resource could also be expanded to encompass additional languages, such as Sanskrit, Tibetan, and Tangut, thereby

making a substantial contribution to the study of binomials within both religious and linguistic contexts.

Chapter 9 The formation of binomials and multinomials

With the examination of translation strategies as presented in Chapter 7, it is concluded that the strategies of direct and oblique translation play a significant role in the translation of both binomials and multinomials, aligning with the translators' objectives of maintaining fidelity to the original text. Meanwhile, the high percentage of employment of modulation strategy suggests the existence of adjustments which, while not conflicting with the original text, involve alterations in form.

As discussed in Section 7.2.2.1.2, in the context of binomials, translators reverse the sequence of the elements (hereafter as SoE). For instance, the binomial 我與汝 (*wǒ yǔ rǔ* 'I and you') is translated as *you and I* (Watson 1993: 85, Reeves 2008:145), and the Chinese term 衣食 (*yī shí* 'clothing [and] food') has been rendered as *food and clothing* (Watson 1993: 83, Reeves 2008: 143). With regard to multinomials, as discussed in Section 7.3.2.1.2, instances exist where a multinomial is restructured into a combination of two binomials in the translation. For example, 比丘、比丘尼、優婆塞、優婆夷 (*bǐ qiū, bǐ qiū nī, yōu pó sā, yōu pó yí* 'monks, nuns, laymen [and] laywomen') is frequently translated as *monks and nuns, laymen and laywomen* (Reeves 2008: 55, etc.) and 草木叢林 (*cǎo mù cóng lín* 'grass, trees, thickets [and] forests') is rendered as *plants and trees, thickets and groves* (Watson 1993: 98).

Focusing on these instances, this chapter examines the formation of binomials and multinomials and analyses the reasons and motivations through comparison of corpus evidence, with comparison to the Chinese ST. The central question addressed in this chapter is: when there is a discrepancy between the two language systems, what constraints influence the translators' decisions when deciding whether to adhere to the source language, Chinese, or to render the text into the structures of English, the target language?

9.1 The sequence of elements in binomials

9.1.1 Methodology: (ir)reversibility score

To gain a comprehensive understanding of the SoE in binomials in both translations, specifically, the extent to which binomials exhibit reversibility, i.e., the occurrence of the construction 'Element 1 (+ connector) + Element 2' in comparison to its reversed counterpart 'Element 2 (+ connector) + Element 1' this study employs the concept of (ir)reversibility for quantitative analysis. Mollin introduces this term along with the following formula to calculate and compare the (ir)reversibility score:

Formula 1: (ir)reversibility score = $\frac{freq}{freq+revfreq} \times 100$ (2014: 40)

Here, *freq* 'frequency' represents the number of occurrences of the searched binomial in the given text, while *revfreq* 'reversed frequency' represents the occurrences of the binomial with reversed SoE. For instance, the binomial *food and clothing* in Watson (1993) occurs 7 times in the text, whereas its reversed version *clothing and food* only once. Therefore, the reversibility score of the binomial *food and clothing* is 87.50, indicating a preference for this order over its reversed counterpart. A score of 100 or 0 suggests that only one order appeared in the text, rendering the binomial irreversible. For instance, *read and recite* (Watson 1993: 16, etc.) and *monks and nuns* (Reeves 2008: 55, etc.) both have an (ir)reversibility score of 100. Previous researchers have assigned various terms to such binomials, including 'irreversible binomials' (Malkiel 1959), 'freezes' (Cooper and Ross 1975), 'fixed-order coordinates' (Abraham 1950), and 'frozen word' (Pink & Birdsong 1979), among others. In this study they are termed as 'irreversible binomials'.

It should be noted here that the irreversible binomials do not always equate to the formulaic binomials discussed in the previous chapter. For example, the formulaic binomial *heavenly and human being* (Watson 1993: 19, etc.) in Watson's translation is reversible, with its reversed counterpart, *human and heavenly being* (Watson 1993: 103, etc.), appearing three times. Nevertheless,

most formulaic binomials are indeed irreversible and the two groups exhibit a significant degree of overlap.

Using the methodology described, the research findings are presented in the following table, which illustrates the number of binomials grouped by their (ir)reversibility scores across the two translations. The statistics are based on counts of types rather than tokens.

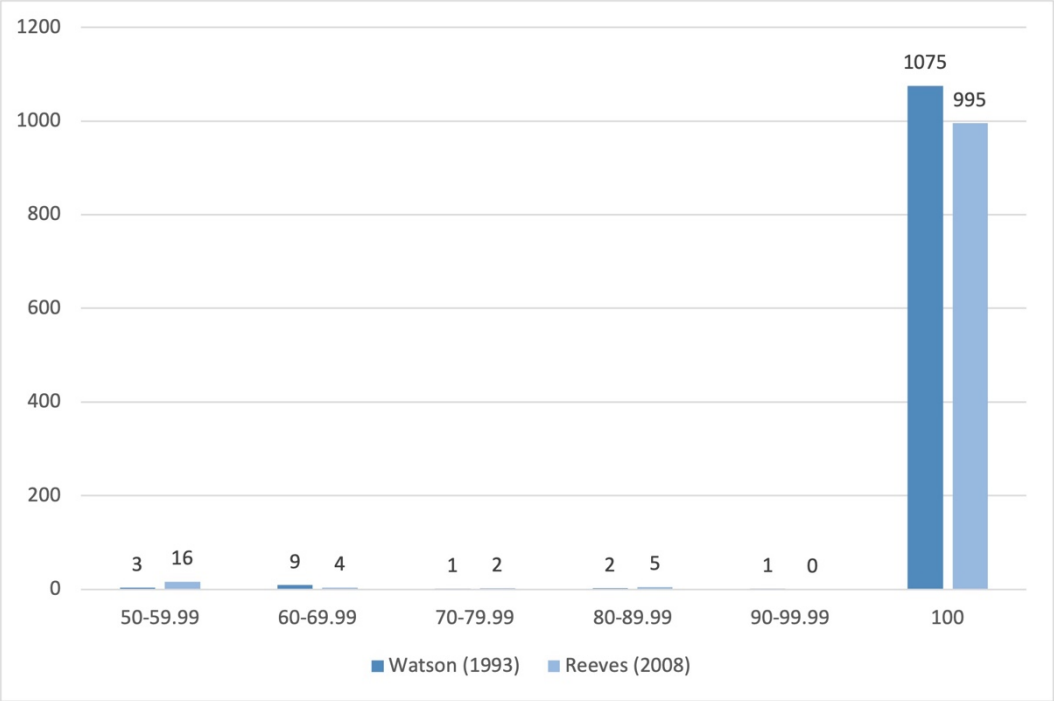

Figure 9.1.1 Number of binomials (types) in Watson (1993) and Reeves (2008) in bands of (ir)reversibility score

The results reveal that in both translations, irreversible binomials constitute a larger proportion than reversible ones, accounting for over 90% in each work, where Watson's translation exhibits slightly more irreversible cases than in Reeves's. This presents a contrast when compared to the findings of Mollin's study, as depicted in the figure below (2014: 45).

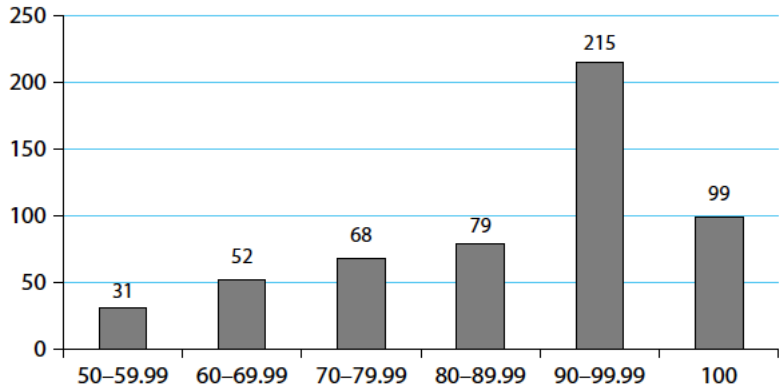

Figure 3.5 Number of binomials in bands of (ir)reversibility scores

Figure 9.1.2 Number of binomials in bands of (ir)reversibility scores in Mollin (2014: 45)

In her investigation of 544 frequent formulaic binomials from the British National Corpus, Mollin (2014) concludes that rather than irreversible binomials, those with a (ir)reversibility score of 90 – 99.99 constitute the majority. Irreversible ones rank second and their percentage is significantly lower. The variance in the composition of each component indicates that the distribution of reversible and irreversible binomials is associated with corpus size and register. Both Watson (1993) and Reeves (2008) focus on one specialized text within the field of Buddhism, while Mollin's examination are of binomials based on many more samples of phrases and encompasses a broader range of registers.

To evaluate the influence of the target language (English) on SoE, this study compares the (ir)reversibility score of binomials in the two translations with that in the COCA[26]. Frequency data from COCA used in this section is cited from Davies (2008–), with data available online at https://www.wordfrequency.info (accessed October 9, 2023).

The binomials in Watson (1993) and Reeves (2008) are categorised into three groups based on the semantic relationship with their corresponding ST:

[26] COCA, rather than BNC, is employed in this chapter because, as established in Chapter 8, the former contains a greater number of binomials than the latter. Consequently, it provides a more comprehensive reference (see Section 8.3.1).

(a.) binomials with AlSoE (an SoE aligned with the ST, such as *birth and death* (Watson 1993: 18), translated from 生死 (*shēng sǐ* 'birth [and] death');[27]

(b.) binomials with RevSoE (an SoE reversed from the ST), such as *night and day* (Reeves 2008: 128), corresponding to 日夜 (*rì yè* 'day and night'); and

(c.) binomials where the influence of the ST is uncertain. This includes cases involving tautological and some of the synonymous elements (see Section 6.1.5.1), such as *revered and respected* (Reeves 2008: 330), which corresponds to 恭敬 (*gōng jìng* '*revere and respect*'), where the meanings of the two elements are too closely aligned to be distinguished from one another. This group also encompasses binomials rendered through equivalence strategy, such as *here and there* (Reeves 2008: 315), corresponding to 东西 (*dōng xī* 'east and west'), as well as amplification strategy, such as *accept and embrace* (Watson 1993: 205), corresponding to 游 (*yóu* 'to roam') (see Sections 7.2.2.3 and 7.2.3).

Groups (a) and (b) are analysed by their (ir)reversibility rates evidenced in COCA. Group (c) and the binomials without reference sequence in COCA are examined according to several constraints governing their SoE.

For ease of discussion, an (ir)reversibility rate exceeding 50 indicates a 'preferred SoE' in the given context, whereas a rate of 50 or below suggests a 'dis-preferred SoE'. Furthermore, as the same type in the TT may be translated from different forms in ST – such as the binomial *human and heavenly being* (Reeves 2008: 67, etc.), which corresponds to both 天人 (*tiān rén* 'heaven [and] human') (p. 67) and 人天 (*tiān rén* 'human [and] heaven') (p. 357), leading to different classifications as AlSoE or RevSoE – token frequencies are used in the following discussions instead of type.

9.1.2 Binomials with AlSoE

The cases with AlSoE, totalling 1,815 and 1,472 tokens in Watson (1993) and Reeves (2008) respectively, constitute a significant proportion of all binomials, accounting for 89% and 85%. Their (ir)reversibility rates in COCA are presented

[27] The alignment with the source text is assessed from a semantic perspective, disregarding alterations in other aspects, such as word class.

in the following figures, categorised into three groups: those with rates between 51 and 100 (i.e., preferred SoE), rates of 50 and below (i.e., dis-preferred SoE), and those not found in the corpus (labelled as 'n/a')

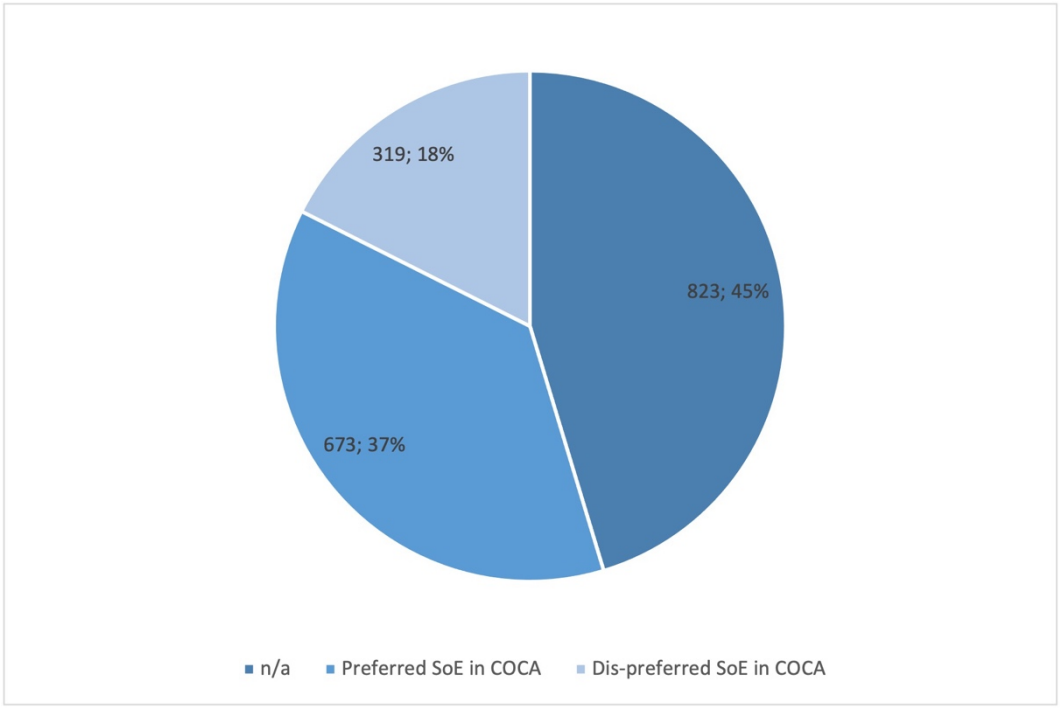

Figure 9.1.2.1 Distribution of binomials with AlSoE from Watson (1993) based on (ir)reversibility score from COCA

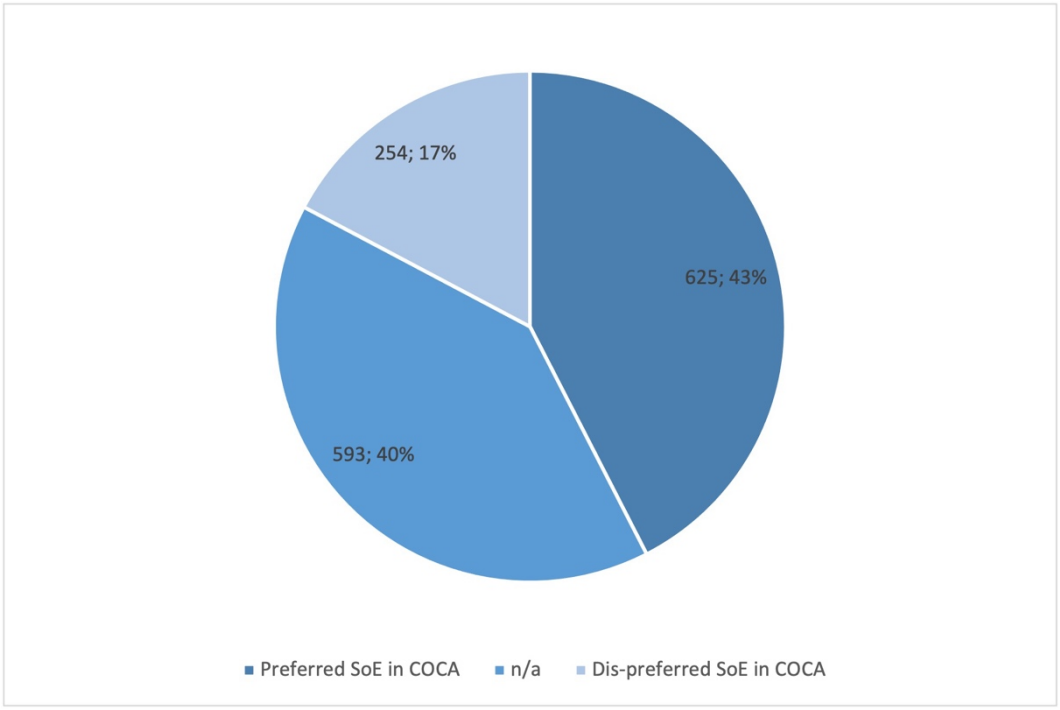

Figure 9.1.2.2 Distribution of binomials with AlSoE from Reeves (2008) based on (ir)reversibility score from COCA

The results indicate that, except for those not found, which to be addressed independently in section 9.1.4, in both translations, a greater number of cases with AlSoE also exhibit a preferred SoE in COCA, aligning with their common usage in English. This finding suggests that when translating binomials from Chinese, both translators tend to conform to the linguistic conventions of TL users while retaining fidelity to the SL. Reeves (2008) shows a slightly stronger inclination towards this trend compared to Watson (1993), with approximately 6% more binomials exhibiting preferred SoE in COCA.

9.1.2.1 Binomials with preferred SoE in COCA

This group comprises 673 instances in Watson (1993) and 625 instances in Reeves (2008), respectively (see figures 9.1.2.1 and 9.1.2.2). Among these cases, the majority are irreversible within the two translations, with 664 and 607 tokens, accounting for 99% and 97%, respectively. The following tables present examples of some of the most frequent irreversible cases.

Binomials in Watson (1993)	ST	Raw frequency of AlSoE	(Ir)reversibility score in COCA
accept and uphold (p. 19, etc)	受持 (*shòu chí* 'accept [and] uphold')	36	75
cause and condition (p. 6, etc.)	因緣 (*yīn yuán* 'cause [and] condition')	34	80
read and recite (p. 16, etc.)	讀誦 (*dú sòng* 'read [and] recite')	16	100
good men or good women (p. 300, etc.)	善男子、善女人 (*shàn nánzǐ, shàn nǚrén* 'good	15	100

	men [and] good women')		
good men and good women (p. 166, etc.)	善男子、善女人 (*shàn nánzǐ, shàn nǚrén* 'good men [and] good women')	14	100
guard and protect (p. 168, etc.)	衛護 (*wèi hù* 'guard [and] protect')	13	82.61
men and women (p. 141, etc.)	男女 (*nán nǚ* 'man [and] woman')	12	90.09
birth and death (p. 18, etc.)	生死 (*shēng sǐ* 'birth [and] death')	11	93.35

Table 9.1.2.1 Most frequent irreversible binomials with AlSoE from Watson (1993) with preferred SoE in COCA

Binomials in Reeves (2008)	ST	Raw frequency of AlSoE	(Ir)reversibility score in COCA
receive and embrace (p. 138, etc)	受持 (*shòu chí* 'accept [and] uphold')	55	80
read and recite (p. 226, etc)	讀誦 (*dú sòng* 'read [and] recite)	39	100
teach and transform (p. 82, etc)	教化 (*jiào huà* 'teach [and] transform)	30	100
monks and nuns (p. 55, etc)	比丘、比丘尼 (*bǐqiū, bǐqiūní* 'monk [and] nun')	15	82.26

cause and condition (p. 51, etc)	因緣 (*yīn yuán* 'cause [and] condition')	15	80
peace and comfort (p. 96, etc)	安隱 (*ān yǐn* 'peace [and] comfort')	14	66.67
male and female (p. 59, etc)	男女 (*nán nǚ* 'man [and] woman')	10	90.56

Table 9.1.2.2 Most frequent irreversible binomials from Reeves (2008) with preferred SoE in COCA

In addition, in both translations, there are a few reversible binomials with AlSoE that also follow the preferred sequence as identified in COCA. In Watson (1993), there are 9 tokens (5 types), while in Reeves (2008), there are 18 tokens (7 types), as listed in the following tables.

Binomials in Watson (1993)	ST	Raw frequency of AlSoE	(Ir)reversibility score	(Ir)reversibility score in COCA
lead and guide (p. 168, 260, & 269)	引導 (*yǐn dǎo* 'lead [and] guide')	3	60	71.43
birds and beasts (p. 63 & 64)	鳥獸 (*niǎo shòu* 'bird [and] beast')	2	66.67	65.08
diligently and earnestly (p. 212 & 221)	勤加精進 (*qín jiā jīng jìn* 'diligently [and] earnestly')	2	66.67	100

you and me (p. 13)	仁及我 (*rén jí wǒ* 'you and me')	1	66.67	99.93
study and practice (p. 220)	學習 (*xué xí* 'study [and] practice')	1	33.33	83.97

Table 9.1.2.3 Reversible binomials with AlSoE from Watson (1993) with preferred SoE in COCA

Binomials in Reeves (2008)	ST	Raw frequency of AlSoE	(Ir)reversibility score	(Ir)reversibility score in COCA
day and night (p. 105, etc.)	日夜 (*rì yè* 'day [and] night')	8	88.89	73.55
fine and wonderful (p. 69, etc)	微妙 (*wēi miào* 'fine [and] wonderful')	5	83.33	75
rare and wonderful (p. 173 & 356)	珍妙 (*zhēn miào* 'rare [and] wonderful')	2	66.67	87.1
study and practice (p. 287)	學習 (*xué xí* 'study [and] practice')	1	87.5	83.97
dragons and gods (p. 252)	龍神 (*lóng shén* 'dragon [and] god')	1	50	100

gods and people (p. 110)	天人 (*tiān rén* 'heaven [and] people')	1	50	61,54
phrase or verse (p. 394)	一句一偈 (*yī jù yī jì* 'one sentence [and] one verse')	1	33.33	100

Table 9.1.2.4 Reversible binomials with AlSoE from Reeves (2008) with preferred SoE in COCA

The presence of these reversible binomials highlights the flexibility available to translators in their work, as their SoE is occasionally reversed, albeit far less frequently than the irreversible instances.

9.1.2.2 Binomials with dis-preferred SoE in COCA

As depicted in Figures 9.1.2.1 and 9.1.2.2, among the binomials with AlSoE, a smaller proportion in both translations represent a dis-preferred sequence as identified in COCA. Specifically, there are 319 such instances in Watson (1993) and 254 instances in Reeves (2008), accounting for 18% and 17% of all binomials with AlSoE, respectively. Of these, 313 and 242 cases are irreversible binomials, in Watson (1993) and Reeves (2008), respectively, constituting over 95% in both. Some of the most frequent irreversible binomials are listed in the following tables.

Binomials in Watson (1993)	ST	Raw frequency of AlSoE	(Ir)reversibility score in COCA
teach and convert (p. 31, etc.)	教化 (*jiào huà* 'teach [and] convert')	38	25
believe and accept (p. 33, etc.)	信受 (*xìn shòu* 'believe [and] accept')	16	35.14

believe and understand (p. 79, etc.)	信解 (*xìn jiě* 'believe [and] understand')	11	23.64
shield and guard (p. 308, etc.)	擁護 (*yōng hù* 'shield [and] guard')	11	0
guard and uphold (p. 155, etc.)	護持 (*hù chí* 'guard [and] uphold')	9	50
level and smooth (p. 52, etc.)	平正 (*píng zhèng* 'level [and] smooth')	9	45.45
body and mind (p. 7, etc.)	身心 (*shēn xīn* 'body [and] mind')	8	43.38
explain and preach (p. 183, etc)	解說 (*jiě shuō* 'explain [and] preach)	8	0
intent and thought (p. 52, etc)	志念 (*zhì niàn* 'intent [and] thought')	6	0

Table 9.1.2.5 Most frequent irreversible binomials from Watson (1993) with dis-preferred SoE in COCA

Binomials in Reeves (2008)	ST	Raw frequency of AlSoE	(Ir)reversibility score in COCA
leader and teacher (p. 56, etc.)	導師 (*dǎo shī*'leader [and] teacher')	10	47.73

demonstrate and teach (p. 351, etc)	示教 (*shì jiào* 'demonstrate [and] teach'	7	50
level and smooth (p. 108, etc.)	平正 (*píng zhèng* 'level [and] smooth')	7	45.45
body and mind (p. 55, etc.)	身心 (*shēn xīn* 'body [and] mind')	6	43.38
protect and embrace (p. 279, etc.)	護持 (*hù chí* 'guard [and] uphold')	6	33.33

Table 9.1.2.6 Most frequent irreversible binomials from Reeves (2008) with dis-preferred SoE in COCA

The occurrence of these cases highlights the translators' efforts to remain faithful to the ST, even when this results in a departure from the preferred SoE in English. However, their comparatively low proportion suggests that, in more cases, both translators strive to balance the meaning of the SL with the form of the TL when seeking the optimal solution for their translation.

9.1.3 Binomials with RevSoE

Regarding binomials with RevSoE, Watson (1993) and Reeves (2008) contain a total of 62 and 113 tokens, respectively, accounting for only 3% and 7%. These instances represent cases where the translator diverges from the SL, Chinese to adhere more closely to the target language, English. Such divergences occur only occasionally, as indicated by the significantly lower proportion compared to those with AlSoE (see Section 9.1.2).

Their occurrence in COCA has also been examined, with the results presented in the following figures:

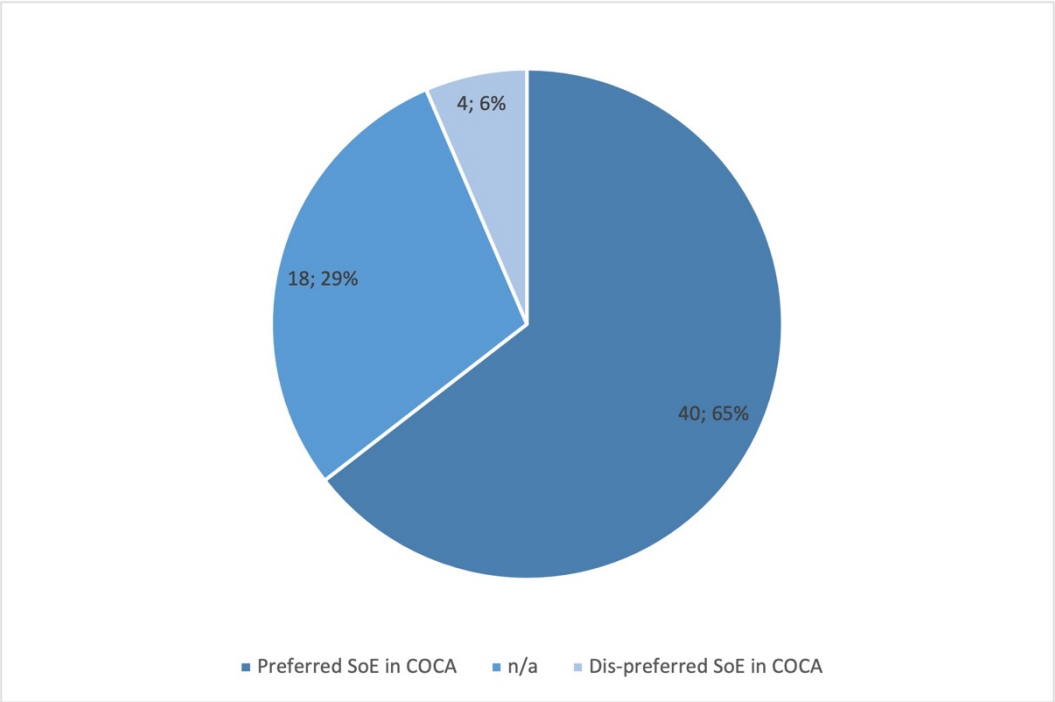

Figure 9.1.3.1 Distribution of binomials with RevSoE from Watson (1993) based on (ir)reversibility score from COCA

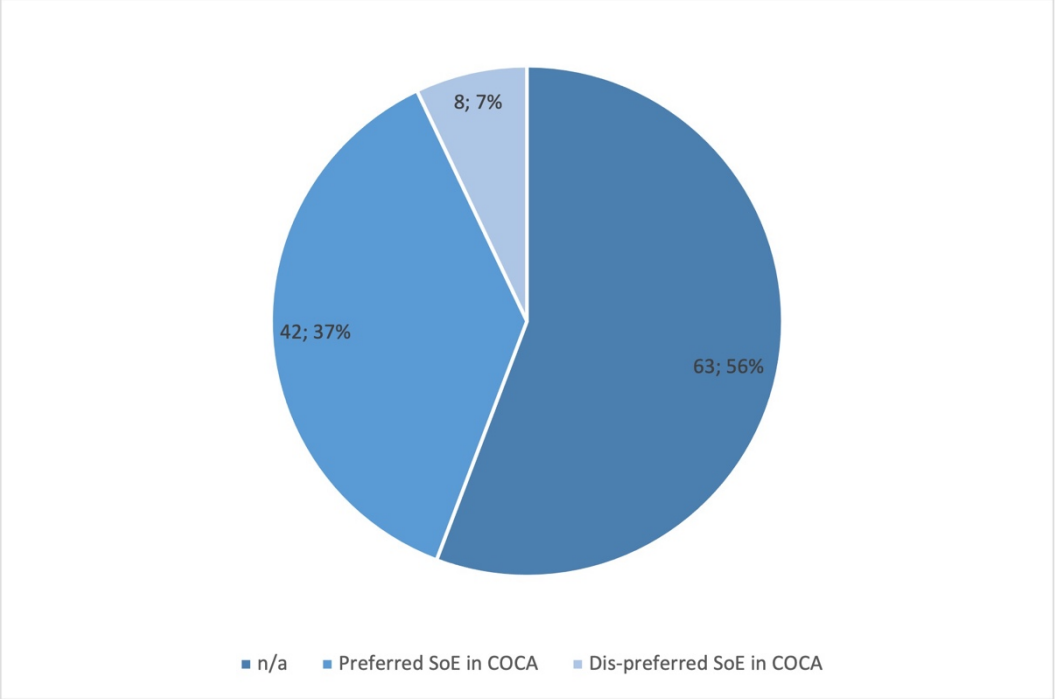

Figure 9.1.3.2 Distribution of binomials with RevSoE from Reeves (2008) based on (ir)reversibility score from COCA

The contrast in Watson (1993) between Figure 9.1.2.1 and Figure 9.1.3.1 is evident. Among the cases where the SoE of a binomial is reversed from the ST,

Watson does so to follow English usage on about 65% of occasions, comparing to only 37% in Figure 9.1.2.1. In contrast, Reeves (2008) displays a less pronounced tendency, with Figure 9.1.2.2 showing 37% and Figure 9.1.3.2 showing 43%. In addition, in both translations, binomials with dis-preferred SoE in COCA are the least common, accounting for only 6% and 7% respectively. This trend suggests that when conventional usage in English is established, translators often choose to reverse the sequence of elements in a binomial to enhance readability.

Furthermore, Reeves demonstrates a significantly higher proportion of instances where the sequence is selected independently by the translator, as indicated by the 56% of cases in this group labelled as "n/a", compared to only 29% in Watson (1993), suggests a greater degree of translator creativity in the formation of binomials.

Among these binomials with either a preferred or dis-preferred COCA, there are 35 and 37 tokens that are irreversible from Watson (1993) and Reeves (2008), respectively. The following tables present the recurrent instances, along with those that have an (ir)reversibility score in COCA exceeding 90.

Binomials in Watson (1993)	ST	Raw frequency of RevSoE	(Ir)reversibility score in COCA
old and decrepit (p. 81, etc.)	朽邁 (*xiǔ mài* 'decrepit [and] old')	4	100
food and drink (p. 238, etc.)	飲食 (*yǐn shí* 'drink [and] eat')	4	95.06
width and depth (p. 12, etc.)	縱廣 (*zòng guǎng* 'depth [and] width')	4	75.00
soft and gentle (p. 8, 24 & 51)	柔軟 (*róu ruǎn* 'gentle [and] soft')	3	85.48
eat and drink (p. 11)	飲食 (*yǐn shí* 'drink [and] eat')	2	91.05

old and decaying (p. 56)	朽故 (*xiǔ gù* ‘decaying [and] old’)	1	100
old and rotting (p. 64)	朽故 (*xiǔ gù* ‘decaying [and] old’)	1	100
falsehood and delusion (p. 72)	虛妄 (*xū wàng* ‘emptiness [and] falsehood)	1	100
back and forth (p. 193)	往返 (*wǎng fǎn* ‘away [and] back’)	1	99.61
this or that (p. 103)	彼此 (*bǐ cǐ* ‘that [and] this’)	1	99.37
come and go (p. 90)	出入 (*chū rù* ‘exit [and] enter’)	1	97.06
long and narrow (p. 248)	狹長 (*xiá cháng* ‘narrow [and] long’)	1	91.71
big and broad (p. 293)	廣大 (*guǎng dà* ‘broad [and] big’)	1	90.24

Table 9.1.3.1 Some irreversible binomials with RevSoE in Watson (1993)

Binomials in Reeves (2008)	ST	Raw frequency of RevSoE	(Ir)reversibility score in COCA
food and drink (p. 61, 150 & 306)	飲食 (*yǐn shí* ‘drink [and] food’)	3	95.06
mind and will (p. 109, 282 & 306)	志念 (*zhì niàn* ‘will [and] mind’)	3	94.39
old and decrepit (p. 316 & 318)	衰老 (*shuāi lǎo* ‘decrepit [and] old’)	2	100
incoming and outgoing (p. 148 & 151)	出內 (*chū nèi* ‘outgoing [and] incoming’)	2	88.32

width and depth (p. 175 & 176)	縱廣 (*zòng guǎng* 'depth [and] width')	2	75.00
large and spacious (p. 113)	廣大 (*guǎng dà* 'broad [and] big')	1	100.00
older and infirm (p. 147)	朽邁 (*xiǔ mài* 'decrepit [and] old')	1	100.00
old and decaying (p. 113)	朽故 (*xiǔ gù* 'decaying [and] old')	1	100.00
you and I (p. 145)	我與汝 (*wǒ yǔ rǔ* 'I [and] you')	1	99.93
good and evil (p. 252)	罪福 (*zuì fú* 'sin [and] fortune')	1	98.75
in and out (p. 150)	出入 (*chū rù* 'exit [and] enter')	1	98.48
long and narrow (p. 317)	狹長 (*xiá cháng* 'narrow [and] long')	1	91.71
eat and drink (p. 323)	飲食 (*yǐn shí* 'drink [and] eat')	1	91.05

Table 9.1.3.2 Some irreversible binomials with RevSoE in Reeves (2008)

Compared with the irreversible ones, the reversible binomials with RevSoE are far less, with 10 and 13 tokens (4 and 6 types) in Watson (1993) and Reeves (2008) respectively, as listed in the following tables.

Binomials in Watson (1993)	ST	Raw frequency of RevSoE	(Ir)reversibility score in Watson (1993)	(Ir)reversibility score in COCA
food and clothing (p. 83, etc.)	衣食 (*yī shí* 'clothing [and] food')	7	87.5	85.75

you and I (p. 85)	我與汝 (*wǒ yǔ rǔ* 'I and you')	1	66.67	99.93
see and know (p. 25)	知見 (*zhī jiàn* 'know [and] see'	1	50	69.34
beasts and birds (p. 254)	禽獸 (qín shòu 'bird [and] beast'	1	33.33	34.92

Table 9.1.3.3 Reversible binomials with RevSoE in Watson (1993)

Binomials in Reeves (2008)	ST	Raw frequency of RevSoE	(Ir)reversibility score in Reeves (2008)	(Ir)reversibility score in COCA
food and clothing (p. 143, etc.)	衣食 (*yī shí* 'clothing [and] food')	7	87.5	85.75
accept and believe (p. 127 & 318)	信受 (*xìn shòu* 'believe [and] accept')	2	25	64.86
study and practice (p. 195.)	修學 (*xiū xué* 'practice [and] study')	1	87.5	83.97
verse or phrase (p. 333)	一句一偈 (*yī jù yī jì* 'one sentence [and] one verse')	1	66.67	0
gods and people (p. 253)	人天 (*rén tiān* 'people [and] heaven')	1	50	61.54

night and day (p. 128)	日夜 (*rì yè* 'day [and] night')	1	11.11	26.45

Table 9.1.3.4 Reversible binomials with RevSoE in Reeves (2008)

These reversible binomials reflect the translator's consideration to avoid repetition in their text, stemming from stylistic considerations. This is particularly evident in binomials with low (ir)reversibility scores or less preferred sequences, both in their translations and in COCA, such as *beasts and birds* (Watson 1993: 254) and *night and day* (Reeves 2008: 128).

9.1.4 Binomials with no reference from COCA

This section examines the rest binomials that are absent from previous analysis. As indicated by the proportions marked as "n/a" in the figures from the previous sections, along with instances where the influence of the ST is uncertain, (the third group discussed in Section 9.1.1), Watson (1993) and Reeves (2008) employ a total of 883 and 696 tokens, respectively. The proportion of such binomials is notably high for both AlSoE and RevSoE (see Figures 9.1.2.1, 9.1.2.2, 9.1.3.1, and 9.1.3.2). In the absence of relevant corpus data, this section applies constraints that influence SoE in English binomials to analyse the underlying motivations for their formation.

9.1.4.1 SoE constraints

Research on the sequence of elements (SoE) in binomials has been extensive, with various constraints identified by Malkiel (1959) and further categorised by Cooper and Ross (1975), Benor and Levy (2006), Lohmann (2012, 2014), and Mollin (2012, 2014), among others (see Section 3.1.2). Their findings are consistent regarding the functionality of these constraints. Cooper and Ross observe that semantic constraints take precedence over phonological ones (1975: 103), a conclusion further supported by Benor and Levy, who emphasise "the prominence of semantic over metrical constraints, and over frequency constraints" (2006: 271). Lohmann's regression analysis, which incorporates 10 variables, similarly

demonstrates that pragmatic and semantic factors, such as ‘information status’, ‘iconic sequencing’, ‘extralinguistic hierarchy’, and ‘conceptual accessibility’, are more significant than phonological factors related to stress patterns as well as length (2014: 93–95). Likewise, Mollin identifies four semantic constraints – ‘iconicity’, ‘perceptual markedness’, ‘power’ and ‘formal markedness’ – as the most influential in determining the SoE in binomials. These are followed by a group of metrical-phonological constraints, among which the ‘number of syllables’ constraint shows a relatively high success rate in predicting the order (2014: 89–97).

Given the previous findings, this study examines the functionality of four semantic constraints: ‘iconicity’, ‘perceptual markedness’, ‘power’ and ‘formal markedness’ and one metrical-phonological constraint ‘number of syllables’, which are identified as the top factors influencing sequence of elements in the previously mentioned studies, following a declining order of functionality. These five constraints are utilised in this study as indicators of the influence of the target language in the translations.

(a.) Iconicity

In linguistics, ‘iconicity’ is a term “identifies the extent to which a relationship between semantic notions is directly represented in a language’s formal expression.” (s.v. “iconicity” *A Dictionary of Linguistics and Phonetics*, 234). Regarding binomials, Malkiel addresses the concept of ‘chronological priority’ when discussing the sequence of the elements (1959: 143–144). Cooper and Ross further elaborate that in a pair of verbs intended to depict a temporal sequence, the verb occupying the first position denotes the earlier action (1975: 102). Benor and Levy address the principle of ‘iconic or scalar sequencing’, which posits that when two elements are perceived to exist in a specific order, whether chronological or otherwise, they should be presented in that same order within a binomial (2006: 239–240). Lohmann also explores ‘iconic sequencing’, noting that the sequence of elements in language mirrors the order found in extra-linguistic reality (2014: 33–35). Mollin supports this view by suggesting that if

the referents of the two elements in a binomial are perceived to follow a chronological or cause-and-effect sequence in the real world, the elements will retain this order in the binomial (2014: 79–80).

This constraint is exemplified in various binomials in Watson (1993) and Reeves (2008) with verbal elements, illustrating a consistent sequence of actions, such as *open up and show* (Watson 1993: 131, Reeves 2008: 284), *sprout and grow* (Watson 1993: 99), *stop and rest* (Reeves 2008: 198). Binomials such as *beginning and end* (Watson 1993: 217), *present and future* (Watson 1993: 50, Reeves 2008: 106), *past and future* (Watson 1993: 276) reflects the chronological sequence. Other examples include *birth or death* (Reeves 2008: 293), *neither arising nor ending* (Reeves 2008: 265), *blossoms and fruit* (Watson 1993: 53) also aligns with the prediction of iconicity constraint, as one is born before dying, arises before ending and blooms before bearing fruits.

(b.) Power

Similar to iconicity, the power constraint reflects a particular real-world relation in SoE of binomials, underlying societal values and hierarchies. As Malkiel suggests, the sequence of words in a binomial may align with a hierarchy of values inherent in the structure of a particular society, or an alliance of societies (1959: 145–147). Benor and Levy expand on this concept, proposing that the power constraint dictates the positioning of elements in a binomial, with the more powerful or significant element typically appearing in the initial position (2006: 239). Lohmann employs the term 'extralinguistic hierarchy' to refer to a principle that applies to "constituents that denote referents that are hierarchically related" (2014: 35). Mollin also discusses an 'extralinguistic' knowledge that influences SoE, noting that the element whose real-world referent is perceived as more powerful or central in society typically appears first (2014: 81–82).

This constraint is exemplified by binomials such as *gods and people* (Reeves 2008: 110), *rulers and princes* (Watson 1993: 202), *ministers and attendants* (Reeves 2008: 326), *the Buddha and the monks* (Reeves 2008: 61), with the former being higher in ranks or more esteemed. Gender-related binomials such as

male or female (Watson 1993: 257, Reeves 2008: 328), *asuras and asura daughters* (Watson 1993: 260) showcase the social bias with men over women. Mollin (2014) also includes size hierarchy as under 'power' constraint, as reflected by *lands and cities* (Reeves 2008: 142).

In addition, Benor and Levy (2006) and Mollin (2014) discuss the difference in societal centrality as reflected by binomial such as *salt and pepper*, proposing that *salt* is "considered more important or central in our society" (Benor and Levy 2006: 239). In Watson (1993) and Reeves (2008), binomials such as *food and clothing* (Watson 1993: 83, Reeves 2008: 143), *eat and drink* (Reeves 2008: 323), *gold and silver* (Reeves 2008: 147), *sun and moon* (Reeves 2008: 184) can similarly be considered as under the influence of power constraint, with Element 1 positing a more central status in society.

(c.) Perceptual markedness

In linguistics 'markedness' refers to "the presence versus the absence of a particular linguistic feature" (s.v. "markedness" *A Dictionary of Linguistics and Phonetics*, p. 295). Semantically, Mayerthaler proposes that certain qualities are considered semantically less marked, signifying that they are more prototypical or typical within a given context. He summarises that "a semantically less marked category [...] reflects prototypical speaker attributes." ([1981] 1988: 9). This proposal to some extent aligns with Cooper and Ross's proposal of 'Me First' Principle as a semantic constraint to conclude what these traits have in common: "first conjuncts refer to those factors which describe the prototypical speaker" (1975: 67).

Based on the previous research, Benor and Levy first introduce the notion of 'perceptual markedness' constraint as an influencer of SoE in binomials, which predicts "perceptually unmarked before perceptually marked" (2006: 238). They summarise the pairs of perceptually marked and unmarked concepts proposed by Mayerthaler ([1981] 1988) in the following table:

Less marked	More marked

animate	inanimate
singular	plural
right	left
positive	negative
concrete	abstract
front	back
above	below
vertical	horizontal

Table 9.1.4.1.1 Pairs of perceptually marked and unmarked concepts (Benor and Levy 2006: 238)

Lohmann employs the term ‘conceptual accessibility’, reflecting preferences for ordering based on immediate cognitive accessibility. These preferences include patterns such as vertical before horizontal, up before down, right before left, animate before inanimate, positive before negative, concrete before abstract, and prototype before non-prototype, among others (2014: 36–40), which align with the proposal by Benor and Levy (2006). Mollin employs the same terminology as Benor and Levy (2006) in her research, which suggests the predictions of “positive before negative, near before far, or front before back” (Mollin 2014: 80).

In binomials *this or that* (Watson 1993: 26), *in the world or after their extinction* (Watson 1993: 40), *here and there* (Watson 1993: 63, Reeves 2008: 115), Elements 1 are perceptually closer to the speaker whether locationally or temporally. In binomials *I and my sons* (Watson 1993: 57), *parents and relatives* (Watson 1993: 246), Element 1 is closer in relationship of to the speaker than Element 2. Binomials *people or scriptures* (Watson 1993: 201), *birth or death* (Reeves 2008: 293) reflect animate before inanimate. Binomial *one and all* (Watson 1993: 125) reflects singular before plural. The binomial *east and west* (Watson 1993: 59) indicates right before left on the map. The binomials *pleasing or ugly* (Watson 1993: 8, Reeves 2008: 57), *love or hate* (Watson 1993: 103)

reflect positive before negative, and the binomials *body and mind* (Watson 1993: 5, Reeves 2008: 55), *physically or emotionally* (Reeves 2008: 247) reflect concrete before abstract concepts.

Regarding the "interaction between space-axis factors", Cooper and Ross also conclude that "up preceding down and vertical preceding horizontal" and attribute to psychological evidence on semantic relations of up-down, right-left and vertical-horizontal, where the former precedes the latter concepts (1975: 86), which is in line with conclusion of Mayerthaler ([1981] 1988), where above is less marked than down, and vertical less marked than horizontal. Binomials such as *high up and far away* (Watson 1993: 176), *tall and wide* (Watson 1993: 242, Reeves 2008: 310) showcase this constraint. However, cases of violation of this constraint are also seen, such as *width and depth* (Watson 1993: 12, Reeves 2008: 175), *wide and deep* (Reeves 2008: 235), *long and set high* (Watson 1993: 248) where horizontal concept precedes vertical ones.

Langacker also proposes other principles of 'relative salience' (1993: 30), including "whole before part" as reflected in *face and eyes* (Watson 1993: 250, Reeves 2008: 320), *heads and eyes* (Reeves 2008: 59), *bodies and limbs* (Reeves 2008: 59), *branches and leaves* (Watson 1993: 30, Reeves 2008: 83), and "visible before non-visible", as in *exposed or hidden* (Reeves 2008: 324). But some violation examples are also noted such as *in and out* (Reeves 2008: 150).

In addition, Benor and Levy categorise binomials such as *see or hear* (Watson 1993: 165), *colors and sounds* (Reeves 2008: 229) as influenced by perceptual markedness constraint, as "seeing is a more salient form of perception" (2006: 239), as well as *day and night* (Reeves 2008: 105), as "humans usually spend more waking hours during the day" (2006: 239). These examples collectively suggest that the constraint of perceptual markedness has broad applicability.

(d.) Formal markedness

Similar with perceptual markedness, this constraint is also first introduced by Benor and Levy and predicts that Element 1 is formally less marked than Element

2. Specifically, they follow the criteria proposed by Battistella (1990), which suggest that "less marked items tend to: a. have a broader, more general meaning, b. have greater freedom of distribution, c. have a larger number of subcategorical distinctions and d. be structurally more simple" (Benor and Levy 2006: 237). According to Mollin, this constraint is "purely linguistic of the semantic constraints" and is often seen in binomials with synonymous element (2014: 82).

Take the binomial *old and decrepit* (Watson 1993: 82, Reeves 2008: 316) as an example, where the Element 2 *decrepit* "Of living beings (and their attributes): Wasted or worn out with old age, decayed and enfeebled with infirmities; old and feeble." (s.v. "decrepit, adj.1" *OED online*. 30 June 2024), a synonym to the Element 1 *old* and more specific in meaning. Therefore, it is placed in the second place as it is formally less marked. Other examples include *old and decaying* (Watson 1993: 56, Reeves 2008: 113), *big and rambling* (Watson 1993: 56), *good and gentle* (Watson 1993: 38, Reeves 2008: 92), etc.

(e.) Number of syllables

Cooper and Ross relate the number of syllables constraint to Pāṇini's Law, proposed by the 4th Century BCE Sanskrit linguist Pāṇini, which suggests that "compared to place 1 element, place 2 elements contain more syllables" (1975: 71). Pinker and Birdsong also attribute the "Law of Syllable Number" to Pāṇini, suggesting that the first element typically has fewer syllables than the second (1979: 499).

Various studies have identified syllable count as a primary constraint influencing SoE in binomias. Malkiel notes a significant tendency in Modern English towards the "short plus long" pattern, which also covers the SoE of binomials (1959: 149). Benor and Levy succinctly encapsulate this principle with the rule that "A should not be longer than B" (2006: 242). Similarly, Lohmann examines the length in syllables of constituents within coordinate constructions and confirms that the first element is typically shorter than the second (2014: 44). Mollin, classifying this constraint as 'metrical-phonological', also observes that

the element in the first position of a binomial pair (slot A) is generally expected to have fewer syllables than the element in the second position (slot B) (2014: 83).

Examples such as *fine and wonderful* (Watson 1993: 113) and *pure and spotless* (Reeves 2008: 378) illustrate this principle. Compared to the other four semantic constraints, this constraint is easier to be identified to just count and compare the number of syllables in the two elements.

Apart from the five general SoE constraints, as Watson (1993) and Reeves (2008) are translation works, the influence of the source text is also unneglectable, therefore also serves as an additional constraint. The SoE constraints discussed in this section as well as their predictions are summarised into the following table:

SoE constraints	Predictions
Iconicity	SoE mirrors the real-world sequence
Power	Element 1 possesses higher social hierarchy than Element 2
Perceptual markedness	Element 1 is semantically less marked than Element 2.
Formal markedness	Element 1 is formally less marked than Element 2
Number of syllables	Element 1 contains less counts of syllables than Element 2
Source text	SoE in the TT aligns with that in the ST

Table 9.1.4.2 SoE constraints in this study and their predictions

9.1.4.2 Methodology: Activity Rate and Success Rate

To be able to quantify the impact of six constraints on SoE, a methodology introduced by Mollin (2014) is referred to and used in a supplemented form.[28] The constraint is initially classified as being either 'active' or 'inactive'. An active constraint plays a role in determining the order of elements, whereas an inactive constraint is irrelevant to SoE despite of its presence. For example, for the binomial *fitting and wonderful* (Watson 1993: 244), the constraint Number of Syllables is active since Element 1 possesses two syllables and Element 2 three,

[28] Mollin (2014) only utilises "Success Rate" in her study to measure the operationalism of ordering constraints, whereas this study supplements her approach by first examining the "Activity Rate" of the constraints.

aligning with the prediction 'short before long'. However, the constraint Power is inactive, since the two elements are not comparable regarding their social hierarchy. Therefore, the Activity Rate indicator is introduced and can be calculated using the following formula, where *active* denotes the number of tokens where constraints are active, and *total* refers to the total tokens of binomial occurrences in Watson (1993) or Reeves (2008), which without reference from COCA: 883 and 696 respectively:

Formula 2: Activity Rate = $\frac{active}{total} \times 100\%$

In cases where a constraint is active and the binomial's SoE aligns with its prediction, it 'succeeds' in its prediction, as when the Number of Syllables constraint succeeds in predicting the binomial *fitting and wonderful* (Watson 1993: 244). Conversely, when the actual SoE does not align with the prediction, the constraint 'fails' in its prediction. For example, regarding the binomial *people and gods* (Reeves 2008: 70), the Power constraint fails as Element 1 possess lower social hierarchy than Element 2, going against its prediction. Therefore, the indicator of Success Rate, as proposed by Mollin (2014: 87–88), can be utilised as an additional reference, employing the following formula, where *suc.* represents the number of cases where the actual order aligns with the constraints' predictions, and *active*, as in the formula refers to the number of cases when the constraints are active:

Formula 3: Success Rate = $\frac{suc.}{active} \times 100\%$

9.1.4.3 Results and discussions

With the definitions of the constraints established and the methods outlined for quantifying and comparing their functionality, Tables 9.1.4.3.1 and 9.1.4.3.2 present the results of their Activity Rates and Success Rates, with a declining order of the Activity Rates.

Constraints	Watson (1993)	Reeves (2008)
Source text	95.24	93.97
Number of syllables	79.95	84.77

Power	14.72	24.71
Iconicity	9.63	7.90
Perceptual markedness	7.25	8.62
Formal markedness	7.02	5.46

Table 9.1.4.3.1 Activity Rates of SoE constraints in binomials from Watson (1993) and Reeves (2008)

Constraints	Watson (1993)	Reeves (2008)
Iconicity	98.82	96.36
Source text	97.86	90.37
Formal markedness	96.77	97.37
Power	96.15	70.93
Number of syllables	72.10	64.92
Perceptual markedness	71.88	93.33

Table 9.1.4.3.2 Success Rates of SoE constraints in binomials from Watson (1993) and Reeves (2008)

From the tables, it is evident that although the source text has the highest Activity Rate in both translations, it does not consistently predict the order, as evidenced by the – albeit few – instances where the order is reversed. Among the other five constraints, the number of syllables emerges as the second most active constraint in both translations; however, it demonstrates a relatively low Success Rate of 72.10 and 64.92 in Watson (1993) and reeves (2008), respectively. In contrast, iconicity often succeeds in predicting the SoE, despite its comparatively low Activity Rate. The Success Rate of the power constraint is significantly higher in Watson (1993) than in Reeves (2008), at 96.15 and 70.93, respectively. However, the perceptual markedness constraint shows a markedly higher Success Rate in Reeves (2008) compared to Watson (1993), despite its low Activity Rate in both translations. Similarly, the formal markedness constraint demonstrates a high Success Rate, reaching 97.37 in Reeves (2008), although its Activity Rate remains the lowest in both works. Nevertheless, the overall trend in Success Rate

aligns with the findings of Lohmann (2014) and Mollin (2014), where the four semantic constraints surpass the metrical-phonological constraint, namely the number of syllables.

To gain a better understanding of the functionality of these five constraints independent of the influence of the source text, a discussion is conducted regarding those with AlSoE and those with RevSoE.

9.1.4.3.1 Binomials with AlSoE

Their Success Rates among the binomials with AlSoE are presented in the following tables.

Constraints	Watson (1993)	Reeves (2008)
Number of syllables	58.32	54.65
Power	14.95	20.47
Iconicity	10.09	8.63
Formal markedness	5.71	4.40
Perceptual markedness	5.47	8.63

Table 9.1.4.3.3 Activity Rates of SoE constraints in binomials with AlSoE from Watson (1993) and Reeves (2008)

Constraints	Watson (1993)	Reeves (2008)
Iconicity	100.00	96.23
Formal markedness	97.92	100.00
Power	96.09	92.37
Perceptual markedness	73.77	94.44
Number of syllables	71.75	63.46

Table 9.1.4.3.4 Success Rates of SoE constraints in binomials with AlSoE from Watson (1993) and Reeves (2008)

Table 9.1.4.3.3 shows that the rankings of the Activity Rate for the five constraints in both translations are consistent, namely: number of syllables, power, iconicity, perceptual markedness, and formal markedness. These findings align with those presented in Table 9.1.4.3.1. Regarding the Success Rate, the

results in Table 9.1.4.3.4 similarly correspond with those in Table 9.1.4.3.2. Notably, the power constraint in Reeves (2008) demonstrates a higher Success Rate in binomials with AlSoE than the other, suggesting that more instances of violation occur in binomials with RevSoE.

9.1.4.3.2 Binomials with RevSoE

In this category, Watson (1993) contains 18 tokens (15 types), while Reeves (2008) includes 63 tokens (18 types), as shown in the tables below, alongside the constraints that successfully predict their SoEs.

Binomials in Watson (1993)	ST	Raw frequency of RevSoE	(Ir)reversibility score in Watson (1993)	Succeeding constraints
preach and expound (p. 246 & 278)	演說 (*yǎn shuō* 'expound [and] speak')	2	100	Number of syllables
steadfast and truthful (p. 30 & 34)	真實 (*zhēn shí* 'real [and] firm')	2	100	
heavenly and human beings (p. 224 & 285)	人天 (*rén tiān* 'human [and] heaven')	2	95.65	Number of syllables; Power
both width and depth (p. 248)	縱廣 (*zòng guǎng* 'vertical [and] horizontal')	1	100	
carefully and with one mind (p. 102)	一心善聽 (*yī xīn shàn tīng* 'one mind carefully listen')	1	100	Number of syllables; Formal markedness

fitting and wonderful (p. 244)	妙好 (*miào hǎo* 'wonderful [and] fine')	1	100	Number of syllables; Formal markedness
great and encompassing (p. 305)	廣大 (*guǎng dà* 'broad [and] big')	1	100	Number of syllables; Formal markedness
handed out and gathered in (p. 85)	取與 (*qǔ yǔ* 'to take [and] to give')	1	100	
long and set high (p. 248)	高而長 (*gao er chang*, 'high and long')	1	100	Number of syllables
old and worn out (p. 228)	衰老 (*shuai lao*, 'decaying [and] old')	1	100	Number of syllables; Formal markedness
palms and ten fingernails (p. 313)	十指爪掌 (*shí zhǐ zhǎo zhǎng* 'ten fingers [and] palms')	1	100	Number of syllables; Perceptual markedness
pleasingly and without hindrance (p. 235)	無礙樂 (*wú ài lè* 'without hindrance [and] pleasantly')	1	100	Number of syllables

stain or defilement (p. 263)	穢濁 (*huì zhuó* 'defilement [and] dirt')	1	100	Number of syllables, Formal markedness
earnestly and diligently (p. 187)	勤加精進 (*qín jiā jīng jìn* 'diligently [and] earnestly')	1	33.33	Number of syllables

Table 9.1.3.2.4 Binomials with RevSoE from Watson (1993)

Binomials in Reeves (2008)	ST	Raw frequency of RevSoE	(Ir)reversibility score in Reeves (2008)	Succeeded constraints
human and heavenly beings (p. 67, etc.)	天人 (*tiān rén* 'heaven [and] human')	37	100	Number of syllables
surrounded and revered (p. 185, 187, etc.)	恭敬圍繞 (*gōng jìng wéi rào* 'revere [and] surround')	5	100	
whether exposed or hidden (p. 321, 322 & 324)	内外 (*nèi wài* 'inside [and] outside')	3	100	Perceptual markedness
both human and heavenly	天人 (*tiān rén* 'heaven [and] human')	2	100	Number of syllables

being (p. 108 & 246)				
old and worn out (p. 141)	朽邁 (*xiǔ mài* ‘rotting[and] old’)	2	100	Number of syllables, Formal markedness
exposed or hidden (p. 324)	内外 (*nèi wài* ‘inside [and] outside’)	1	100	Perceptual markedness
frown upon and abuse (p. 259)	噁口而顰蹙(*ě kǒu ér pín cù* ‘to speak ill and frown upon’	1	100	
my children and I (p. 113)	我及諸子 (*wǒ jí zhū zi* ‘I and all children’)	1	100	
pure and ornate (p. 64)	嚴淨 (*yán jìng* ‘decorated [and] clean’)	1	100	Number of syllables
purity and splendor (p. 173)	嚴淨 (*yán jìng* ‘decorated [and] clean’)	1	100	
seat and bed (p. 247)	床座 (*chuáng zuò* ‘bed [and] seat’)	1	100	
the exposed and the hidden (p. 322)	内外 (*nèi wài* ‘inside [and] outside’)	1	100	Perceptual markedness

to make or to adorn (p. 93)	嚴飾作 (*yán shì zuò* 'to decorate [and] to make')	1	100	Number of syllables, Iconicity, Formal markedness
with insight and by skillful means (p. 207)	方便知見 (*fāng biàn zhī jiàn* 'skillful means [and] insight')	1	100	Number of syllables
people and gods (p. 70)	天人 (*tiān rén* 'heaven [and] human')	1	50	
tranquility and goodness (p. 117)	善寂 (*shàn jì* 'goodness [and] tranquillity')	1	50	
trained and in training (p. 141)	學無學 (*xué wú xué* 'in training [and] trained')	1	33.33	Number of syllables, Power

Table 9.1.3.2.5 Binomials with RevSoE from Reeves (2008)

The results highlight the significant role of the constraint of number of syllables, particularly in Watson (1993), where 11 out of 15 binomials align with the predictions of this constraint. Meanwhile in Reeves (2008), this is observed in only 7 out of the 18 cases. Examples include *earnestly and diligently* (Watson 1993: 187), *pleasingly and without hindrance* (Watson: 235), *preach and expound* (Watson 1993: 305), *purity and splendor* (Reeves 2008: 173), *with insight and by skillful means* (Reeves 2008: 207). No violations of this constraint are observed in

Watson (1993), whereas Reeves (2008) presents six instances, including *people and gods* (Reeves 2008: 70), *frown upon and abuse* (Reeves 2008: 259), *tranquility and goodness* (Reeves 2008: 117), among others. This suggests a greater degree of flexibility in binomial formation in Reeves (2008) compared to Watson (1993).

The formal markedness constraint is observed in five instances in Watson (1993), but only in two instances in Reeves (2008). Examples include *stain or defilement* (Watson 1993: 263), *pleasingly and without hindrance* (Watson 1993: 235), *great and encompassing* (Watson 1993: 305), *fitting and wonderful* (Watson 1993: 244), *old and worn out* (Watson 1993: 228, Reeves 2008: 141), to make or to adorn (Reeves 2008: 93). This suggests that the formal markedness constraint also plays a more prominent role in Watson's translation. It is also worth noting that these examples also adhere to the syllable number constraint, which aligns with the aforementioned criteria proposed by Battistella (1990), wherein the formally less marked item is considered "structurally more simple".

The perceptual markedness constraint is observed in one instance in Watson (1993) and in three instances in Reeves (2008), although the latter's three instances can be considered variations of the same binomial. The binomial *palms and ten fingernails* (Watson 1993: 313) suggests "whole before part", while the binomials *whether exposed or hidden* (Reeves 2008: 321, 322, 324), *the exposed and the hidden* (Reeves 2008: 322) and *exposed or hidden* (Reeves 2008: 324) reflect the "visible before invisible" principle. However, two binomials *long and set high* (Watson 1993: 248), *both width and depth* (Watson 1993: 248) contradict the prediction of "vertical before horizontal" sequence. Another instance of violation is *my children and I* (Reeves 2008: 113), which, although it breaches the 'Me First' principle, reflects a politeness convention. This convention, as noted by Cooper and Ross, often "runs counter to natural linguistic tendencies" (1975: 105) by placing the element more distant from the speaker – *my children* – in Slot 1.

The functionality of power constraint is exemplified by *heavenly and human beings* (Watson 1993: 224, 285) and *trained and in training* (Reeves 2008: 141).

However, Reeves (2008) presents more instances of violations of this constraint in the binomials related to "human" and "heaven": *human and heavenly beings* (Reeves 2008: 67, etc.) *both human and heavenly beings* (Reeves 2008: 108 & 246) and *people and gods* (Reeves 2008: 70), where elements of lower hierarchy *human* are placed before those of higher hierarchy *heavenly being*. This could also be interpreted as following the perceptual markedness constraint, with the element closer to the speaker *human* appearing first. However, given the obvious hierarchical distinction between human and heavenly beings, particularly within the context of Buddhist religious discourse, the preference is better explained by the power constraint. The differing preferences in sequence by the two translators are further discussed in Section 9.1.4.3.3.

The iconicity constraint is only observed successful in one instance from Reeves (2008): *to make or to adorn* (Reeves 2008: 93), as a thing is usually "made" before being "adorned". This also aligns with the formal markedness constraint, as the former verb *to make* has a more general meaning than *to adorn*. The binomial *handed out and gathered in* (Watson 1993: 85) violates this constraint, as one would typically "gather in" first before "handing out". Some instances, however, remain debatable. For example, in the verbal binomials *preach and expound* (Watson 1993: 246, 278), *frown upon and abuse* (Reeves 2008: 259) and *surrounded and revered* (Reeves 2008: 185, etc.), it is unclear which chronological order these elements are ought to follow, as the actions could occur simultaneously, making both sequences in the ST and TT plausible.

In addition, there are cases where none of the discussed constraints appear to be clearly operational, whether successfully or not, including *steadfast and truthful* (Watson 1993: 30, 34), *seat and bed* (Reeves 2008: 247), where both elements in the binomials have the same number of syllables – two and one – and do not exhibit clear semantic constraints. Besides, the binomials *purity and splendor* (Reeves 2008: 173) and *tranquility and goodness* (Reeves 2008: 117) also lack evident semantic constraints and exhibit a reversed sequence in terms of syllable numbers. Nevertheless, given their infrequent occurrences in the

translations, these examples underscore the creativity of the translators, particularly in Reeves (2008).

9.1.4.3.3 Binomials involving "heaven" and "human"

The translation of 天人 (*tiān rén* 'heaven [and] human) and 人天 (*rén tiān* 'human [and] heaven')[29] warrant a more detailed analysis due to their frequent occurrences. In the Chinese ST, the sequence with 天 (*tiān* 'heaven') preceding 人 (*rén* 'human') occurs a total of 63 times, while the other sequence occurs only 7 times. However, in the translations by Watson and Reeves, different preferences in their SoE are observed.

In Watson (1993), the element meaning "heaven" before "human" as reflected in *heavenly and human being* (Watson 1993: 19, etc.) is his preferred SoE, with 65 occurrences, including two instances with RevSoE (see Table 9.1.3.2.4) when he reverses the sequence in ST to place 'heaven' in Slot 1. The binomial with alternative sequence *human and heavenly beings* (Watson 1993: 103, 145, 189) and *human or heavenly beings* (Watson 1993: 185, 219), with 5 tokens, being consistent to ST 人天 (*rén tiān* 'human [and] heaven').

In comparison, Reeves (2008) tends to reverse the SoE, placing the term for "human" before "heaven" when translating 天人 (*tiān rén* 'heaven [and] human') and employs a total of 40 binomials with RevSoE (see Table 9.1.3.2.5). His instances of AlSoE include *heavenly beings and people* (Reeves 2008: 65 etc.) 20 times, which appear exclusively within the phrase *teacher of heavenly being or people*, as well as *heavenly or human beings* (Reeves 2008: 101) (one instance), *gods and people* (Reeves 2008: 110) (one instance), and *gods and humans* (Reeves 2008: 155) (one instance).

When translating 人天 (*rén tiān* 'human [and] heaven'), Reeves generally follows the original SoE, as seen in *human and heavenly being* (Reeves 2008: 165, 313, 357) (three instances), *human or heavenly being* (Reeves 2008: 250,

[29]As Chinese is not an inflectional language like English, the decision to translate elements in either singular or plural form must be determined based on the co-text. In this instance, the singular form is employed in the translation of the terms. The following examples include both singular and plural forms, with a focus exclusively on the sequencing from the semantic perspective.

286) (two instances), and *people and gods* (Reeves 2008: 209) (one instance). Only on one occasion does he reverse the sequence to *gods and people* (Reeves 2008: 253), demonstrating a flexible use of various binomial forms.

These deviations highlight the flexibility and freedom of translators in dealing with their text. It is possible that the translator introduced these variations to innovate or to avoid the repetitive occurrence of one structure. However, the precise reason remains known only to the translator. Although such cases are comparatively rare and do not significantly affect the overall trend, their existence demonstrates the unpredictability and innovativeness in the process of language production, even in translation, which also reflects the translator's style.

9.1.4.4 Interim summary

Section 9.1.4 has examined some SoE constraints and their functionality in forming the binomials that lack any references from COCA. To assess the impact of the TL on the formation of binomials, five constraints and their Success Rates in predicting the SoE are analysed: iconicity, power, perceptual markedness, formal markedness, and number of syllables. The ST is considered as the sixth constraint for comparative analysis.

The results indicate that among these constraints, the number of syllables constraint emerges as the most active constraint when the translator decides the SoE, though its success rates are lower than those of other semantic constraints. Nevertheless, there are many instances in which both translators reverse the SoE to align with this constraint, particularly Watson (1993). The iconicity and formal markedness constraints exhibits high Success Rate in predicting the order, but the former is less active for cases with RevSoE. The perceptual markedness constraint reveals differences in dimensional cognition between Chinese and English users, and the power constraint is often violated in Reeves (2008). Overall, Reeves (2008) contains more instances where a constraint's prediction is violated, reflecting a freer translation style.

A detailed study of the translations of binomials involving "heaven" and "human", such as 天人 (*tiān rén* 'heaven [and] human') and 人天 (*rén tiān*

‘human’ [and] heaven’), provides further insight into Reeves’s translation approach. While Watson strongly favours the sequence *heavenly and human beings*, aligning with both the Power constraint and the ST, Reeves prefers the sequence *human and heavenly beings*, even when this involves reversing the SoE of the ST. This highlights the differing preferences and strategies employed by each translator.

9.1.5 Summary

This section has delved into the intricate interplay between the source language (Chinese) and the target language (English) during the translation of binomials, particularly regarding the sequence order of their elements. Initially, the section examined the (ir)reversibility score, serving as an indicator of a binomial’s reversibility. The findings reveal that in both translations, irreversible binomials prevail, contrasting with previous research results, potentially due to differences in the particular register and the limited scale of database.

The study then investigated the comparative influence of the source and target languages by comparing the (ir)reversibility score in the translations and in COCA. It becomes evident that translators strive for balance between the two language systems. Binomials with AlSoE dominate in both translations and are often preferred SoE in COCA. However, there are instances in both translations where their strong preferences in COCA prompt translators to reverse the SoE, deviating from the source text.

In the case of binomials lacking reference data in COCA, Section 9.1.4 utilizes SoE constraints to examine the influence of the target language when translators create such novel binomials. Specifically, the study examines five constraints, namely, iconicity, perceptual markedness, power, formal markedness, and number of syllables. The findings parallel trends observed with COCA data, also underscoring the translators’ endeavour to strike a balance between the source and target languages, as evidenced by the Activity Rates and Success Rates of these constraints. Notably, among these constraints, the number of syllables

emerges as a SoE constraint with a high level of activity in binomials with both AlSoE and RevSoE. However, its success rate is lower than that of semantic constraints, underscoring the latter's paramount importance in the formation of English binomials, a finding consistent with previous studies.

Furthermore, a case study of the translation of 天人 (*tiān rén* 'heaven [and] human') and 人天 (*rén tiān* 'human [and] heaven') showcases distinctly different translation strategies by Watson (1993) and Reeves (2008), underscoring the flexibility and freedom inherent in creating binomials in English. This highlights the dynamic nature of translation activity and the nuanced decisions translators make based on linguistic and contextual factors.

9.2 The restructuring of multinomials

9.2.1 Overview

As previously explored in Section 7.2.2.1.2, in translating multinomials, both translators occasionally opt to restructure a multinomial from the ST into a combination of binomials. For instance, the quadrinomial 草木叢林 (*cǎo mù cóng lín* 'grass, trees, thickets [and] forests'), is rendered as *plants and trees, thickets and groves* (Watson 1993: 101) (see Example 122), a combination of two binomials.

In Watson's (1993) translation, there are 26 such multinomials, whereas Reeves (2008) has 59 instances. The distributions of restructured multinomials (tokens) by their numbers of elements (length) are illustrated in the following figures.

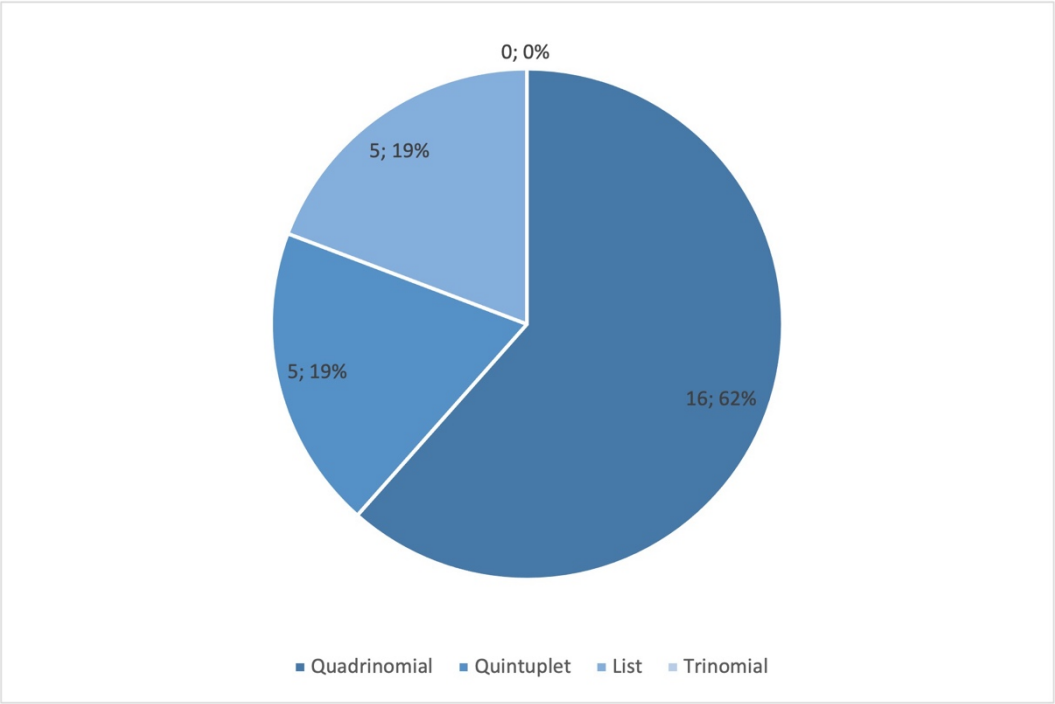

Figure 9.2.1.1 Distribution of restructured multinomials (tokens) in Watson (1993) by length

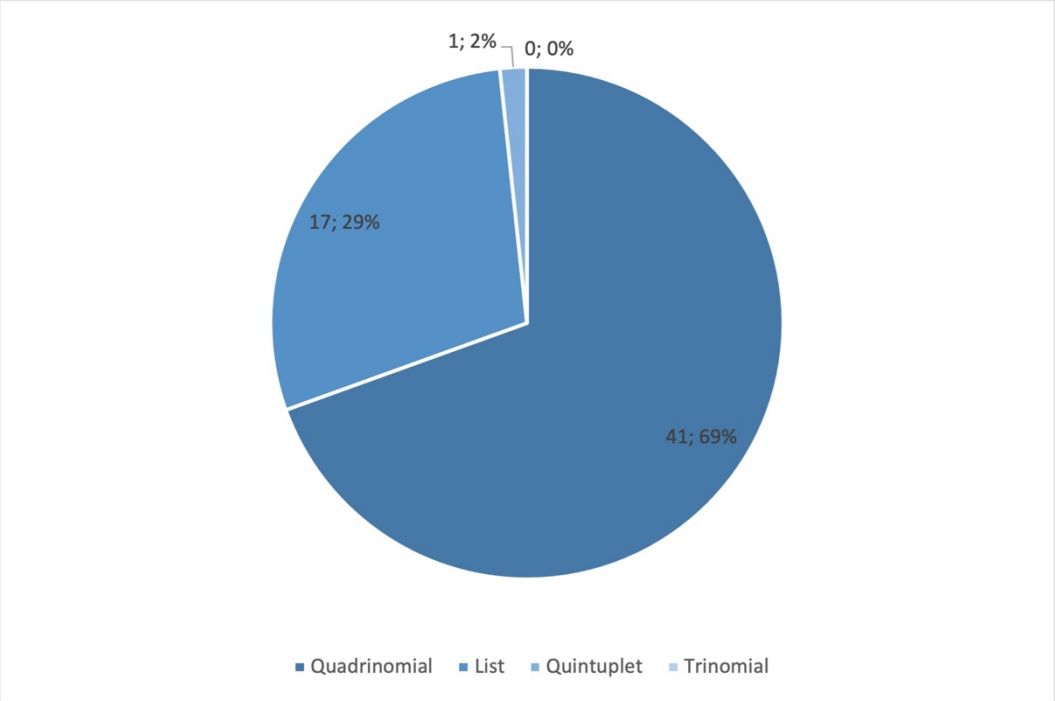

Figure 9.2.1.2 Distribution of restructured multinomials (tokens) in Reeves (2008) by length

The distribution reveals similar patterns in both translations, with no instances of trinomials identified in either. Quintuplets are the second least

common type in Reeves (2008), with only one occurrence of 水腫幹痟疥癩癰疽 (*shuǐ zhǒng gàn xiǎo jiè lài yōng jū* 'blisters, scurvy, scabs, sores, abscesses'), rendered as *blisters and scurvy, scabs, sores and abscesses* (Reeves 2008: 136). In contrast, Watson (1993) contains five instances of quintuplets, including 來往行坐臥 (*lái wǎng xíng zuò wò* 'coming, going, walking, sitting, lying down'), which is translated as *coming and going, walking, sitting, lying down* in Watson (1993: 258) (see Example 129).

The most prevalent type involves splitting quadrinomials in ST into two binomials, with 16 instances in Watson (1993) and 41 in Reeves (2008). For example, the quadrinomial 受持讀誦 (*shòu chí dú sòng* 'receive, hold, read, recite') is restructured 18 times in Reeves (2008) as *receive and embrace, read and recite* (Reeves 2008: 246, etc.), whereas in Watson (1993) it is restructured only once as *accept and uphold, read and recite* (Watson 1993: 307) (co-text see Example 126). On other occasions, Watson retains the original phrase structure as a quadrinomial, rendering it as *accept, uphold, read and recite* (Watson 1993: 322, etc.). Reeves (2008) also restructures the quadrinomial 比丘、比丘尼、優婆塞、優婆夷 (*bǐ qiū, bǐ qiū ní, yōu pó sāi, yōu pó yí* 'monks, nuns, laymen, laywomen') into *monks and nuns, laymen and laywomen* (Reeves 2008: 55, etc.) on eight occasions (Reeves 2008: 55, etc.), while Watson (1993) consistently adheres to the ST, translating it as *monks, nuns, laymen and laywomen* (Watson 1993: 267, etc.) (co-text see Example 125).

The most frequent case in Watson (1993) involves the restructuring of the quintuplet 卉木叢林及諸藥草 (*huì mù cóng lín jí zhū yào cǎo* 'plants, trees, thickets, forests and medicinal herbs'), which is translated as *plants and trees, thickets and groves, and medicinal herbs* (Watson 1993: 98, etc.), with four occurrences. In comparison, Reeves's translation aligns with the ST, rendering it as *plants, trees, thickets, forests and medicinal herbs* (Reeves 2008: 159, etc.)

Both translations also feature lists that are restructured into groups of binomials or shorter multinomials, with the following list being the longest, containing 44 elements:

(146) 象聲、馬聲、牛聲、車聲，啼哭聲、愁歎聲，螺聲、鼓聲、鍾聲、鈴聲，笑聲、語聲，男聲、女聲、童子聲、童女聲，法聲、非法聲，苦聲、樂聲，凡夫聲、聖人聲，喜聲、不喜聲，天聲、龍聲、夜叉聲、乾闥婆聲、阿修羅聲、迦樓羅聲、緊那羅聲、摩睺羅伽聲，火聲、水聲、風聲，地獄聲、畜生聲、餓鬼聲，比丘聲、比丘尼聲，聲聞聲、辟支佛聲，菩薩聲、佛聲 (*xiàng shēng, mǎ shēng, niú shēng, chē shēng, tí kū shēng, chóu tàn shēng, luó shēng, gǔ shēng, zhōng shēng, líng shēng, xiào shēng, yǔ shēng, nán shēng, nǚ shēng, tóng zǐ shēng, tóng nǚ shēng, fǎ shēng, fēi fǎ shēng, kǔ shēng, lè shēng, fán fū shēng, shèng rén shēng, xǐ shēng, bù xǐ shēng, tiān shēng, lóng shēng, yè chā shēng, qián tà pó shēng, ā xiū luó shēng, jiā lóu luó shēng, jǐn nà luó shēng, mó hóu luó jiā shēng, huǒ shēng, shuǐ shēng, fēng shēng, dì yù shēng, xì zhū shēng, è guǐ shēng, bǐ qiū shēng, bǐ qiū nī shēng, shēng wén shēng, bì zhì fó shēng, pú sà shēng, fó shēng*) (CBETA 2024.R2, T09, no. 262, pp. 47c26-48a4)

"elephant sounds, horse sounds, ox sounds, carriage sounds, weeping sounds, lamenting sounds, conch sounds, drum sounds, bell sounds, chime sounds, sounds of laughter, sounds of speaking, men's voices, women's voices, boys' voices, girls' voices. the voice of the law, the voice that is not the law, bitter voices, merry voices, voices of common morals, voices of sages, happy voices, unhappy voices, voices of heavenly beings, dragon voices, yaksha voices, gandharva, voices, asura voices, garuda voices, kimnara voices, mahoraga voices, the sound of fire, the sound of water, the sound of wind, voices of hell dwellers, voices of beasts, voices of hungry spirits, monks' voices, nuns' voices, voices of voice-hearers, voices of pratyekabuddhas, voices of bodhisattvas and voices of Buddhas" (Watson 1993: 252).

"elephant sounds, horse sounds, cattle sounds, sounds of carriages, sounds of weeping, sounds of lamentation, conch sounds, drum sounds, gong sounds, bell sounds, sounds of laughter, sounds of conversation, sounds of men and women, sounds of boys and girls, sounds of the righteous and the unrighteous, sounds of suffering and of delight, sounds of common people and of holy people, happy and unhappy sounds, sounds of gods, sounds of dragons, of satyrs and centaurs, of asuras and griffins, of chimeras and pythons, sounds of fire, sounds of water, sounds of wind, sounds from those in purgatories, sounds of animals, of hungry spirits, of monks and nuns, of shravakas and pratyekabuddhas, of bodhisattvas and of buddhas." (Reeves 2008: 322).

In Example (146), Watson generally adheres to the structure of the ST, employing various premodifiers and postmodifiers for two types of headwords – *sound* for inanimate beings and *voice* for animate beings. Reeves, by contrast, utilises only the headword *sound*, while restructuring the complete list into groups of multinomials, combining elements that are semantically closer to one

another, as seen in phrases such as *sounds of men and women*, *sounds of boys and girls*.

9.2.2 Analysis

While previous research on the restructuring of multinomials is limited, this study explores several hypotheses to and seeks explanations to such occurrences.

9.2.2.1 Semantic motivation

In some multinomials, certain elements exhibit closer semantic relations than others, prompting their natural grouping, as demonstrated by the following examples.

(147) 國城妻子 (*guó chéng qī zǐ* 'country, city, wife, children'), translated as *realm and cities, wife and children* (Watson 1993: 282, 285), where Watson groups it into two binomials since Elements 1 and 2 denote locations, while Elements 3 and 4 represent people (co-text see Example 128).

(148) 去來坐立 (*qù lái zuò lì* 'to go, to come, to sit, to stand'), translated as *going or coming, sitting or standing* (Reeves 2008: 165). Here, Reeves divides it into two binomials, considering that the first two elements indicate different directions of movement, while the latter two denote actions without movement.

(149) 比丘、比丘尼、優婆塞、優婆夷 (*bǐ qiū, bǐ qiū ní, yōu pó sāi, yōu pó yí* 'monks, nuns, laymen, laywomen'), rendered as *monks and nuns, laymen and laywomen* (Reeves 2008: 55, etc.). This restructuring aligns with Buddhist doctrines, as the former two elements refer to renunciants who leave their homes to practice Buddhism (s.v. "出家" *Foguang Da Cidian,* p. 1558), while the latter two denote practitioners who engage with Buddhist activities at home (s.v. "在家" *Foguang Da Cidian,* p. 2324).

(150) 龍、龍女、夜叉、夜叉女、乾闥婆、乾闥婆女、阿修羅、阿修羅女、迦樓羅、迦樓羅女、緊那羅、緊那羅女、摩睺羅伽、摩睺羅伽女 (*lóng, lóng nǚ, yè chā, yè chā nǚ, qián tà pó, qián tà pó nǚ, ā xiū luó, ā xiū luó nǚ, jiā lóu luó, jiā lóu luó nǚ, jǐn nà luó, jǐn nà luó nǚ, mó hóu luó jiā, mó hóu luó jiā nǚ* 'dragons, dragon daughters, yakshas, yaksha daughters, gandharvas, gandharva

daughters, asuras, asura daughters, garudas, garuda daughters, kimnaras, kimnara daughters, mahoragas, mahoraga daughters'), translated as:

dragons and dragon daughters, yakshas and yaksha daughters, gandharvas and gandharva daughters, asuras and asura daughters, garudas and garuda daughters, kimnaras and kimnara daughters, mahoragas and mahoraga daughters (Watson 1993: 260)

male and female dragons, male and female satyrs, male and female centaurs, male and female asuras, male and female griffins, male and female chimeras, and male and female pythons (Reeves 2008: 330)

The ST of Example (150) is a list comprising 14 elements and, in their translations, both Watson and Reeves choose to restructure it into one with 7 elements, grouping the elements in pairs according to their species and gender.

However, semantic motivation cannot consistently account for the translators' decisions, as evidenced by the alternative translations for Examples (147) to (149). Regarding the ST in Example (147), Reeves translates it as *town, countries and wives and children* (Reeves 2008: 355) and as *lands, towns, wives, children* (Reeves 2008: 357), adhering the original structure as a quadrinomial. For Example (148), Watson's translation remains faithful to the ST with *coming, going, sitting, standing* (Watson 1993: 103). As for Example (149), Watson translates it as *monks, nuns, laymen and laywomen* (Watson 1993: 267, etc.), also only adding a connector *and* using the modulation strategy. These differing approaches indicate the influence of the translators' personal choices in their creative process.

9.2.2.3 Cognitive motivation

Another perspective to consider is cognitive motivation, which explores the relationship between memory capability and the length of multinomials. Study by Miller demonstrates that the number seven is associated with the span of immediate memory, with individuals typically able to recall around seven items in a sequence (1956: 85). Additionally, Cowan et al. investigate the impact of list length on item-to-item associations in working memory, revealing that memory

for item associations tends to be better for shorter lists (2013: 1257). This theory can offer explanations for the restructuring of some longer lists, such as:

(151) 老死憂悲苦惱 (*lǎo sǐ yōu bēi kǔ nǎo* 'oldness, death, worry, grief, suffering, anguish') is restructured by the two translators as *old age and death, worry and grief, suffering and anguish* Watson (1993: 131) and *old age and death, anxiety and sorry, suffering and anguish* (Reeves 2008: 194).

(152) 有形、無形，有想、無想，非有想、非無想 (*yǒu xíng, wú xíng, yǒu xiǎng, wú xiǎng, fēi yǒu xiǎng, fēi wú xiǎng* 'with form, without form, with thinking, without thinking, not-with thinking, not-without thinking') is grouped by Reeves into pairs of two, as *with form or formless, thinking or unthinking, not thinking or not unthinking* (Reeves 2008: 316).

(153) 諸天人、龍神夜叉眾、乾闥緊那羅 (*jí jiàn zhū tiān rén, lóng shén yè chā zhòng, gān tà jǐn nà luó* 'heaven, people, dragon-gods, yakshas, gandharvas [and] kimnaras) is restructured in pairs by Reeves as *human and heavenly beings, dragon-gods and satyrs, centaurs and chimeras* (Reeves 2008: 69).

However, while cognitive motivation provides insights into the necessity of shortening long lists, it offers only a partial explanation for the translators' choices. For instance, the list of Example (146) consists of 44 elements, which, despite being restructured into different groups by Reeves (2008), is retained in the same structure in Watson (1993). Furthermore, cognitive motivation does not adequately explain why restructuring frequently occurs in quadrinomials, where managing four elements should not present a significant burden on memory, according to findings from previous research.

9.2.2.3 Influence of formulaic binomials

Frequency of the embedded binomials in the restructuring process can also explain certain cases when they have already appeared multiple times in the translations. A representative example involves the quadrinomial 受持讀誦 (*shòu chí dú sòng* 'receive, hold, read, recite') (co-text see Example 126), which incorporates the binomials 受持 (*shòu chí* 'accept [and] hold') and 讀誦 (*dú*

sòng ‘read [and] recite’). Excluding the restructured multinomials, the former binomial is frequently observed in both translations: *accept and uphold* (Watson 1993: 241, etc.) with 35 occurrences, while *receive and embrace* (Reeves 2008: 138, etc.) appears 38 times. Similarly, *read and recite* (Watson 1993: 16, Reeves 2008: 226, etc.) is noted 14 times in Watson’s work and 18 times in Reeves’s. Given their frequent occurrences, readers may find it easier to accept the consistency of the formulaic binomial throughout reading the translations, including when these binomials are integrated into a multinomial.

However, this explanation still possesses limitations. For instance, in Watson’s translation, the aforementioned quadrinomial is restructured as *accept and uphold, read and recite* only once (Watson 1993: 307), whereas in other instances, it is kept as a quadrinomial *accept, uphold, read, recite* (Watson 1993: 193, etc.), despite the high frequency of the embedded binomials, resulting in a formulaic multinomial among others (see Table 8.1.3). This again demonstrates the creative nature of the translation process.

9.2.2.4 Influence of the SL

The lexicalisation of binomials in SL can influence a translator’s approach when these binomials appear embedded within multinomials, as demonstrated in the following examples:

(154) 廣大深遠 (*guǎng dà shēn yuǎn* ‘broad, big, deep, far’), is restructured as *broad and great, profound and far-reaching* (Reeves 2008: 75) (co-text see Example 137).

In the ST, both 廣大 (*guǎng dà* ‘broad [and] big’) and 深遠 (*shēn yuǎn* ‘deep [and] far’) are now recognised as correlative compounds and are included in the *Xiandai Hanyu Cidian* ‘Modern Chinese Dictionary’ (s.v. “广大”, p. 488; “深远”, p. 1161). This lexicalisation inevitably influences the translator, resulting in the decision to divide the quadrinomial into two binomials, as evidenced in Reeves’s translation.

(155) 頭目身體 (*tóu mù shēn tǐ* ‘head, eyes, body, limb’) is translated as *heads and eyes, bodies and limbs* (Reeves, 2008: 59). Both 頭目 (*tóu mù*) and

身體 (*shēn tǐ*) are listed in the *Xiandai Hanyu Cidian* 'Modern Chinese Dictionary' (s.v. "头目", p. 1319; "身体", p. 1159), with the former undergoing a semantic shift to refer to the leader of a group (often with negative meanings).

(156) 草木叢林 (*cǎo mù cóng lín* 'grass, trees, thickets [and] forests') is translated as *plants and trees, thickets and groves* in Watson (1993: 98, etc.) (co-text see Example 127). While 叢林 (*cóng lín*) can be found in the dictionary (s.v. "丛林" *Xiandai Hanyu Cidian*, p.219), 草木 lacks its own dictionary entry. However, the construction is part of the idiom 草木皆兵 (*cǎo mù jiē bīng* 'every grass and tree become an enemy soldier, indicating a beleaguered feeling') (s.v. "草木皆兵" *Xiandai Hanyu Cidian*, p. 130), rendering the combination formulaic.

Nevertheless, the influence of the ST does not necessarily compel translators to group all lexicalised constructions together in their translations. As seen in these examples, the alternative translator often opts for a more indirect approach, preserving the quadrinomial's original form. Regarding Example (155), Watson translates it as the quadrinomial *head, eyes, bodies, and limbs* (Watson 1993: 9), while for Example (156), Reeves retains the original structure: *plants, trees, thickets, and forests* (Reeves 2008: 163).

9.2.3 Summary

This section has delved into the restructuring of multinomials in the two translations and endeavours to discern the underlying mechanisms behind this phenomenon. Watson (1993) contains 26 restructured multinomials, whereas Reeves (2008) has 59, indicating a higher prevalence of restructuring in the latter translation, particularly evident in the grouping of quadrinomials into clusters of two binomials.

However, despite exploring four hypothetical motivations – semantic, cognitive, frequency, and translational – this study cannot provide a definitive explanation for the restructuring of multinomials. While there is supporting evidence for each hypothesis, there are also counterarguments, leaving the matter unresolved. It can be concluded for now that the restructuring of multinomials

into groups of binomials is a notable feature in translations from Chinese to English, and the specific approach varies by translator and necessitates individual scrutiny.

9.3 Chapter summary

This chapter has delved into the complexities of the formation of English binomials and multinomials under the influence of Chinese ST, exploring the decisions translators make between the SL and TT. The analysis begins by focusing on the SoE of binomials, revealing a preference for irreversible binomials in the two translations. Both translators aim for a balance between the two language systems, and occasionally deviate from the ST due to established conventions in English language usage, as supported by corpus data. In exploring SoE constraints, the semantic constraint emerges as a pivotal factor in English binomial formation, surpassing the influence of metrical-phonological constraint. Between the two translators, Reeves (2008) demonstrates greater flexibility and creativity in his translation of binomials.

Section 9.2 focuses on restructuring of multinomials in the two translations, with Reeves (2008) exhibiting a higher prevalence compared to Watson (1993). Various motivations for this restructuring are explored, including semantic, cognitive, frequency, and translational motivations. However, no definitive explanation is reached, highlighting the intricate nature of translation activities where individual translators adopt unique approaches. Overall, this chapter underscores the dynamic nature of the formation of binomials and multinomials, influenced by the SL, the TL, as well as the translators' individual choices.

Chapter 10 Conclusion

Binomials and multinomials are multi-word expressions that embody a coordinative relationship between their constituent elements. Previous studies on such constructions reveal that they are processed holistically and exhibit schematic regularities in form. Building on this foundation, the current study undertakes a comprehensive investigation into the use of English binomials and multinomials in Buddhist textual translation from Chinese, focusing on two English versions of the Lotus Sutra by Watson (1993) and Reeves (2008). It contributes original insights into the structure and function of coordinated phrasal constructions. Employing a frequency-based approach and quantitative methodology, the study derives qualitative conclusions from the collection of binomials and multinomials found in the translations, with reference to their corresponding Chinese source texts. Situated within current debates in English phraseology and translation studies, this study conducts a multifaceted analysis encompassing frequency, grammatical features, translation strategies, formulaic usage, and structural patterns. It elucidates the complexities and nuances involved in translating these linguistic constructs from Chinese into English, offering a comprehensive and empirically grounded contribution to the understanding of binomials and multinomials in both linguistic and translational contexts.

10.1 Summary of findings

The quantitative and distributional analysis of binomials and multinomials in Watson (1993) and Reeves (2008) reveals that binomials occur with greater frequency than multinomials in both translations. A more detailed examination identifies distinct patterns of usage, establishing both the frequency and TTR for each category. These findings point to a stylistic divergence between the translators: Watson demonstrates a more formulaic deployment of fixed expressions, whereas Reeves employs a broader and more context-sensitive approach. The distribution of these expressions across and within different chapters exhibits no consistent pattern, indicating that their occurrence and form

are influenced not only by textual genre and doctrinal function, but also by each translator's stylistic preferences and interpretive strategies.

The grammatical analysis of binomials and multinomials offers further insight into their structures, connectors, as well as the grammatical and semantic properties of their elements. Both translations show a preference for basic structures over extended, with the coordinator *and* most frequently employed. Elements are classified by word class, phonological patterning (alliteration and rhyme), morphological composition, and etymological origin and results show that nouns dominate, followed by adjectives and verbs, while alliteration appears more frequently than rhyme, particularly in Watson's version. Morphologically, most binomials comprise simple words or involve affixation while compounding is rare. Etymologically, both translators exhibit a tendency to combine native and loanwords, occasionally incorporating Sanskrit-derived terms or substituting them with accessible English equivalents.

Semantically, the relations of the elements are categorised into synonymy, antonymy, and complementarity. Complementarity emerges as the most frequent relation in both translations. Synonymous binomials, typically employed for stylistic emphasis, occur more often in Watson's translation, usually coordinated by *and* and sometimes enhanced with phonological features like alliteration. Antonymous binomials show greater structural and lexical variation and frequently use *or* as a connector, especially in adjectival combinations. Complementary binomials which encompass co-hyponyms, sequential actions, and evaluative pairs, require contextual interpretation due to their semantic diversity.

Multinomials display consistent structural tendencies across both translations. Trinomials are the most common, followed by longer series. Basic structures prevail over extended forms, and *and* remains the preferred connector, although Reeves employs *or* more frequently than Watson. Coordination tags are regularly used to summarise enumerative lists, enhancing textual conciseness and clarity. Like binomials, multinomials predominantly consist of nouns or NPs.

However, unlike binomials, their primary function is informative rather than stylistic; they serve to categorise, sequence, or enumerate factual items. Complementarity is the sole semantic relation observed in multinomials, reflecting their expository rather than evaluative purpose.

The comparison between English binomials and multinomials and their corresponding Chinese reveals further insights into the translation strategies adopted by both translators. The analysis is situated within the structural particularities of Classical Chinese, notably its frequent use of asyndetic coordination and diachronic lexicalisation of binomial expressions. Given the typological differences between Chinese and English, both translators favour oblique translation strategies, particularly modulation, which typically involves the insertion or adjustment of conjunctions such as *and*, *or*, or correlative coordinators. Direct translation is relatively rare, due to structural incongruities between the source and target languages, though Reeves demonstrates a greater inclination towards direct translation. Watson, conversely, tends to adopt more adaptive renderings that align with English syntactic norms. Amplification is employed to expand minimal Chinese expressions into fuller English binomial or multinomial constructions, often to enhance clarity or express implicit semantic content. Five specific types of amplification are identified, including gender clarification, pronoun resolution, the addition of coordination tags, etc. In contrast, the economy strategy, which entails omission or reduction, is applied more sparingly. Overall, these translation choices reflect differing translational philosophies: Watson emphasises stylistic fluency and idiomaticity in the TL, while Reeves prioritises semantic fidelity to the SL.

An exploration of formulaic binomials and multinomials shows that although the recurrent cases represent only a minority, they are more prevalent in Watson's translation, suggesting a stronger reliance on established collocations. A comparison with earlier English translations indicates that Watson's rendering is more closely aligned, lexically and stylistically, with Hurvitz (1976), while Reeves demonstrates greater innovation and lexical divergence. Only a limited

number of binomials appear consistently across all translations, highlighting both the translators' creative agency and the minimal constraining influence of precedent. Formulaic multinomials exhibit even less cross-translation consistency, affirming their lower degree of lexical conventionalisation. Further comparison with general English corpora (BNC and COCA) reveals that most formulaic binomials in the translations do not appear in general usage. The few exceptions usually involve universal concepts, while the remainder are context-specific and reflect religious or doctrinal content. This contrast underscores the dual function of binomials: they may serve either as culturally embedded constructs within Buddhist discourse or as vehicles for conveying broadly recognisable human experience. Multinomials, by contrast, are largely absent from general corpora, reinforcing their idiosyncratic and highly contextual nature.

Finally, the study of formation of English binomials and multinomials under the influence of their Chinese source counterparts addresses how translators navigate divergences in structural norms. An indicator of (ir)reversibility score is employed in studying the SoE of binomials, and the analysis demonstrates that most binomials in both translations are irreversible, with Watson's translation showing a marginally higher percentage. This finding stands in contrast to previous studies on general English usage and likely reflects the specialised and doctrinal nature of the ST. In further examining the relationship with the ST, two types of sequencing alignment are identified: binomials with AlSoE and those with RevSoE. The former predominates in both translations, even in instances where the sequence is dispreferred according to COCA data, suggesting a strong influence from the SL. RevSoE occurs only in a limited number of cases, reflecting the influence of the TL. Notably, Reeves more frequently reverses the element order to achieve greater fluency and naturalness in English, whereas Watson tends to maintain the original sequence, demonstrating a stronger commitment to preserving fidelity to ST in terms of element sequencing. To account for binomials not attested in COCA, five sequencing constraints are evaluated using Activity Rate and Success Rate: iconicity, power, perceptual

markedness, formal markedness, as well as number of syllables. Among these, the constraint of number of syllables exhibits the strongest influence with the highest Activity Rate. However, semantic constraints, particularly iconicity and formal markedness, achieve the greatest predictive success, aligning with the findings from previous studies.

As for the formation of English multinomials, the study observes a particular feature regarding the frequent restructuring of the elements by the translators, particularly evident in Reeves's work, whereby complex multinomials in SL are reformulated as combinations of binomials in TL. The motivations behind such restructuring are multifaceted and nuanced, encompassing semantic, cognitive, frequency-related, and translational considerations.

10.2 Implications and future research

This dissertation integrates corpus-based analysis, grammatical investigation, and cross-cultural comparison, bridging theoretical linguistics with applied translation studies. It highlights the significance of translator agency in shaping linguistic form and semantic nuance, particularly in the translation of specialised and ritual texts. Moreover, it contributes to ongoing debates in phraseology, cognitive linguistics, and religious linguistics by foregrounding the functional and expressive versatility of MWEs. The findings of this dissertation have several implications for the field of translation studies and linguistic analysis. Firstly, they underscore the importance of considering both frequency and variety in the use of binomials and multinomials, as these factors influence textual cohesion and reader engagement. Secondly, the detailed examination of grammatical features provides valuable insights into the functional roles and stylistic significance of these constructs in translated texts. Additionally, they highlight the complexity involved in translating MWEs across typologically distinct languages, revealing how translators negotiate structural constraints, stylistic norms, and doctrinal meaning. By integrating corpus-based analysis, this study offers a model for examining MWEs across languages. It also affirms the importance of translator agency in

shaping textual meaning and demonstrates the interpretive flexibility of binomials and multinomials as both formulaic and context-sensitive expressions. More broadly, the study contributes to the fields of phraseology, translation studies, and religious linguistics, emphasising the need for greater attention to MWEs in specialised discourse.

Future studies could examine binomials and multinomials in other textual domains (e.g., legal, journalistic, or literary texts) to assess the extent to which the patterns identified here are genre-specific or generalisable. Comparative analysis involving other languages, particularly Sanskrit or Tibetan versions of the *Lotus Sutra*, could reveal how typological and cultural factors influence the formation, structure, and translation of MWEs. Investigating the historical development of binomial and multinomial expressions across time periods may offer insights into their lexicalisation and grammaticalisation processes. Constructionist approaches could further explore their status as entrenched schematic constructions in the mental lexicon. Finally, computational methods including machine learning and natural language processing (NLP) could be employed to automate the detection and classification of binomials and multinomials at scale, particularly context-sensitive or semantically opaque instances. Such tools could support glossary compilation, enhance machine translation accuracy, and aid human translators in identifying fixed expressions within specific registers.

10.3 Concluding remarks

In conclusion, this dissertation has provided a thorough and nuanced exploration of binomials and multinomials employed in the translations of Watson (1993) and Reeves (2008), contributing to a deeper understanding of these linguistic phenomena and their role in translation, highlighting the dynamic nature of translation activities, where individual translators' choices play a crucial role in shaping the linguistic and stylistic outcomes of translated texts. By doing so, this dissertation offers a comprehensive and empirically grounded exploration of binomials and multinomials as structurally intricate, semantically flexible, and

translationally significant expressions, providing a foundation for future interdisciplinary research into the nature of multi-word constructions across languages, genres, and contexts.

Bibliography

1. Primary sources

Bunno, Kato, Yoshiro Tamura and Kojiro Miyasak. 1975. *The Threefold Lotus Sutra*. New York: John Weatherhill.

Hurvitz, Leon. 1976. *Scripture of the Lotus Blossom of the Fine Dharma*. New York: Columbia University Press.

Kumārajīva. [406] 2016 –. *Miao Fa Lian Hua Jing* 'The Wonderful Dharma Lotus Sutra'. Comprehensive Buddhist Electronic Text Archive (CBETA) Version 2024. R1, T09, no. 262, p. 1a3–p. 62c14. <https://cbetaonline.dila.edu.tw/zh/ > (accessed June 20, 2024)

Lee, Minerva T.Y. 2015. *The Lotus Sutra and its Opening and Closing Sutras: A Beautiful Translation with Deep Love from a Lay Buddhist Practitioner*. Self-published.

Reeves, Gene. 2008. *The Lotus Sutra: A Contemporary Translation of a Buddhist Classic*. Somerville: Wisdom Publications.

Soothill, William Edward. [1930] 1995. *The Lotus of the Wonderful Law or the Lotus Gospel*. Richmond: Curzon Press.

Watson, Burton. 1993. *The Lotus Sutra*. New York: Columbia University Press.

2. Corpora

Davies, Mark. 2004. British National Corpus (from Oxford University Press). <https://www.english-corpora.org/bnc/>. (accessed October 9, 2023).

Davies, Mark. 2008–. The Corpus of Contemporary American English (COCA). <https://www.english-corpora.org/coca/>. (accessed October 9, 2023).

Davies, Mark. 2008–. Word Frequency Data from The Corpus of Contemporary American English (COCA). <https://www.wordfrequency.info>. (accessed October 9, 2023).

Kilgarriff, Adam. 2001. "Comparing Corpora". *International Journal of Corpus Linguistics* 6.1: 97-133. <http://www.sketchengine.eu> (accessed August 24, 2023)

Kilgarriff, Adam, Pavel Rychlý, Pavel Smrž and David Tugwell. 2004. "The Sketch Engine". *Proceedings of the 11th EURALEX International Congress*: 105-116. <http://www.sketchengine.eu> (accessed August 24, 2023)

Kilgarriff, Adam, Vít Baisa, Jan Bušta, Miloš Jakubíček, Vojtěch Kovář, Jan Michelfeit, Pavel Rychlý and Vít Suchomel. 2014. "The Sketch Engine: Ten Years on". *Lexicography* 1: 7-

36. <http://www.sketchengine.eu> (accessed August 24, 2023).

3. Dictionaries

Baldick, Chris. 2008. *The Oxford Dictionary of Literary Terms*. 3rd ed. Oxford: Oxford University Press.

Buswell, Jr., Robert E. and Donald S. Lopez, Jr. 2014. *The Princeton Dictionary of Buddhism*. Princeton: Princeton University Press.

Crystal, David. 2008. *A Dictionary of Linguistics and Phonetics*. 6th ed. Oxford: Blackwell Publishing.

Keown, Damien. 2004. *A Dictionary of Buddhism*. Oxford: Oxford University Press.

Kroll, Paul W. 2015. *A Student's Dictionary of Classical and Medieval Chinese*. Leiden: Koninklijke Brill.

Pei, Mario A., and Frank Gaynor. 1958. *Dictionary of Linguistics*. London: Peter Owen Limited.

Foguang Da Cidian 'Foguang Great Dictionary of Buddhism'. 1988. Ed. Ciyun. Kaohsiung: Fo Guang Shan Publications.

Hanyu Da Cidian 'Chinese Grand Dictionary'. 1986–. Shanghai: Shanghai Cishu Publishing. <https://www.hanyucidian.org/hanyu-da-cidian> (accessed September 10, 2024)

OED = The Oxford English Dictionary. 2000–. Ed. John a. Simplsons. 3rd ed. Oxford: Oxford University Press. < https://www.oed.com> (accessed June 20, 2024).

Xiandai Hanyu Cidian 'Modern Chinese Dictionary'. 2016–. 7th ed. Beijing: Commercial Press.

4. Secondary sources

Abraham, Richard. D. 1950. "Fixed Order of Coordinates: A Study in Comparative Lexicography". *The Modern Language Journal* 34.4: 276–287.

Akita, Kimi and Keiko Murasugi. 2022. "Binomial Adjective Doublets in Japanese: A Relational Morphology Account". *Morphology* 32: 281–297.

Allan, Keith. 1987. "Hierarchies and the Choice of Left Conjuncts (with Particular Attention to English)". *J. Linguistics* 23: 51–77.

Alzaidi, Muhammad Swaileh. 2022. "The Phonological Ordering Constraint of the Short-

Before-Long Preference Tendency in Qassimi Arabic Binomial Phrases: A Quantitative Analysis". *International Journal of Language and Literary Studies* 4.3: 54–75.

Arcara, Giorgio, Graziano Lacaita, Elisa Mattaloni, Laura Passarini, Sara Mondini, Paola Benincà and Carlo Semenza. 2012. "Is 'Hit and Run' a Single Word? The Processing of Irreversible Binomials in Neglect Dyslexia". *Frontiers in Psychology* 3.11: 1–11.

Battistella, Edwin. 1990. *Markedness: The Evaluative Superstructure of Language*. Albany: State University of New York Press.

Benor, Sara and Roger Levy. 2006. "The Chicken or the Egg? A Probabilistic Analysis of English Binomials". *Language* 82.2: 233–278.

Bhatia, Vijay K. 1993. *Analysing Genre: Language Use in Professional Settings*. London: Longman.

Biber, Douglas, Stig Johansson, Geoffrey N. Leech, Susan Conrad, Edward Finegan and Randolph Quirk. 2021. *Grammar of Spoken and Written English*. Amsterdam: John Benjamins Publishing Company.

Bolinger, Dwight L. 1962. "Binomials and Pitch Accent". *Lingua* 11: 34–44.

Bybee, Joan. 2006. "From Usage to Grammar: The Mind's Response to Repetition". *Language* 82.4: 711–733.

Buerki, Andreas. 2016. "Formulaic Sequences: A Drop in the Ocean of Constructions or Something More Significant?" *European Journal of English Studies* 20.1: 15–34.

Buerki, Andreas. 2020. *Formulaic Language and Linguistic Change: A Data-led Approach*. Cambridge: Cambridge University Press.

Bugaj [= Kopaczyk], Joanna. 2006. "Sources of Discourse-Specific Vocabulary in Middle Scots Administrative Records: An Etymological Study of Binominals". *Diachronic Perspectives on Domain-specific English*. Eds. Marina Dossena and Irma Taavitsainen. Bern: Peter Lang. 109–132.

Cao, Wei. 2004. "*Han Ying Chengduici Bijiao Yanjiu* 'A Comparative Study of Chinese and English Word in Pairs'". *Foreign Languages and Their Teaching* 178.1: 32–34.

Campbell, Georg. [1776] 1818. *The Philosophy of Rhetoric*. Philadelphia: Mitchell, Ames, and White.

Carpuat, Marine and Mona Diab. 2010. "Task-based Evaluation of Multiword Expressions: A

Pilot Study in Statistical Machine Translation". *Human Language Technologies: The 2010 Annual Conference of the North American Chapter of the Association for Computational Linguistics*. Eds. Ron Kaplan, Jill Burstein, Mary Harper and Gerald Penn. Los Angeles, California: Association for Computational Linguistics. 242–245.

Carrol, Gareth and Kathy Conklin. 2020. "Is All Formulaic Language Created Equal? Unpacking the Processing Advantage for Different Types of Formulaic Sequences". *Language and Speech* 63.1: 95–122.

Chantavarin, Suphasiree, Emily Morgan and Fernanda Ferreira. 2022. "Robust Processing Advantage for Binomial Phrases with Variant Conjunctions". *Cognitive Science* 46: e13187.

Chen, Chihua. 2017. "*Hanying Binglie Jiegou Duibi Yanjiu* 'A Comparative Study of Coordination Structure in Chinese and English'". Unpubl. PhD dissertation, Central China Normal University.

Chen, Yunji and Ning Lu. 2004. "*Shi Yi Miaofa Lianhua Jing Li de Wenxue Shijie* 'The Literary World in the Translation of the Lotus Sutra by Kumārajīva'". *Fojing Wenxue Yanjiu Lunji*. Eds. Yunji Chen, et al. Shanghai: Fudan University Press. 1–43.

Chu, Chia-ning. 2011. "*Cong Fojing Kan Hanyu Shuangyinhua de Guodu Xianxiang* 'The Transition Process of Bisyllabification in the Chinese Language as Attested in Buddhist Texts". *Zhongzheng Daxue Zhongwen Xueshu Niankan* 1: 27–52.

Conklin, Kathy and Norbert Schmitt. 2012. "The Processing of Formulaic Language". *Annual Review of Applied Linguistics* 32: 45–61.

Constant, Mathieu., Gülşen Eryiğit, Johanna Monti, Lonneke van der Plas, Carlos Ramisch, Michael Rosner and Amalia Todirascu. 2017. "Multiword Expression Processing: A Survey". *Computational Linguistics* 43.4: 837–892.

Cooper, William E. and John Robert Ross. 1975. "Word Order". *Papers from the Parasession on Functionalism*. Eds. Robin E. Grossman, L. James San and Timothy J. Vance. Chicago: Chicago Linguistic Society. 62–111.

Cowan, Nelson, Kristin Donnell and J. Scott Saults. 2013. "A List-length Constraint on Incidental Item-to-item Associations". *Psychonomic Bulletin & Review* 20.6: 1253–1258.

Crawford, Paul, Alison J. Johnson, Brian J. Brown and Peter Nolan. 1999. "The Language of

Mental Health Nursing Reports: Firing Paper Bullets?". *Journal of Advanced Nursing* 29.2: 331–340.

Cutler, Anne and William E. Cooper. 1978. "Phoneme-monitoring in the Context of Different Phonetic Sequences". *Journal of Phonetics* 6: 221–225.

De Jong, J. W. 1995. "Reviewed Work(s): The Lotus Sutra by B. Watson". *The Eastern Buddhist New Series* 28.2: 303–304.

Deng, Yunhua. 2005. "*Hanying Lianhe Duanyu de Leixing Yanjiu* 'A Typological Study of English-Chinese Coordinate Phrases'". *Foreign Language Education* 26.1: 22–25.

Deng, Yunhua. 2006. "*Yinghan Yilei Lianhe Duanyu de Duibi Yanjiu* 'A Comparative Study of English and Chinese coordinate phrases different classes'". *Foreign Languages and Their Teaching* 209.8: 44–48.

Deng, Yunhua and Chu Zexiang. 2005. "*Ying Han Lianhe Duanyu de Gongxing Yanjiu* 'A Study in Universal Features in English and Chinese Coordinate Phrases'". *Foreign Languages and Their Teaching* 191.2: 44–48.

Dong, Xiufang. [2011] 2017. *Cihuihua:Hanyu Shuangyinci de Yansheng he Fazhan*, 'Lexicalization: The Origin and Evolution of Chinese Dissylabic Words'. Revised ed. Beijing: The Commercial Press.

Fazildinova, Sevara. 2020. "Some Lexical Features of Translating Binomial Pairs from Uzbek into English (on the Material of 'Alexander's Wall' by Alisher Navoi)". *Mental Enlightenment Scientific-Methodological Journal* 1.42: 85–94.

Fenk-Oczlon, Gertraud. 1989. "Word Frequency and Word Order in Freezes". *Linguistics* 27.3: 517–556.

Finkbeiner, Rita and Barbara Schlücker. 2019. "Compounds and Multi-word Expressions in the Languages of Europe". *Complex Lexical Units: Compounds and Multi-Word Expressions*. Ed. Barbara Schlücker. Berlin and Boston: De Gruyter. 1–43.

Frade, Celina. 2005. "Legal Multinomials Recovering Possible Meanings from Vague Tags". *Vagueness in Normative Texts*. Eds. Vijay K. Bhatia, Jan Engberg, Maurizio Gotti and Dorothee Heller. Bern: Peter Lang. 133–155.

Gabrovšek, Dušan. 2011. "'Micro' Phraseology in Action: A Look at Fixed Binomials". *Elope* 8.1: 19–29.

Gaenszle, Martin, Balthasar Bickel, Narayan P. Sharma, Judith Pettigrew, Arjun Rai, Shree Kumar Rai and Diana Schackow. 2011. “Binomials and the Noun-to-Verb Ratio”. *Puma Rai Ritual Speech. Anthropological Linguistics* 53.4: 365–382.

George, Eli. 2020. “Competing Semantic and Phonological Constraints in Novel Binomials”. *WWU Honors Program Senior Projects*. <https://cedar.wwu.edu/wwu_honors/405>

Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago, IL: University of Chicago Press.

Goldberg, Adele E. 2006. *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.

Green, Viola and David Birdsong. 2018. “Intuitions for Phonological Constraints in Binomials: A Psycholinguistic Investigation”. *Language Sciences* 66: 116–134.

Green, Viola and David Birdsong. 2024. “Binomials in English and French: Ablaut, Rhyme and Syllable Structure”. *Linguistics* 62.4: 849–888.

Gries, Stefan Th. 2008. “Phraseology and Linguistic Theory: A Brief Survey”. *Phraseology: An Interdisciplinary Perspective*. Eds. Sylviane Granger and Fanny Meunier. Amsterdam and Philadelphia: John Bengamins Publishing Company. 3–25.

Gustafsson, Marita. 1974. “The Phonetic Length of the Members in Present-day English Binomials”. *Neuphilologische Mitteilungen* 75.4: 663–677.

Gustafsson, Marita. 1975. *Binomial Expressions in Present-day English*. Turku: Turun Yliopisto.

Gustafsson, Marita. 1984. “The Syntactic Features of Binomial Expression in Legal English”. *Text* 4.1–3: 123–141.

Haspelmath, Martin. 2004. “Coordinating Constructions: An Overview”. *Coordinating Constructions (Typological Studies in Language 58)*. Ed. Martin Haspelmath. Amsterdam: John Benjamins. 3–39.

He, Yuping. 2008. “*Fahuajing Zhuyao Wenxue Tezheng ji Chengyin* ‘Major Literature characteristics and the Cause of Formations of the *Lotus Sutra*’”. *Xiao Shuo Ping Lun* 2: 115–117.

Hejazi, Shima and Hossein Vahid Dastjerdi. 2015. “Translation of Binomials in Hard News: A Contrastive Study of English and Persian”. *Mediterranean Journal of Social Sciences*

6.2: 512–516.

Hudson, Jean. 1998. *Perspectives on Fixedness Applied and Theoretical*. Lund: Lund University Press.

Hussein, Riyad F. and Richard Lingwood. 2011. “Strategies Used in Translating English Binomials into Arabic”. *Babel* 57.2: 168–184.

Hu, Yushu, eds. 1981. *Xiandai Hanyu* ‘Modern Chinese’. Shanghai: Shanghai Education Publishing House.

Iliev, Rumen and Anastasia Smirnova. 2016. “Revealing Word Order: Using Serial Position in Binomials to Predict Properties of the Speaker”. *J Psycholinguist Res* 45: 205–235.

Jespersen, Otto. 1905 [1952]. *Growth and Structure of the English Language*. 9th ed. Oxford: Basil Blackwell.

Karashima, Seishi. 1998. *A Glossary of Dharmarakṣa’s Translation of the Lotus Sutra*. Tokyo: The International Research Institute for Advanced Buddhology, Soka University.

Karashima, Seishi. 2001a. *A Glossary of Kumārajīva’s Translation of the Lotus Sutra*. Tokyo: The International Research Institute for Advanced Buddhology, Soka University.

Karashima, Seishi. 2001b. “Some Features of the Language of the *Saddharmapuarīkasūtra*”. *Indo-Iranian Journal* 44.3: 207–230.

Karashima Seishi. 2016. *Fodian Yuyan ji Chuancheng* ‘Languages and Transmissions of Buddhist Scriptures’. Transl. Yunqing Qiu and Weilin Wu. Shanghai: *Zhong Xi* Book Company.

Katami, Aiko. 2017. “Word Pairs in Middle English Mystic Prose of the Fourteenth Century”. *Saitama Gakuen University Bulletin (School of Business Edition)* 9: 177–189.

Khatibzadeh, Parisa and Motahareh Sameri. 2013. “Translation of Binomials in Political Speeches and Reports: A Contrastive study of English and Persian”. *SKASE Journal of Translation and Interpretation* 6.1: 18–33.

Kikiopoulou, Athina and Nina Topintzi. 2022. “Regularities and Oddities in Greek Binomials”. *Proceedings of the 2021 Annual Meeting on Phonology*. < https://doi.org/10.3765/amp.v9i0.5164>

Klégr, Aleš, and Jan Čermák. 2008. “Binomials in an Historical English Literary Perspective: Shakespeare, Chaucer, Beowulf”. *Shakespeare Between the Middle Ages and Modernity:*

From Translator's Art to Academic Discourse. Eds. M. Procházka and Jan Čermák. Prague: Charles University. 40–62.

Knappe, Gabriele. 2004. *Idioms and Fixed Expressions in English Language Study before 1800: A Contribution to English Historical Phraseology*. Lausanne: Peter Lang.

Koevering, Katherine Van, Austin R. Benson and Jon Kleinberg. 2020. "Frozen Binomials on the Web: Word Ordering and Language Conventions in Online Text". *WWW '20: Proceedings of The Web Conference 2020*. Eds. Yennun Huang, Irwin King, Tie-Yan Liu and Maarten van Steen. New York: Association for Computing Machinery. 606–616.

Kohonen, Viljo. 1979. "Observations on Syntactic Characteristics of Binomials in Late Old English and Early Middle English Prose". *Neuphilologische Mitteilungen* 80.2: 143–163.

Kopaczyk, Joanna. 2013. *The Legal Language of Scottish Burghs: Standardization and Lexical Bundles (1380–1560)*. Oxford: Oxford University Press.

Kopaczyk, Joanna and Hans Sauer. 2017. "Defining and Exploring Binomials". *Binomials in the History of English: Fixed and Flexible*. Eds. Joanna Kopaczyk and Hans Sauer. Cambridge: Cambridge University Press. 1–24.

Kopaczyk, Joanna and Hans Sauer, eds. 2017. *Binomials in the History of English: Fixed and Flexible*. Cambridge: Cambridge University Press.

Koskenniemi, Inna. 1968. *Repetitive Word Pairs in Old and Early Middle English Prose: Expressions of the Type "Whole and Sound" and "Answered and Said", and Other Parallel Constructions*. Turku: Turun Yliopisto.

Lai, Whalen. 1987. "Why the *Lotus Sūtra*?: On the Historic Significance of Tendai". *Japanese Journal of Religious Studies* 14.2/3: 83–99.

Lambrecht, Knud. 1984. "Formulaicity, Frame Semantics, and Pragmatics in German Binomial Expressions". *Language* 60.4: 753–796.

Langacker, Ronald W. 1993. "Reference-point Constructions". *Cognitive Linguistics* 4.1: 1–38.

Li, Yafei. 2022. "On an Integral Theory of Word Formation in Chinese and Beyond". *The Cambridge Handbook of Chinese Linguistics*. Eds. C.-R. Huang, Y.-H. Lin, I.-H. Chen, and Y.-Y. Hsu. Cambridge: Cambridge University Press. 174–197.

Liu, Shiying. 2013. "*Hanying Shuangxiangshi Binglie Duanyu de Cixu Zhiyue Yinsu Yanjiu*

‘Study on Ordering Constraints in Chinese and English Binomials’”. Unpubl. PhD dissertation, Shanghai International Studies University.

Lohmann, Arne. 2012. “A Processing View on Order in Reversible and Irreversible Binomials”. *Views* 21: 25–50.

Lohmann, Arne. 2014. *English Coordinate Constructions: A Processing Perspective on Constituent Order*. Cambridge: Cambridge University Press.

Lohmann, Aren and Tayo Takada. 2014. “Order in NP Conjuncts in spoken English and Japanese”. *Lingua* 152: 48–64.

Makkai, Adam. 1972. *Idiom Structure in English*. The Hague: Mouton.

Malkiel, Yakov. 1959. Studies in Irreversible Binomials. *Lingua* 8: 113–160.

Malvern, David, Brian Richards, Ngoni Chipere and Pilar Durán. 2004. “Traditional Approaches to Measuring Lexical Diversity”. *Lexical Diversity and Language Development*. London: Palgrave Macmillan. 16–30.

Masini, Francesca. 2006. “Binomial Constructions Inheritance, Specification and Subregularities”. *Lingue E Linguaggio* 2: 207–232.

Masini, Francesca. 2009. “Phrasal Lexemes, Compounds and Phrases: A Constructionist Perspective”. *Word Structure* 2.2: 254–271.

Mattison, Julia. 2021. “Universalizing Doublets in Middle English Verse: Chaucer and Romance”. *Medium Ævum* 90.1: 24–50.

Mayerthaler, Willi. [1981] 1988. *Morphological Naturalness*. Transl. Janice Seidler. Ann Arbor: Karoma Publishers.

McDonald, Janet L., Kathryn Bock and Michael H. Kelly. 1993. “Word and World Order: Semantic Phonological and Metrical Determinants of Serial Position”. *Cognitive Psychology* 25: 288–230.

McManus, Damian. 2020. “Binomial Phrases, Dvandva Compounds and the House in Which Cú Chulainn Was Born”. *Ériu* 70: 5–29.

Miller, George A. 1956. “The Magical Number Seven, Plus or Minus two: Some Limits on Our Capacity for Processing Information”. *Psychological Review* 63: 81–97.

Miwa, Nobuharu and Su Dan Li. 2003. “On the Repetitive Word-Pairs in English: With Special Reference to W. Caxton”. *Cultural Science Reports of Kagoshima University* 58:

49–66.

Mollin, Sandra. 2012. “Revisiting Binomial Order in English: Ordering Constraints and Reversibility”. *English Language and Linguistics* 16.1: 81–103.

Mollin, Sandra. 2014. *The (Ir)reversibility of English Binomials: Corpus, Constraints, developments.* Amsterdam: John Benjamins Publishing Company.

Mollin, Sandra. 2017. “Developments in the Frequency of English Binomials, 1600–2000.” *Binomials in the History of English: Fixed and Flexible, Studies in English Language*. Eds. Joanna Kopaczyk and Hans Sauer. Cambridge: Cambridge University Press. 281–295.

Mueller, Janel M. 1984. *The Native Tongue and the Word: Developments in English Prose Style 1380–1580*. Chicago: The University of Chicago Press.

Müller, Gereon. 1997. “*Beschränkungen für Binomialbildung im Deutschen* ‘Restrictions for binomial formation in German’”. *Zeitschrift für Sprachwissenschaft* 16.1/2: 5–51.

Nash, W. 1958. “Paired Words in *Othello*: Shakespeare’s Use of a Stylistic Device”. *English Studies* 39: 62–67.

Norman, Jerry. [1988] 2010. *Chinese*. New York: Cambridge University Press.

Oakeshott-Taylor, John. 1984. “Phonetic Factors in Word Order”. *Phonetica* 47: 226–223.

Oden, Gregg C. and Lola L. Lopes. 1981. “Preference for Order in Freezes”. *Linguistic Inquiry* 12.4: 673-679.

Pharr, Clyde. 1945. “A Thirteenth Century Formula of Anathema”. *The American Journal of Philology* 66.2: 135-150.

Pinker, Steven and David Birdsong. 1979. “Speakers’ Sensitivity to Rules of Frozen Word Order”. *Journal of Verbal Learning and Verbal Behavior* 18: 497–508.

Pordány, L. 1986. “Irreversible Binomials in Hungarian”. *Acta Linguistica Academiae Scientiarum Hungaricae* 36.1/4: 151-179.

Potter, Simeon. 1972. “Chaucer’s Untransposable Binomials”. *Neuphilologische Mitteilungen* 73.1/3: 309–314.

Pulleyblank, Edwin G. 1995. *Outline of Classical Chinese Grammar*. Vancouver: UBC Press.

Pym, Anthony. [2010] 2014. *Exploring Translation Theories*. 2nd ed. London: Routledge.

Royster, James Finch. 1919. “A Note on French-English Word Pairs in Middle English”.

Modern Philology 16.9: 501–502.

Ryan, Kevin. M. 2019. “Prosodic End-weight Reflects Phrasal Stress”. *Natural Language & Linguistic Theory* 37.1: 315–356.

Saaed, A. Saaed. 2017. “Vowel Length as an Ordering Constraint in Badini Kurdish Binomials: A Quantitative Analysis”. *Journal of Duhok University* 20.2: 76–93.

Sag, Ivan A., Timothy Baldwin, Francis Bond, Ann Copestake and Dan Flickinger. 2002. “Multiword Expressions: A Pain in the Neck for NLP”. *Computational Linguistics and Intelligent Text Processing* (CICLing 2002). Eds. Alexander Gelbukh. Berlin and Heidelberg: Springer. 1–15.

Sailer, Manfred and Stella Markantonatou. 2018. “Multiword Expressions: Insights from a Multi-lingual Perspective”. *Multiword Expressions: Insights from a Multi-lingual Perspective*. Eds. Manfred Sailer and Stella Markantonatou. Berlin: Language Science Press. iii–xxxi.

Sánchez, Ignacio Rodríguez. 2013. “Frequency and Specialization in Spanish Binomials *N y N*”. *Social and Behavioral Sciences* 95: 284–292.

Sauer, Hans. 2014. “Twin Formulae and More in Late Middle English: *The Historye of the Patriarks*, Caxton’s *Ovid*, Pecock’s *Donet*”. *Studies in Middle English: Words, Forms, Senses and Texts*. Ed. Michael Bilynsky. Frankfurt am Main: Peter Lang. 25–46.

Sauer, Hans. 2017a. “Flexible and Formulaic: Binomials and Multinomials in the Late Middle English *The Wise Book of Philosophy and Astronomy*”. *Acta Philologica* 50: 61–78.

Sauer, Hans. 2017b. “Milton’s Binomials and Multinomials in *Samson Agonistes*”. *Current Developments in English Historical Linguistics*. Eds. Artur Kijak, Andrzej M. Łęcki, and Jerzy Nykiel. Katowice: Wydawnictwo Uniwersytetu Śląskiego. 275–303.

Sauer, Hans. 2017c. “The World in Two Words: Binomials in Two English Translations of the *Lotus Sutra*”. *Linguistica Silesiana* 38: 7–37.

Sauer, Hans. 2018. “Binomials in the Middle English and Early Modern English Versions of Boccacio’s *De Mulieribus Claris*”. *Editing and Interpretation of Middle English Text*. Eds. Margaret Connolly and Raluca Radulescu. Turnhout: Brepols. 83–105.

Sauer, Hans. 2019a. “In Defence of Lydgate: Lydgate’s Use of Binomials in his *Troy Book* (Part 1)”. *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 136.3: 227–244.

Sauer, Hans. 2019b. “In Defence of Lydgate: Lydgate’s Use of Binomials in his *Troy Book* (Part 2)”. *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 136.4: 309–326.

Sauer, Hans. 2020. “The Middle English Romance *Richard Coer de Lyon* and Its Use of Binomials”. *Poetica* 93&94: 97–116.

Sauer, Hans and Birgit Schwan. 2017. “Heaven and Earth, Good and Bad, Answered and Said: A Survey of English Binomials and Multinomials”. *Studia Linguistica Universitatis Iagellonicae Cracoviensis* 134. 83–96 (Part I); 185–204 (Part II).

Scott, Fred Newton. 1913. “The Order of Words in Certain Rhythm-Groups”. *Modern Language Notes* 28.8: 237–239.

Shi, Yuzhi. 2023. *The Evolution of Chinese Grammar*. New York: Cambridge University Press.

Sinclair, John. 1991. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.

Siyanova-Chanturia, Anna, Kathy Conklin and Walter J. B. van Heuven, 2011. “Seeing a Phrase ‘Time and Again’ Matters: The Role of Phrasal Frequency in the Processing of Multiword Sequences”. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 37.3: 776–784.

Siyanova-Chanturia, Anna and Ron Martinez. 2015. “The Idiom Principle Revisited”. *Applied Linguistics* 36.5: 549–569.

Siyanova-Chanturia, Anna, Kathy Conklin, Sendy Caffarra, Edith Kaan and Walter J. B. van Heuven, 2017. “Representation and Processing of Multi-word Expressions in the Brain”. *Brain and Language* 175: 111–122.

Siyanova-Chanturia, Anna and Niels Janssen. 2018. “Production of Familiar Phrases: Frequency Effects in Native Speakers and Second Language Learners”. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 44.12: 2009–2018.

Sobkowiak, Wlodzimierz. 1993. “Unmarked-before-marked as a Freezing Principle”. *Language and Speech* 36.4: 393–414.

Solano, Ramon Marti. 2010. “Variation Patterns and Creativity in English Non-compositional Binomials”. *Analizar datos > Describir variación / Analysing data > Describing variation*. <https://unilim.hal.science/hal-01645054v1>.

Sonbul, Suhad, Dina Abdel Salam El-Dakhs, Kathy Conklin and Gareth Carrol. 2023. “‘Bread

and Butter' or "Butter and Bread'? Nonnatives' Processing of Novel Lexical Patterns in Context". *Studies in Second Language Acquisition* 45.2: 370–392.

Southern, Mark R. V. 2000. "Formulaic Binomials, Morphosymbolism, and Behaghel's Law: The Grammatical Status of Expressive Iconicity". *American Journal of Germanic Linguistics and Literatures* 12.2: 251–279.

Strunk, William Jr. and E. B. White. [1918] 1999. *The Elements of Style*. 4th Ed. New York: Longman Publishers.

Tani, Akinobu. 2008. "The Word Pairs in 'The Paston Letters and Papers' with Special Reference to Text Type, Gender and Generation". *Historical Englishes in Varieties of Texts and Contexts*. Eds. Masachiyo Amano, Michiko Ogura and Masayuki Ohkado. Frankfurt: Peter Lang. 217–232.

Tani, Akinobu. 2010. "Word Pairs or Doublets in Chaucer's *Tales of Melibee* and Their Variant Readings: A Preliminary Examination". *Aspects of History of the English Language and Literature*. Eds. Osamu Imahayashi, Yoshiyuki Nakao and Michiko Ogura. Frankfurt: Peter Lang. 101–113.

Tani, Akinobu. 2025 [forthcoming]. *Binomials in Late Middle English to Early Modern English: Style, Frequency and Etymology*. Abingdon & New York: Routledge.

Tao, Hongyin. 1991. "NP Coordination in Medieval Chinese: A Discourse Approach". *Cahiers de Linguistique – Asie Orientale* 20.1: 85–106.

Tiersma, Peter M. 1999. *Legal Language*. Chicago: University of Chicago Press.

Vinay, Jean-Paul and Jean Darbelnet. [1958] 1995. *Comparative Stylistics of French and English: A Methodology for Translation*. Transls. and Eds. Juan C. Sager and M. -J. Hamel. Amsterdam: John Benjamins Publishing Company.

Vogelsang, Kai. 2021. *Introduction to Classical Chinese*. Oxford: Oxford University Press.

Volk, Martin and Johannes Graën. 2022. "Binomials in Swedish Corpora – 'Ordpar 1965' Revisited". *Live and Learn: Festschrift in Honor of Lars Borin*. Eds Elena Volodina, Dana Dannélls, Aleksandrs Berdicevskis, Markus Forsberg and Shafqat Virk. Göteborg: Department of Swedish, Multilingualism and Language Technology, University of Gothenburg. 139–144.

Wang, Li. [1957] 2013. *Hanyu Shigao* 'History of Chinese Language'. *Wang Li Quanji*

‘Complete Works of Wang Li’ *Volume 1*. Beijing: *Zhonghua* Book Company.

Więcławska, Edyta. 2023. “Legal Multinomials from the Sociolinguistic Perspective – Insights into Authorship-Based Distinctions”. *Int J Semiot Law* 36: 1699–1715.

Wright, Saundra K., Hay Jennifer and Bent Tessa. 2005. “Ladies first? Phonology, Frequency, and the Naming Conspiracy”. *Linguistics* 43.3: 531–561.

Zhang, Peicheng. 2000. “*Yingyu Chengduici yu Hanyu Lianheshi Fuheci Bijiao* ‘A Comparison of English Paired Words and Chinese Joint Compound Words’”. *Foreign Language Education* 21.1: 83–88.

Zhu, Qingzhi. 1992a. *Fodian yu Zhonggu Hanyu Cihui Yanjiu* ‘Study in Buddhist Scriptures and Middle Ancient Chinese Vocabulary’. Taipei: Wenchin Press.

Zhu, Qingzhi. 1992b. “*Shilun Fodian Fanyii dui Zhonggu Hanyu Cihui Fazhan de Ruogan Yingxiang* ‘An Exploration of the Various Impacts of Buddhist Text Translations on the Development of Middle Chinese Lexicon’”. *Zhongguo Yuwen* 4: 297 –305.

Zusammenfassung

Die Dissertation untersucht die linguistischen Eigenschaften von Binomialen und Multinomialen in zwei englischen Übersetzungen des *Lotus-Sutra*, das ursprünglich von Kumārajīva aus dem Chinesischen übersetzt wurde. Diese Studie konzentriert sich darauf, wie diese sprachlichen Konstruktionen – Binomiale und Multinomiale – in den Übersetzungen von Watson (1993) und Reeves (2008) verwendet werden. Durch eine vergleichende linguistische und translationswissenschaftliche Analyse beleuchtet die Forschung die Natur dieser Konstruktionen in religiösen Textübersetzungen und leistet somit einen Beitrag sowohl zur englischen Linguistik als auch zur Übersetzungswissenschaft. Die Untersuchung betrachtet auch die linguistischen Techniken, die von den Übersetzern angewendet werden, und liefert Erkenntnisse darüber, wie religiöse Texte an die Zielsprache angepasst werden, während der Kern des Ausgangsmaterials bewahrt bleibt.

Das Hauptziel der Dissertation besteht darin, die Verwendung und die sprachlichen Eigenschaften von Binomialen und Multinomialen in den Übersetzungen des *Lotus-Sutra* zu erforschen. Diese mehrteiligen lexikalischen Ausdrücke werden sowohl durch quantitative als auch qualitative Methoden untersucht. Die Studie konzentriert sich insbesondere auf drei Ebenen des Vergleichs: innerhalb einer einzelnen Übersetzung, zwischen den beiden Übersetzungen und zwischen dem Ausgangstext und dem Zieltext. Dadurch wird detailliert auf die sprachliche Variation in religiösen Übersetzungen eingegangen. Ein frequenzbasiertes strukturalistisches Vorgehen wird angewendet, um zu untersuchen, wie häufig und in welcher Form Binomiale und Multinomiale auftreten sowie welche Motive hinter ihrer Verwendung in diesen Texten stehen.

Das Korpus der Studie umfasst die Übersetzungen von Watson (1993) und Reeves (2008) des *Lotus-Sutra*, die beide für ein modernes englischsprachiges Publikum ohne tiefere Kenntnisse des Buddhismus bestimmt sind. Beide Übersetzer strebten danach, ihre Übersetzungen zugänglich und lesbar zu machen, was wertvolle Voraussetzungen für eine vergleichende linguistische Studie bietet.

Obwohl sie auf derselben chinesischen Quelle basieren, spiegeln diese Übersetzungen unterschiedliche Übersetzungsansätze und Strategien wider, wenn es darum geht, komplexe sprachliche Formen von einem Sprachsystem in ein anderes zu übertragen.

Methodologisch verwendet die Studie einen rigorosen Rahmen, um Binomiale und Multinomiale zu untersuchen. Zunächst werden klare Arbeitsdefinitionen für Binomiale und Multinomiale festgelegt, die die Identifikation und den Ausschluss bestimmter Phrasen leiten. Diese Definitionen sorgen für Konsistenz während des gesamten Datenerhebungsprozesses. Die Datenerhebung selbst ist akribisch, da die Binomiale und Multinomiale manuell aus beiden Übersetzungen extrahiert und systematisch in Excel-Tabellen gespeichert werden. Diese zweisprachigen parallelen Korpora bilden die Grundlage für die vergleichende Analyse, die detaillierte Annotationen zu den strukturellen Merkmalen, Verbindungswörtern sowie den phonologischen, morphologischen und semantischen Aspekten der Elemente enthält. Visuelle Hilfsmittel wie Pivot-Tabellen und Pivot-Diagramme werden verwendet, um die Daten quantitativ darzustellen und statistische Erkenntnisse über die Häufigkeit und Verteilung der Binomiale und Multinomiale in den Texten zu liefern. Die Studie verwendet auch das Korpus-Analyse-Tool Sketch Engine, das einen Vergleich der Übersetzungen mit anderen englischen Korpora, wie dem British National Corpus (BNC) und dem Corpus of Contemporary American English (COCA), ermöglicht.

In den frühen Kapiteln skizziert die Dissertation einen umfassenden Überblick über die relevante Literatur zu Binomialen und Multinomialen. Sie fasst frühere Forschungen zusammen, um eine solide theoretische Grundlage für die Studie zu schaffen. Die Definitionen und Typologien von Binomialen und Multinomialen werden detailliert geklärt. Diese grundlegende Arbeit ist entscheidend, um die Parameter für die nachfolgende Analyse festzulegen, da die Dissertation zwischen verschiedenen Typen von Binomialen und Multinomialen auf der Grundlage ihrer strukturellen und semantischen Eigenschaften

unterscheidet. Darüber hinaus werden bestimmte Ausdrücke, wie Numerale und Eigennamen, von der Analyse ausgeschlossen, um den Umfang der Studie einzugrenzen und eine fokussierte Untersuchung koordinativer Konstruktionen zu gewährleisten.

Die Studie zeigt, dass Binomiale in bei den Übersetzungen häufiger vorkommen als Multinomiale, wobei Watson insgesamt eine größere Anzahl von Binomialen verwendet, während Reeves häufiger Multinomiale verwendet. Diese Variation wird in der Dissertation detailliert untersucht und bietet Einblicke in die stilistischen Entscheidungen der einzelnen Übersetzer. Die Häufigkeit und Verteilung der Binomiale und Multinomiale über die Kapitel des *Lotus-Sutra* hinweg deutet darauf hin, dass diese sprachlichen Strukturen eine wesentliche Rolle bei der Vermittlung des Kerninhalts des Sutra spielen. Darüber hinaus treten Binomiale häufiger in Verspassagen auf, während Multinomiale eher in Prosa vorkommen. Die Verteilung dieser sprachlichen Konstruktionen zeigt jedoch kein konsistentes Muster über die Texte hinweg, was darauf hindeutet, dass ihre Verwendung durch spezifische Inhalte oder individuelle Übersetzungsstrategien geprägt sein könnte.

Es folgte eine detaillierte grammatikalische Analyse, die sich auf die strukturellen Elemente von Binomialen und Multinomialen in beiden Übersetzungen konzentriert. Diese Analyse vergleicht ihre Verbindungen, Wortklassen und phonetischen Merkmale. In beiden Übersetzungen dominieren einfache Strukturen, wobei *and* das am häufigsten verwendete Verbindungswort ist. Andere Verbindungen wie *or* und Fälle ohne Verbindungen kommen seltener vor, und korrelative Strukturen sind selten. Die Dissertation widmet auch den Elementen innerhalb der Binomiale und Multinomiale besondere Aufmerksamkeit und stellt fest, dass Substantive die am häufigsten verwendete Wortklasse sind, gefolgt von Adjektiven, Verben und Adverbien. Dieses Muster legt nahe, dass Binomiale und Multinomiale häufig dazu dienen, Beziehungen oder Kategorien zu beschreiben, insbesondere in religiösen Texten, die abstrakte Konzepte und doktrinäre Punkte vermitteln.

In Bezug auf phonetische Merkmale wird Alliteration häufiger als Reim beobachtet, obwohl beide in den Übersetzungen selten sind. Watsons Übersetzung weist eine etwas höhere Inzidenz von Alliteration auf, was eine stilistische Entscheidung widerspiegelt, die Lesbarkeit oder Merkfähigkeit zu erhöhen, insbesondere in religiöser Dichtung. Morphologisch dominieren einfache Wörter, wobei affixierte Elemente sparsam verwendet werden. Wenn Affixe vorhanden sind, sind Suffixe häufiger als Präfixe. Darüber hinaus neigen beide Übersetzer dazu, gemischte etymologische Paarungen zu bevorzugen, die einheimische und Lehnwörter kombinieren, was mit Jespersens Hypothese übereinstimmt, dass Übersetzer sowohl einheimische als auch entlehnte Elemente verwenden, um durch Wiederholung reichhaltigere Bedeutungen zu schaffen.

Die Dissertation untersucht weiter die semantischen Beziehungen innerhalb von Binomialen und stellt fest, dass Komplementarität die am häufigsten vorkommende Beziehung ist, gefolgt von Synonymie und Antonymie. Komplementäre Binomiale werden in Kategorien unterteilt, basierend auf ihren semantischen Domänen, wie Ko-Hyponyme, positive oder negative Attribute und Aktionsabfolgen. Synonyme Binomiale weisen häufig phonetische Merkmale wie Alliteration auf, insbesondere in Watsons Übersetzung, was die Kohärenz zwischen den gepaarten Elementen verstärkt. Antonyme Binomiale hingegen erscheinen häufig mit reduzierten Strukturen und verwenden *or* als Verbindungswort, was die gegensätzliche Natur der gepaarten Elemente widerspiegelt.

Die Analyse der Multinomiale zeigt, dass beide Übersetzer Trinomiale bevorzugen, gefolgt von Quadrinomiale und Quintuplets. Diese Multinomiale drücken häufig Komplementarität aus und werden verwendet, um Informationen zu kategorisieren oder aufzulisten. Ähnlich wie den Binomialen dominieren auch hier einfache Strukturen, wobei *and* das am häufigsten verwendete Verbindungswort bleibt. Reeves zeigt jedoch eine größere Tendenz, Multinomiale zu restrukturieren, indem er sie in kleinere Gruppen von Binomialen aufteilt. Diese Restrukturierung ist besonders in Reeves' Übersetzung bemerkenswert, wo

Multinomiale häufig zu Clustern zusammengefasst werden, um die Klarheit und Lesbarkeit zu erhöhen.

Kapitel 7 der Dissertation befasst sich eingehend mit den Übersetzungsstrategien, die von Watson und Reeves verwendet werden. Die Analyse identifiziert vier Hauptkategorien von Übersetzungsstrategien: direkte Übersetzung, Modulation, Amplifikation und Ökonomie. Beide Übersetzer setzen häufig Modulation ein, die Änderungen an Verbindungswörtern und der Reihenfolge der Elemente beinhaltet. Watson hält sich generell enger an die ursprüngliche chinesische Wortstellung, während Reeves größere Flexibilität zeigt und oft die Reihenfolge der Elemente an die englische Syntax anpasst. Die Amplifikation, besonders bei Binomialen, wird eingesetzt, um die englische Übersetzung von einem einzelnen Wort oder einer Phrase im Ausgangstext zu erweitern. Die Ökonomie wird seltener verwendet, obwohl die Dissertation einige Beispiele hervorhebt, in denen die Übersetzer Elemente verdichten oder weglassen, um die Übersetzung zu straffen.

Ein bemerkenswertes Merkmal der Dissertation ist die vergleichende Analyse der Formelhaftigkeit von Binomialen und Multinomialen. Durch den Vergleich der Übersetzungen von Watson und Reeves mit anderen englischen Übersetzungen des *Lotus-Sutra* (Soothill, Kato und Hurvitz) sowie mit englischen Korpora wie dem BNC und COCA zeigt die Studie, dass Binomiale im Allgemeinen formelhafter sind als Multinomiale. Die in den untersuchten Übersetzungen verwendeten Binomiale stimmen jedoch nicht eng mit denen in den englischen Korpora überein, was wahrscheinlich daran liegt, dass viele der formelhaften Ausdrücke in einem spezifischen religiösen Kontext verwendet werden. Die Dissertation betont die Notwendigkeit spezialisierter Glossare oder Wörterbücher für religiöse Texte, insbesondere für buddhistische Ausdrücke und Formeln. Solche Ressourcen könnten die Zugänglichkeit dieser Texte für moderne Leser erheblich verbessern und dazu beitragen, sprachliche Nuancen in Übersetzungen zu bewahren.

Im neunten Kapitel untersucht die Dissertation die Formationsprozesse von Binomialen und Multinomialen, insbesondere solcher, die von den Ausgangstexten abweichen. Die Studie berücksichtigt verschiedene Zwänge, die die Reihenfolge der Elemente beeinflussen, wie Ikonizität, Wahrnehmungsmarkierung, Machtverhältnisse und Silbenzahl. Obwohl die Silbenzahl als ein aktiver Zwang in der Bildung von englischen Binomialen hervorgeht, spielen semantische Zwänge, wie Ikonizität und Wahrnehmungsmarkierung, eine bedeutendere Rolle. Die Studie kommt zu dem Schluss, dass Übersetzer häufig die Reihenfolge der Elemente in Binomialen umkehren, um den Präferenzen der Zielsprache gerecht zu werden, wobei sie gelegentlich die Reihenfolge des Ausgangstextes beibehalten, wenn dies die beabsichtigte Bedeutung besser vermittelt.

Die Studie untersucht auch die kognitiven Motive hinter der Restrukturierung von Multinomialen, insbesondere in Reeves' Übersetzung, wo dieses Phänomen ausgeprägter ist. Reeves gruppiert Multinomiale häufig zu Clustern von Binomialen, eine Praxis, die in Watsons Übersetzung weniger häufig vorkommt. Die Dissertation untersucht mehrere Hypothesen hinsichtlich der Gründe für diese Restrukturierung, darunter kognitive Belastung und Übersetzungsstrategien, kommt jedoch zu dem Schluss, dass keine einzelne Erklärung schlüssig ist.

Abschließend liefert die Dissertation eine umfassende sprachwissenschaftliche Untersuchung von Binomialen und Multinomialen in den Übersetzungen des *Lotus-Sutra*. Durch eine detaillierte vergleichende Analyse bietet die Studie Einblicke in die strukturellen und semantischen Merkmale dieser Konstruktionen sowie in die Übersetzungsstrategien, die von Watson und Reeves angewendet wurden. Die Forschung hebt die Herausforderungen hervor, die sich bei der Übersetzung religiöser Texte aus dem Chinesischen ins Englische ergeben, insbesondere im Umgang mit sprachlichen Konstruktionen wie Binomialen und Multinomialen. Die Ergebnisse leisten einen bedeutenden Beitrag sowohl zur englischen Linguistik als auch zur Übersetzungswissenschaft und bieten eine

Grundlage für weitere Forschungen in diesen Bereichen, insbesondere im Kontext religiöser Textübersetzungen.