Academic Education Publishing House

Economic Society and Humanities Vol. 2 No. 10, 2025

A Report on the Translation of *China's Food: A History of Grain*

Guizhi Zhang*, Fei Liu

School of Foreign Languages, Henan University of Technology, Zhengzhou, Henan, China

**Corresponding Author*

Abstract: The translation practice report, based on excerpts from Shi Jun's popular science book *China's Food: A History of Grain,* aims to facilitate a profound global understanding of Chinese civilization. It investigates translation strategies for addressing challenges across three dimensions: vocabulary, syntax, and discourse. At the lexical level, the explanatory translation method is employed to tackle the absence of established equivalents for many specialized terms and the difficulty of accurately transmitting their profound cultural and historical connotations. At the syntactic level, a combined strategy of explanatory translation and adaptive translation is proposed to address the challenges posed by classical Chinese expressions and colloquialisms. At the discourse level, an explicit cohesion strategy—characterized by the appropriate addition of connectors or explanatory clauses—is adopted to enhance logical coherence; additionally, a flexible style adaptation approach is applied to balance the text's academic rigor with its accessibility as a popular science work. Overall, the translation of food-related Chinese popular science texts is of great practical significance for the dissemination of Chinese culture.

Keywords: Grain History; Explanatory Translation Method; Adaptive Translation Method; Explicit Cohesion Strategy; Flexible Style Adaptation Approach

1. Introduction

This section elaborates on the translation practice from two aspects: introduction to the source text and significance of this translation project.

1.1 Source Text

1.1.1 Description of the source text

The source text, *China's Food: A History of Grain*, is a popular science book on cereals written by Dr. Shi Jun[1], a botanist from the Institute of Botany, Chinese Academy of Sciences. Following the chronological order of Chinese history, the author vividly narrates the evolutionary history of various grains over several millennia. Combining botanical knowledge, ancient agricultural wisdom, culinary evolution, and historical anecdotes, the book helps readers understand how social and economic changes have shaped agricultural production and everyday life. The book consists of ten chapters, as follows:

Chapter One, "Shang and Zhou Dynasties", introduces Panicum miliaceum the staple crops that supported early Chinese civilization.

Chapter Two, "Spring and Autumn and the Warring States Periods", describes the transition from "hundred grains" to the "five grains", as Setaria italica(sù) gradually replaced Panicum miliaceum(shǔ) as the dominant staple.

Chapter Three, "Qin and Han Dynasties", recounts how wheat emerged in northern China and how soybeans, once a staple, became a secondary food; it also discusses the origins of noodles and tofu.

Chapter Four, "Wei, Jin, and the Northern and Southern Dynasties" explains how the cold climate affected crop yields and spurred innovations in agricultural techniques.

Chapter Five, "Tang Dynasty", shows that rice became the primary grain for wine brewing and wheat for bread and pastry making, while millet remained the staple food.

Chapter Six, "Song and Yuan Dynasties", depicts how large-scale migration from the north brought advanced farming techniques to the south, increasing pressure on land productivity. New crops and techniques—most notably the introduction of Champa rice—reshaped rice cultivation across China. Sorghum also rose quietly during this period.

Chapter Seven, "Ming and Qing Dynasties", focuses on the introduction of maize, sweet potatoes, and potatoes, as well as improved farming practices and policies such as tanding rumu (combining labor and land taxes), which supported rapid population growth.

Chapter Eight, "Modern Times", covers the era from the Opium War (1840) to the founding of the People's Republic of China (1949). In times of war and food shortage, crops such as highland barley, buckwheat, naked oats, and cassava became key energy sources supporting revolutionary success.

Chapter Nine, "Contemporary Era", describes how rice breeding greatly increased yields, while advances in processing technologies transformed dietary standards from "having enough to eat" to "eating well".

Chapter Ten, "Future", looks ahead to the twenty-first century, when people increasingly value healthy eating. Functional grains such as quinoa have entered Chinese diets, and genetically modified crops have begun to emerge alongside technological progress.

1.1.2 Features of the source text

This translation project selects passages from the first three chapters of *China's Food: A History of Grain*. The source text is a work that blends academic rigor, popular science, and cultural narrative. It stands out for its distinctive style, being both accessible to general readers and rich in specialized knowledge of history and botany.

Based on the translation challenges encountered during the process, the text's characteristics can be analyzed on three linguistic levels: lexical, syntactic, and Textual.

At the lexical level, the translator has compiled and analyzed a range of culture-specific and technically nuanced terms that require careful consideration in translation. The following tables (Table 1, 2 and 3) list the key lexical items identified in the source text.

Table 1. Agricultural Term Translation

Agricultural Terms	TT
shǔ jì	Panicum miliaceum
xiǎo mǐ	Setaria italica
jiāo bái	Zizania aquatica
gū	Zizania latifolia
jī tóu mǐ	Euryale ferox
guàn jiāng qī	pustulation stage
fēn niè qī	tillering stage
xiǎo huā fēn huà qī	flower primordium differentiation stage
yōng tǔ	piled-up earth
lí tián zhěng dì	plowing and land preparation
lěi	lei (an early Chinese tool for tilling the soil, shaped like a digging stick with a footrest)
pá	pa (an ancient Chinese rake or harrow made of wood or bamboo, with several teeth used for breaking up clods and leveling the field)
jiā	jia (a wooden farming frame or press used in ancient China for fastening, pressing, or stabilizing crops or tools)
liáng	Setaria italica
shū	beans
sōu zhǒng fǎ	souchong fa (ancient Chinese seed activation and protection method)

The book contains agricultural terms, culture-loaded words, and scientific terminology. In translation, it is crucial to balance the conventions of these different disciplines, ensuring terminological accuracy while also maintaining cultural communicability.

At the syntactic level, the source text frequently includes quotations from classical Chinese, such as "sì tǐ bù qín, wǔ gǔ bù fēn, shú wèi fū zǐ?", "mín yǒu èr nán yǐ shàng bù fēn yì zhě, bèi qí fù", and "yī xī chéng wáng, jì zhāo jiǎ ěr. shuài shí nóng fū, bō jué bǎi gǔ. jùn fā ěr sī, zhōng sān shí lǐ. yì fú ěr gēng, shí qiān wéi ǒu". Translating such classical expressions poses a major challenge for the translator.

Moreover, as a popular science work, the author frequently employs personification, metaphors, idioms, and colloquial expressions, infusing academic agricultural knowledge with vivid, life-oriented narration. Although the book conveys a wealth of scholarly information, the author intentionally adopts expressive, reader-friendly language to make complex agricultural history more engaging and accessible.

For example, expressions such as "shēng xìng pí shí、 néng gòu yǔ zá cǎo jìng zhēng de shǔ jì chéng wéi nóng tián de zhǔ jué" "zuì zǎo shàng

wèi de shǔ jì" "dài tóu de zhuàng hàn" "shuō dào zhè lǐ, yǒu yī gè wèn tí chū xiàn le" "nǐ gēng tián lái, wǒ zhī bù; wǒ tiāo shuǐ lái, nǐ jiāo yuán" and "gèng shàng yī céng lóu" all reflect this colloquial and metaphorical tone.

Table 2. Culture-Loaded Word Translation

Culture-loaded Words	TT
shè jì	state
dāo gēng huǒ zhǒng	slash-and-burn cultivation
Shāng Yāng biàn fǎ	Shang Yang's Reforms
huáng liáng yī mèng	a pipe dream
Wén Jǐng zhī zhì	The Prosperous Rule of Emperors Wen and Jing
gǒu diāo gǔ suì	The myth of "a dog sent grain seeds to people"
Yí Dí	Yidi（the legendary inventor of wine）
Hòu Jì	Hou Ji（the legendary founder of agriculture）
gǔ shén	the god of grain
tǔ dì shén	the god of land
《Xià Xiǎo Zhèng》	An Ancient Chinese Almanac on Agriculture and Seasonal Changes
《Bào Pǔ Zǐ · Jīn Dān》	*Baopuzi: On the Elixir of Immortality*
dé dào shēng xiān	ascend to the immortal
tiān hé	The Milky Way
liàn dān	alchemy

Table 3. Scientific Term Translation

Scientific Terms	TT
hú huà	gelatinization
zhí liàn diàn fěn	amylose
kàng xìng diàn fěn	resistant starch
pēi rǔ	endosperm
bù shè fáng zǐ lì	unprotected grain
diàn fěn bīng jīng	crystal starch
Xīn Xiān Nǚ Mù Bīng Qī	Younger Dryas
nǐ shān yáng cǎo	Aegilops speltoides
zhī fáng yǎng huà méi	lipoxidase
lí céng xì bāo	Separated layer cell
sì qīng dà má fēn	tetrahydrocannabinol
hé zǐ qián gé lí	prezygotic isolation

To quantify this stylistic tendency, the translator uploaded the source text into ChatGPT and extracted all informal or figurative expressions. The analysis showed approximately 2,000 characters of such colloquial and metaphorical language (including idioms, similes, personification, and conversational phrasing), accounting for about 17%–25% of the total text.

During translation, it is essential to preserve this light, engaging, and accessible tone, adapting the expressions to the conventions of English popular writing. Achieving both readability and charm while retaining the depth of the original scholarly content poses a significant challenge.

At the textual level, the source text shows relatively weak cohesion—logical relations between sentences are sometimes implicit rather than explicit. The translator therefore analyzed the use of logical connectors (Table 4) within the source text, with the results shown below.

Table 4. Logical Connectors

Type of Logical Relation	Examples of Connectors	Frequency	Proportion
Contrast	dàn shì	10	16.39%
Causality	yīn wèi、suǒ yǐ、yīn cǐ、yú shì	27	44.26%
Addition	bìng qiě、tóng shí	8	13.11%
Sequence	shǒu xiān、suí hòu	2	3.28%
Summary	—	0	0.00%
Analogy	—	0	0.00%
Condition	rú guǒ, zhǐ yào, nà me	14	22.95%
Concession	—	0	0.00%

In the 10,000-character source text, a total of 61 logical connectors were identified, giving a connector density of 6.1 per thousand characters—lower than the average of 30 connectors (below 3%). This relatively low density indicates that the logical relations in the text are often implicit rather than explicit. Therefore, during translation, special attention must be paid to the transformation between implicit logic in Chinese and explicit logical expression in English, ensuring proper cohesion and coherence across sentences and paragraphs.

1.2 Significance of the Task

The purpose of this translation project is to provide methodological insights for similar types of texts by analyzing the translator's strategies. Based on the characteristics of the source text and the requirements of the translation, the translator faced numerous challenges. For instance, the text contains quotations from classical Chinese literature, which may be difficult to understand even for native speakers. In addition, the selected chapters offer detailed descriptions of the evolution of ancient Chinese crops, including many terms that have no direct equivalents in the target language.

Moreover, the project aims to contribute to the global dissemination of Chinese culture. The source text presents a systematic overview of the history of Chinese grains — an essential part of Chinese civilization. In the context of globalization, the interaction, exchange, and integration among different cultures and civilizations have accelerated, while humanity faces increasing shared challenges. The transformation of world civilizations, the pursuit of cultural prosperity, and the exploration of global governance all call for the revival of Chinese civilization. Cultural dissemination is thus an important means of strengthening national confidence and promoting intercultural dialogue, enabling the essence of Chinese culture to flourish on the world stage. Through diverse approaches such as translation, education, and the arts, the promotion of Chinese culture can not only foster cross-cultural exchange but also advance shared global values, achieving the ideal of "harmony in diversity and unity among all under heaven".

Finally, this project purposes to enrich the translation and introduction of works in the field of Chinese grain history. Although topics related to grain have been widely discussed, existing research has largely focused on state procurement policies and their implementation at the local level. Systematic popular works on the history of Chinese grains remain limited in China, and English-language versions for international readers are even rarer. This book, which examines the development of China's grain culture through a multidisciplinary lens—encompassing botany, history, and sociology—holds unique academic and communicative value. While most overseas publications on Chinese food culture focus on cuisine or philosophy, this work centers on the evolution of staple crops, offering a valuable addition to the global study and translation of grain history.

2. Process Description

This chapter outlines the preparatory, procedural, and post-editing stages of the translation practice, including pre-translation preparation, translation execution, and post-translation proofreading.

2.1 Pre-Translation Preparation

Reading the entire source text thoroughly before translation is a golden rule for any professional translator. Before beginning the translation, the translator carefully read the entire book, analyzing its vocabulary, discourse structure, and linguistic style. The source text presents several distinctive features, which also constitute the main challenges encountered during the translation process.

Firstly, the book contains a large number of botanical and agricultural terms, as well as culturally loaded expressions. Moreover, as a popular science work, its Chinese prose is designed to be vivid and accessible, yet this very accessibility poses difficulties in English translation: the translator must ensure that explanations are detailed enough to make the text intelligible to readers unfamiliar with Chinese cultural or agricultural contexts.

After completing a full reading, the translator decided to adopt Peter Newmark's Communicative Translation Theory as the guiding theoretical framework for this project. Newmark's theory emphasizes that the translated text should produce an equivalent effect on the target readers as the original does on its source readers. This theory is particularly valuable in translating popular science texts, as it allows the translator to convey scientific knowledge accurately while maintaining readability and engagement. By adopting communicative translation strategies, the translator aimed to ensure that English-speaking readers could both comprehend and appreciate the content, thus achieving the educational purpose of popular science writing[2,3,4].

2.2 While-Translation Process

To ensure translation quality, the use of reliable reference materials is essential. A competent translator must consult dictionaries, parallel texts, and online resources when encountering unfamiliar terminology or conceptual challenges.

During the translation process, the following reference tools were prepared and used:

Online English–English Dictionaries. Merriam-Webster Online Dictionary was the translator's primary reference, known for its reliability. Longman Dictionary of Contemporary English (Online) was also used. These dictionaries provided nuanced English definitions and helped the translator distinguish between subtle shades of meaning, thus improving lexical precision.

English–Chinese Dictionaries. *The English–Chinese Dictionary* (edited by Lu Gusun) and the *Oxford Advanced Learner's English–Chinese Dictionary* were used to clarify rare terms and phrases efficiently, ensuring semantic accuracy.

Chinese Dictionaries. The translator used the *Modern Chinese Dictionary (7th Edition)* for authoritative Chinese definitions. Since precise wording in both source and target languages is essential, this reference helped ensure lexical accuracy. Additionally, the translator searched for relevant plant images and background information through Bing, Google, and Baidu to better understand cultural and historical references.

The translator also selected E.N. Anderson's *The Food of China*[5] as a core parallel text. This work systematically examines the historical evolution of Chinese food culture, including agriculture, culinary technology, and the social context of food consumption. Anderson, an internationally renowned food anthropologist, is widely regarded as a leading scholar in the field. His book, written for both academic and general readers, combines scholarly rigor with engaging narrative—an approach that closely aligns with *The History of Chinese Grains* and its "popular science for all ages" positioning.

2.3 Post-Translation Management

Quality control after the first draft is critical for ensuring both accuracy and fluency. Immediately after completing the translation, the translator conducted a self-proofreading session. However, self-review alone is insufficient; it is essential to seek feedback from others.

After completing the initial draft, the translator invited classmates and the academic supervisor to review the translation to identify and correct potential issues, thereby improving the final quality.

(1) Self-proofreading

The translator first compared the source text and target text line by line to check for any omissions or mistranslations. Next, the translator reviewed each sentence for fidelity and fluency. Then, by reading the English text aloud, the translator assessed the naturalness of the target text—since, as Nida[6] observed, "our ears are often more sensitive to language than our eyes". This practice helped identify awkward phrasing and unnoticed grammatical errors. The translator also conducted background research to refine accuracy and ensure stylistic consistency between the two languages.

(2) Peer proofreading

As Li[7] notes, "Proofreading can be done by the translator, but it is best entrusted to others, since human perspectives are complementary." Two classmates were asked to check the translation line by line against the original text for fidelity, accuracy, and fluency. Additionally, a native English speaker was invited to read the translation without reference to the source text and provide feedback from a target reader's perspective. Their input significantly enhanced the readability and coherence of the translation.

(3) Supervisor proofreading

Finally, the translator revised the translation according to the supervisor's detailed feedback, aiming to further improve linguistic precision and stylistic smoothness.

3. Case Analysis

3.1 Lexical Translation

The lexical system of a language serves as the carrier of a nation's cultural heritage, and its vocabulary directly reflects the evolution of that culture[8]. Therefore, the accurate translation of lexical items is crucial. However, as discussed earlier, the source text contains numerous proper nouns and culture-specific terms, which present significant challenges to the translator. This section discusses feasible strategies to overcome these lexical difficulties.

3.1.1 Title of ancient books

Example 1:

《hàn shū · shí huò zhì》

Initial Translation:

The History of the Han Dynasty: Treatise on Food and Goods

Revised Translation:

The History of the Han Dynasty: Treatise on Agriculture and Economy

Analysis:

When the translator first encountered this term, there was no established English equivalent available in dictionaries or academic references. The initial version was therefore based on a literal understanding of the title, assuming the work concerned food and commodities. However, after further research, the translator discovered that book actually summarizes pre-Qin agricultural thought in its first section and discusses the evolution of monetary systems from pre-Qin to Western Han in its second. It analyzes the successes and failures of economic policies and their implications for governance. Consequently, "Agriculture and Economy" more accurately captures the dual focus of the text, aligning better with its historical and thematic scope.

Example 2:

《xià xiǎo zhèng》

Initial Translation:

Xia Xiao Zheng

Revised Translation:

An Ancient Chinese Almanac on Agriculture and Seasonal Changes

Analysis:

In the initial translation, the translator opted for pure transliteration (xià xiǎo zhèng) to preserve the cultural identity of this classic text, since no widely accepted English translation existed. However, such a title conveys no meaning to readers unfamiliar with Chinese history. After consulting historical sources, the translator found that Xia Xiao Zheng is an ancient agricultural calendar that records phenological, meteorological, and astronomical changes month by month, based on the lunar calendar. When a literal or transliterated title fails to communicate meaning, explanatory translation is permissible so long as it remains faithful to the text's essence. Therefore, the revised version—An Ancient Chinese Almanac on Agriculture and Seasonal Changes—balances clarity with cultural preservation.

Example 3:

《lún yǔ · wēi zǐ》

Initial Translation:

The Analects (Wei Zi)

Revised Translation:

The Analects—Book 18: Wei Zi

Analysis:

The initial translation used parentheses, a format that appeared informal and failed to convey the textual hierarchy within The Analects. After reviewing standard academic editions by James Legge and D.C. Lau, the translator observed that Western sinological practice usually adopts a "Book—Chapter: Title" format to reflect textual structure while retaining cultural specificity. Since Wei Zi is a proper name, rendering it as "Prince Wei" or "Master Wei" might create confusion and diminish the classical tone. The revised translation—*The Analects—Book 18: Wei Zi*—aligns with scholarly conventions, highlights the internal organization of the classic, and respects its cultural authenticity.

Example 4:

《fán shèng zhī shū》

Initial Translation:

The Book of Fan Sheng-zhi

Revised Translation:

Fan Shengzhi's Book on Agriculture

Analysis:

The initial translation used partial transliteration to preserve the book's historical value, but this approach lacked clarity about its content. Consulting academic databases revealed that *Fan Shengzhi's Book on Agriculture* is the most accepted English rendering in sinological studies. This structure—"author's name + subject"—is consistent with Western naming conventions for technical or classical texts, such as *Xu Guangqi's Treatise on Agriculture* or *Wang Chong's Discourses of Balance*. This version preserves both cultural identity (via the author's name) and thematic transparency (via the subject "Agriculture"), making it accessible and academically standard.

Example 5:

《bào pǔ zǐ · jīn dān》

Initial Translation:

Baopuzi: The Golden Elixir

Revised Translation:

Baopuzi: On the Elixir of Immortality

Analysis:

The initial translation retained the pinyin Baopuzi for cultural specificity but rendered Jindan literally as "The Golden Elixir". This literal version risked misleading English readers into interpreting the text as a manual on metallurgy or alchemy in the modern chemical sense. Further research revealed that Baopuzi, written by Ge Hong of the Eastern Jin Dynasty, consists of Inner Chapters discussing Daoist philosophy, immortality, and alchemy, and Outer Chapters addressing political and moral issues. The chapter Jindan focuses on Daoist elixirs of

immortality rather than actual metals. Hence, the revised title *Baopuzi: On the Elixir of Immortality* better communicates its Daoist context while preserving the cultural resonance of Baopuzi. The phrase "Elixir of Immortality" clarifies the metaphysical nature of Jindan and avoids semantic ambiguity, achieving a balance between fidelity and accessibility.

Example 6:

《mèng zǐ · jìn xīn shàng》

Initial Translation:

Mencius: Jinxin Shang

Revised Translation:

Mencius: Cultivating the Mind to Comprehend Heaven (Part I)

Analysis:

In the initial translation stage, the translator adopted a full pinyin rendering. This was because the translator did not fully understand the meaning of the term "jìn xīn". A brief search revealed that in the Confucian context, "jìn xīn" means "to exhaust one's mind and effort in pursuit of the Way and in understanding Heaven's mandate". However, even with this definition, the translator found it difficult to grasp the precise meaning of the phrase within its specific textual and philosophical context. Therefore, before confirming its exact interpretation, the translator chose to temporarily retain the pinyin form to avoid mistranslation.

In the revision stage, the translator carefully read the original text of *Mencius: Cultivating the Mind to Comprehend Heaven (Part I)* and examined the key passage: "jìn qí xīn zhě, zhī qí xìng yě. zhī qí xìng, zé zhī tiān yǐ. cún qí xīn, yǎng qí xìng, suǒ yǐ shì tiān yě. yāo shòu bù èr, xiū shēn yǐ sì zhī, suǒ yǐ lì mìng yě. "

This passage means that by fully cultivating one's good mind, a person becomes aware of their true nature; by understanding one's nature, one comes to understand Heaven's will. Preserving one's moral heart and nurturing one's inherent nature are ways to live in harmony with Heaven. Regardless of whether life is long or short, one should cultivate oneself and accept fate with equanimity—this is the way to establish one's destiny.

Another passage states: "mò fēi mìng yě, shùn shòu qí zhèng; shì gù zhī mìng zhě bù lì hū yán qiáng zhī xià. jìn qí dào ér sǐ zhě, zhèng mìng yě; zhì gù sǐ zhě, fēi zhèng mìng yě. "

This means that nothing falls outside the decree of Heaven; those who understand destiny accept it without resistance. The one who follows the Way to the end, even in death, fulfills true destiny; the one who dies through wrongdoing does not.

From these readings, the translator concluded that "jìn xīn" refers to a process through which one exhausts the capacity of the mind to perceive one's own nature, thereby achieving harmony with Heaven's will. It encapsulates the Confucian ideal of uniting inner moral cultivation with the cosmic order, and represents the core of Mencius's philosophy of "self-cultivation to establish destiny".

Therefore, the translator revised the title as *Mencius: Cultivating the Mind to Comprehend Heaven (Part I)*.

The phrase "Cultivating the Mind" emphasizes the introspective practice of refining one's moral and spiritual nature, while "to Comprehend Heaven" reveals the ultimate Confucian goal of attaining moral enlightenment and understanding the mandate of Heaven. Furthermore, since the chapters of Mencius are conventionally divided into "Upper" and "Lower" sections, the translator rendered this as Part I to align with academic convention.

3.1.2 Agricultural terms

Example 7:

qǐ lǒng zuò zhèn

Initial Translation:

Ridge Raising and Canal Digging

Revised Translation:

Ridge Raising and Furrow Cultivation

Analysis:

The initial translation misinterpreted "zhèn" as "canal," implying large-scale irrigation, whereas in the context of ancient Chinese farming, "zhèn" refers to the narrow furrows between ridges used alternately for planting and resting the soil. Therefore, "Furrow Cultivation" more accurately describes this technique and aligns with the ridge–furrow alternation method in the Daitian Farming System developed in the Western Han period.

Example 8

Initial Translation:

Table 5. Initial Translation for Agricultural Terms

ST	TT
lěi	lei (a primitive wooden plow handle)
sì	si (an ancient plowshare)
bà	rake
jiā	jia (a wooden farming frame)

Revised Translation:

Table 6. Revised Translation for Agricultural Terms

ST	TT
lěi	lei (an early Chinese tool for tilling the soil, shaped like a digging stick with a footrest)
sì	si (an ancient Chinese plowing tool with a flat, spade-like blade attached to a wooden handle, used for turning the soil)
bà	pa (an ancient Chinese rake or harrow made of wood or bamboo, with several teeth used for breaking up clods and leveling the field)
jiā	jia (a wooden farming frame or press used in ancient China for fastening, pressing, or stabilizing crops or tools)

Analysis:

During the initial translation stage (Table 5), the translator consulted reference materials about these traditional Chinese farming tools. The lei (lěi) was a wooden implement used for loosening soil and pulling in early agriculture—it served as the prototype of the plow. The si (sì) was an ancient tool used for turning the soil, often used together with the lei. The ba (bà) was designed for leveling the field, breaking up clods, or removing weeds, with functions similar to Western rakes or harrows. The jia (jiā) was an early wooden device used for holding or pressing harvested grain. Based on these findings, the translator initially used pinyin transliteration for each tool name, followed by brief explanations in parentheses.

However, in the revised version (Table 6), the translator found that such brief notes were insufficient for readers to fully grasp the form and function of each tool, which could hinder comprehension. The lei, one of the earliest Chinese farming tools, was used for loosening soil and served as a precursor to the plow. In the revised translation, the translator added a descriptive explanation in parentheses[9]—"an early Chinese tool for tilling the soil, shaped like a digging stick with a footrest". This approach avoids mistranslating it as existing Western tools such as a "hoe" or "spade," while clearly conveying its appearance and function.

The si was a common soil-turning tool in early Chinese agriculture, often paired with the lei, representing a key transitional implement between digging tools and plow-type implements. The translator again adopted explanatory transliteration, retaining the original name (si) and supplementing it with a functional description— "with a flat, spade-like blade, used for turning the soil"—allowing readers to visualize its use and shape. This method preserves both linguistic authenticity and cultural information.

The ba was mainly used for breaking up soil and leveling the land, an essential tool for spring cultivation. Although it could be translated as "rake" or "harrow," these English terms generally refer to modern tools and cannot accurately reflect the ancient ba's structure or function. The translator therefore explained its material (wood or bamboo), structure (with several teeth), and function (for breaking up clods and leveling the field), enabling readers to form a concrete image of the tool.

The jia in ancient China referred both to a punitive device and a wooden agricultural implement used for fixing, pressing, or supporting crops and tools. To avoid confusion with the penal instrument, the translator clarified its agricultural use and physical structure, rendering it as jia (a wooden farming frame or press used in ancient China…). This translation preserves the cultural specificity of the term while using descriptive explanation to delimit its meaning, achieving a balance between accuracy and cultural transmission[10].

Example 9:

sōu zhǒng fǎ

Initial Translation:

seed steeping method

Revised Translation:

souchong fa (ancient Chinese seed activation and protection method)

Analysis:

In the initial translation, the translator consulted the meaning of the character "sōu", which is a polysemous term meaning to excrete, to soak, to wash, or to mix with water. The source text also provides an explanation of the souchong fa, describing a process in which animal bones (from horses, cattle, sheep, pigs, etc.) are boiled in water, to which the toxic herb aconite (containing aconitine) and silkworm or sheep manure are added and mixed into a paste. The seeds are then coated with this mixture and dried repeatedly six or seven times. This gives the seeds a nutrient-rich and toxin-protected coating that significantly increases their survival rate and yield. In short, it involves soaking seeds in a solution of bone broth, herbal extracts, and organic manure to promote growth and prevent pests. Therefore, the translator initially chose the term "steeping".

However, upon revision, the translator realized that "seed steeping method" did not fully convey the agricultural complexity of the souchong fa. While the literal meaning of "soaking seeds" was correct, it failed to express the multifaceted purpose of this traditional technique, which functioned both as a seed activation and protection method. It was not merely a process of soaking, but a sophisticated pre-treatment that included soaking, drying, pest prevention, and vitality enhancement. The revised translation—souchong fa (ancient Chinese seed activation and protection method)— accurately summarizes its dual purposes of stimulating seed germination and protecting against disease and pests, while the use of pinyin preserves the cultural and terminological specificity of the original Chinese agricultural concept.

Example 10:

jiāo bái de běn míng wèi gū, yě gēn shuǐ dào yí yàng zhǎng yǒu suì, qí zǐ lì—gū mǐ (diāo hú mǐ) zài chūn qiū shí qī hái shì zhòng yào de liáng shi.

Initial Translation:

The plant's original name is gu (Zizania latifolia), which, like rice, produces ears of grain. Its seeds—gu mi (Zizania seeds)—were an important food source during the Spring and Autumn period.

Revised Translation:

The plant's original name was gu (Zizania latifolia), which, like rice, bore ears of grain. Its seeds—known in ancient times as "gu rice" (also called "diaohu rice")—were an important cereal during the Spring and Autumn period.

Analysis:

The initial translation rendered "gū mǐ" as Zizania seeds, which posed two problems. First, in modern botanical terminology, Zizania refers to the genus that includes North American wild rice, and thus "Zizania seeds" would likely mislead readers into thinking that the text referred to wild rice, which is not identical to gu mi. Second, the initial version omitted the synonym "diāo hú mǐ", thereby losing an important historical and linguistic detail—the coexistence of two ancient names for the same grain.

In the revised translation, the translator employed a combined transliteration and explanatory translation strategy, rendering the term as "'gu rice' (also called 'diaohu rice')". This approach preserves the historical authenticity of the ancient names while clarifying that both refer to the same species, preventing confusion. Quotation marks are used to signal that these are historical names, not modern taxonomic terms. This solution successfully balances scientific precision with cultural fidelity, helping readers understand the plant's dual identity in historical context.

3.2 Syntactic Translation

Given the syntactic redundancy of Classical Chinese and the structural complexity of its literary forms, the translator adopted flexible strategies to ensure coherence and clarity. Among these, explicitation and recasting proved particularly effective. Explicitation adds interpretive detail to make implicit information explicit, thereby improving logical flow and semantic completeness. Recasting, on the other hand, allows structural reorganization within the bounds of faithfulness, ensuring the translation aligns with English logic and readability.

The combination of these methods helps resolve the looseness and condensation typical of Classical Chinese syntax, improving textual cohesion and readability while preserving the depth of the original. The translator must remain sensitive to structural and stylistic differences between Chinese and English, adapting strategies according to context to ensure that the translation is both faithful and communicatively effective.

3.2.1 Classical Chinese

Example 11:

fú jīn dān zhī wéi wù, shāo zhī yù jiǔ, biàn huà yù miào. huáng jīn rù huǒ, bǎi liàn bù xiāo, mái zhī, bì tiān bù xiǔ. fú cǐ èr wù, liàn rén shēn tǐ, gù néng lìng rén bù lǎo bù sǐ.

Initial Translation:

The substance called golden elixir becomes more wondrous the longer it is refined by fire. Gold, when placed in the fire, does not dissolve even after being refined a hundred times; when buried, it remains imperishable for a very long time. Consuming these two substances refines the human body, enabling one to become immortal and ageless.

Revised Translation:

The so-called golden elixir (a product made by refining cinnabar, lead, sulfur, and other materials) becomes more intricate the longer it is heated. Gold, when placed in fire, does not dissolve even after repeated refining; when buried, it remains unchanged for a very long time. Consuming these two substances was

believed to refine the human body, granting immortality and eternal youth.

Analysis:

In the initial translation, the translator interpreted the passage straightforwardly—"The golden elixir becomes more wondrous with longer refinement." However, upon further research, it became clear that "golden elixir" (jīn dān) had complex connotations in Daoist alchemy, referring not to an actual medicine but to an external alchemical compound made from cinnabar, lead, and sulfur. The revised translation introduces this background by adding an explicative parenthesis—(a product made by refining cinnabar, lead, sulfur, and other materials)—thus clarifying its nature and avoiding potential misunderstanding.

Furthermore, the phrase "so-called golden elixir" signals a critical distance, preventing readers from mistaking ancient beliefs for scientifically valid statements. This adjustment reflects a balance between cultural fidelity (retaining Daoist terminology) and modern scientific clarity, ensuring the text remains accessible and appropriate for a contemporary audience.

Example 12:

《lún yǔ · wēi zǐ》 zhōng xiě dào: "sì tǐ bù qín, wǔ gǔ bù fēn, shú wéi fū zǐ?"

Initial Translation:

The four limbs are not diligent, the five grains are not distinguished—can this be called being a gentleman?

Revised Translation:

One who shuns manual work and cannot tell the five grains apart—can such a man be called a true scholar?

Analysis:

In the initial translation, the translator adopted a literal rendering. While accurate on a word-for-word level, it resulted in stiff, unnatural phrasing that failed to convey the satirical tone of Confucius's remark. The phrase "fū zǐ", though literally meaning "master" or "teacher," here carries an ironic implication—criticizing intellectuals who detach themselves from manual labor and practical knowledge.

Thus, in the revised version, the translator employed recasting to restructure the sentence and capture its pragmatic force. Replacing "gentleman" with "scholar" aligns better with the cultural and rhetorical intent, as "gentleman" in English evokes moral refinement rather than scholarly elitism. Adding "shuns manual work" concretizes the critique, allowing the irony to emerge naturally in English discourse. The final version—"One who shuns manual work and cannot tell the five grains apart—can such a man be called a true scholar?"—preserves both meaning and tone, achieving a faithful yet idiomatic translation.

Example 13:

《shī jīng · zhōu sòng》 zhōng duō cì chū xiàn le "bǎi gǔ" de shuō fǎ, bǐ rú "yī xī chéng wáng, jì zhāo xiá ěr. shuài shí nóng fū, bō jué bǎi gǔ. jùn fā ěr sī, zhōng sān shí lǐ. yì fú ěr gēng, shí qiān wéi ǒu".

Initial Translation:

Alas, King Cheng, having performed your rites, you lead the farmers in due season to sow the hundred grains. Swiftly they plow your private fields, covering thirty li. Tens of thousands of people, working in pairs, labored together with one heart and one mind.

Revised Translation:

Ah, King Cheng, the High God and your august forebears have revealed themselves and descended upon you in response to your rites. You lead the farmers in due season to sow the hundred grains. You exhorted the agrarian officers to work their ploughs with speed and diligence, cultivating fields that stretched for many miles beyond. Tens of thousands of people, working in pairs, labored together with one heart and one mind.

Analysis:

In the initial translation, the translator, after consulting related references, understood that this poem depicts King Cheng personally leading officials and farmers in sowing the "hundred grains" after completing ancestral and heavenly sacrifices, encouraging diligence and cooperation in the fields. However, the original text contains multiple layers of ritual and symbolic meaning that required careful handling.

The exclamation "yī xī" conveys both reverence and invocation in a ritual context, rather than sorrow. Thus, "Alas", which in English carries connotations of grief, was replaced with "Ah", which better preserves the tone of solemn invocation.

The phrase "having performed your rites" failed to express the sense of divine response to the king's offerings, so it was revised to "the High God and your august forebears have revealed themselves and descended upon you in response to your rites".

The word "jùn" was reinterpreted as meaning either "swiftly" or "agrarian officials," while "sī" may refer to "private fields" or an ancient farming implement. The revised version blends these interpretations to emphasize the act of royal exhortation and collective farming.

Finally, the phrase "zhōng sān shí lǐ" was treated as a hyperbolic description of vast farmland rather than a literal measurement. Hence, it was rendered as "cultivating fields that stretched for many miles beyond". The revised translation maintains the ritual grandeur and poetic rhythm of the original while clarifying its agricultural and symbolic context for modern readers.

Example 14:

"jǐn jì jiā kǒu shù zhòng dà dòu, shuài rén wǔ mǔ, cǐ tián zhī běn yě", tí chàng měi rén yào zhòng wǔ mǔ dà dòu, bǎo zhèng jī běn de yíng yǎng gōng jǐ.

Initial Translation:

The cultivation of soybeans, calculated at five mu per person according to household size, is regarded as the very foundation of agriculture.

Revised Translation:

The cultivation of soybeans, calculated at five mu per person according to household size, for soybeans are an indispensable crop to people's livelihood.

Analysis:

The initial translation interpreted the line as prescribing that each household cultivate soybeans based on population size, treating "the foundation of agriculture" as a general statement. However, upon further research into, *Fan Shengzhi's Book on Agriculture* the translator discovered that this passage emphasizes soybeans as a reliable and essential crop—drought-resistant, adaptable, and vital for preventing famine.

The phrase "cǐ tián zhī běn yě" refers not to agriculture in a universal sense, but to the importance of soybeans as a staple ensuring stability in years of poor harvests. Thus, the revision rephrases the final clause as "for soybeans are an indispensable crop to people's livelihood", capturing both the socio-economic and ecological significance of soybeans in sustaining the agrarian population.

Example 15:

"mín yǒu èr nán yǐ shàng bù fēn yì zhě, bèi qí fù", jìn yí bù qiáng huà le xiǎo nóng shēng chǎn mó shì, tōng guò fù shuì guī zé pò shǐ dà jiā tíng chāi fēn chéng xiǎo jiā tíng.

Initial Translation:

If a family has more than two men and does not divide them, their tax will be doubled.

Revised Translation:

Households with two or more adult sons who failed to divide and live independently were subject to double taxation.

Analysis:

In the initial translation, the phrase "èr nán" was misunderstood as referring to any two adult males. However, historical context from pre-Qin legal texts reveals that "nán" here specifically denotes adult sons within a household. The policy aimed to dismantle large patriarchal family structures and promote smallholder households by imposing higher taxes on undivided families.

The revised version thus clarifies the sociopolitical intent behind the rule and accurately conveys its legal and familial implications through the phrasing "adult sons who failed to divide and live independently".

3.2.2 Common saying

Example 16:

zì cǐ, "nǐ gēng tián lái, wǒ zhī bù; wǒ tiāo shuǐ lái, nǐ jiāo yuán" jiù chéng wéi gǔ dài zhōng guó biāo zhǔn de nóng yè shēng chǎn mó shì.

Initial Translation:

From then on, "You plow the fields, I weave the cloth; I carry the water, you water the garden" became the standard mode of agricultural production in ancient China.

Revised Translation:

From then on, "Each does their part and contributes according to their skills—he works the fields while she weaves cloth; he carries the water and she tends the garden"—became the standard mode of agricultural production in ancient China.

Analysis:

Although the initial translation captured the literal rhythm of the original saying, it failed to reflect its deeper meaning—a depiction of gendered division of labor and harmonious cooperation within agrarian households. Using "you" and "I" reduced the proverb to a personal dialogue rather than a universal ideal of shared rural life.

Categorization of idiom translation methods—borrowing, explicating, literal, and free translation—the translator combined free translation and adaptive reformulation to preserve both the symbolic and emotional layers of the proverb. The revised version foregrounds the spirit of cooperation, mutual reliance, and

domestic harmony through inclusive phrasing that conveys both practicality and affection.

Example 17:

Huáng Hé "sān nián liǎng jué kǒu, bǎi nián yī gǎi dào" de tè diǎn yóu cǐ ér lái.

Initial Translation:

Every three years, there are two breaches; every hundred years, there is a change of course.

Revised Translation:

Every three years it breaks its banks, once a century it changes course.

Analysis:

The proverb vividly encapsulates the Yellow River's natural volatility. While the initial translation reproduced its meaning faithfully, it sounded overly formal and lacked the rhythm and oral flavor of a traditional saying. The phrase "there are two breaches" in particular reads like a factual report rather than a proverbial observation.

The revised translation adopts more dynamic and idiomatic English, using "breaks its banks," a natural expression for river flooding. "Once a century it changes course" replaces "every hundred years", giving the sentence smoother rhythm and a proverb-like cadence that echoes the conciseness and symmetry of the Chinese original.

Example 18:

yóu yú shuǐ zī yuán chōng yù、rì zhào chōng zú, kě yǐ mǎn zú nóng zuò wù shēng chǎn de xū qiú, suǒ yǐ zài Sòng cháo zhī hòu, zhè lǐ chéng wéi zhōng guó zhòng yào de liáng shi shēng chǎn jī dì, "Hú Guǎng shú, tiān xià zú" tǐ xiàn le zhè yì diǎn.

Initial Translation:

When Huguang is abundant, the whole country has enough.

Revised Translation:

Huguang ripens, and the realm is fed.

Analysis:

The original proverb is admired for its parallelism and rhythmic compactness, celebrating Huguang's agricultural importance. The initial translation, though accurate, flattened its poetic symmetry and used the vague phrase "has enough", which obscured what was being referred to (grain, resources, etc.).

The revised translation "Huguang ripens, and the realm is fed" restores the poetic rhythm and balanced structure through verb parallelism (ripens/fed), while clearly conveying the agricultural and national implications. Its brevity and cadence reproduce the aphoristic tone of the Chinese original, preserving both linguistic beauty and cultural resonance.

Example 19:

mín jiān chuán shuō Liú Ān zuì zhōng yīn liàn dān "dé dào chéng xiān", ér qiě tā méi fú wán de xiān dān bèi jiā lǐ de jī、gǒu chī le, yú shì jī、gǒu yě fēi shēng chéng xiān le. zhè jiù shì "yī rén dé dào, jī quǎn shēng tiān" zhè yī diǎn gù de yóu lái.

Initial Translation:

When one attains the Way, even the chickens and dogs ascend to heaven.

Revised Translation:

When a person gains power or favor, those close to him also rise to prominence.

Analysis:

The idiom originates from the legend of Liu An, Prince of Huainan, who was said to have ascended to immortality after refining elixirs, with his household animals ascending alongside him. Over time, the saying evolved from a mythological expression to a social and political metaphor, denoting how one person's success can benefit their associates.

While the initial translation preserved the literal imagery, it failed to communicate the modern ironic undertone of the phrase, which often mocks those who prosper through proximity to power. The revised version focuses on this pragmatic meaning—"When a person gains power or favor, those close to him also rise to prominence."—effectively rendering the idiom's evolved sociocultural sense. By moving from mythic literalism to pragmatic metaphor, the translation bridges the semantic shift the expression underwent across history, aligning its tone and function with the expectations of contemporary English readers.

3.3 Textual Translation

In English writing, texts are typically composed of a series of sentences that are linked together through cohesive devices such as pronouns, adverbs, conjunctions, subordinate clauses, non-finite constructions, and variations in tense or voice. In contrast, Chinese discourse tends to be more loosely structured, often lacking explicit markers of cohesion. Therefore, translators must be fully aware of these differences and employ appropriate cohesive devices in the target language to achieve a similar degree of coherence and unity as in the source text.

Furthermore, when translating from Chinese to English, shifts in style are often necessary.

Chinese popular science writing frequently incorporates personification, exaggeration, or humor. To preserve this liveliness in English, translators must select appropriate metaphors and expressions so that readers can grasp both the scientific information and the emotional tone of the original text[11].

3.3.1 Explicitation of logical relations

Example 20:

zài Shāng Zhōu shí qī, zhōng guó de nóng yè yǒu le cháng zú fā zhǎn hé jìn bù, dàn bù kě fǒu rèn de shì, zhè ge shí qī de nóng gēng jì shù réng chǔ yú chū jí fā zhǎn jiē duàn. chú le tián lǐ de nóng zuò wù, rén men cǎi jí dào de yě cài yě guǒ yǐ jí yú liè huò dé de gè zhǒng ròu shí réng rán shì qí zhòng yào de shí wù zǔ chéng. Shén Nóng cháng bǎi cǎo de chuán shuō yǐ jí zhōng guó rén duì kǔ wèi mǐn gǎn de jī yīn, dōu kě yǐ chéng wéi yǒu lì de zhèng jù.

Initial Translation:

Chinese agriculture had made long progress in the Shang and Zhou dynasties. But it is certain that the farming techniques was still on its primary development stage in this period. Beyond cultivated crops, foraged wild vegetables and fruits and meat obtained through fishing and hunting remained essential components of their diet. The legendary tale of Shennong tasting hundreds of herbs, along with the genetic predisposition of Chinese people to detect bitter flavors, serve as compelling evidence of this dietary pattern.

Revised Translation:

During the Shang-Zhou period, while agricultural productivity markedly improved, the persistent dietary dependence on foraged plants (notably bitter herbs) and hunted game—evidenced both by the Shennong mythos (a cultural memory of primitive phytochemical experimentation) and the TAS2R38 bitter receptor gene polymorphism prevalent among East Asians (an evolutionary adaptation to toxin identification)—conclusively indicates that agricultural technology remained fundamentally primitive at this stage.

Analysis:

In the initial translation, the final sentence linked the argument with "serve as compelling evidence," maintaining surface-level cohesion but failing to clarify what the evidence supported. The translator realized upon review that the passage followed a three-part logical structure: progress → limitation → supporting evidence. The myth of Shennong and the genetic predisposition to bitterness both functioned as evidence that agricultural practices were still in an early developmental stage.

Thus, the revised version adds explanatory details—"a cultural memory of primitive phytochemical experimentation" and "an evolutionary adaptation to toxin identification"—to clarify the scientific and cultural relevance of each piece of evidence. The conclusion "conclusively indicates" explicitly signals the logical relationship, ensuring that the argument flows clearly and coherently for English readers.

Example 21:

zài zhè yī guò chéng zhōng, wǒ men de zǔ xiān hěn kě néng dé dào le rén lèi de hǎo péng yǒu—gǒu de bāng zhù. yǒu yī gè liú chuán yú gè dì de chuán shuō: Tiān Tíng yǒu gǔ wù de zhǒng zi, hǎo xīn de gǒu zài Yù Huáng Dà Dì de gǔ cāng lǐ dǎ le yī gè gǔn, shēn shàng de máo jiù zhān mǎn le gǔ zhǒng, kě xī tā zài guī tú zhōng jīng guò Tiān Hé, shēn shàng de zhǒng zi dōu diào jìn le Tiān Hé lǐ, jǐn bǎ wěi ba shàng de zhǒng zi dài dào le rén jiān, cóng cǐ rén lèi cái yǒu le néng tián bǎo dù zi de liáng shi. zhè ge chuán shuō kàn qǐ lái gēn kē xué yī diǎn dōu bù dā jiè, dàn shì zhǐ yào shāo jiā fēn xī, wǒ men jiù néng kàn dào qí zhōng de hé lǐ zhī chù.

Initial Translation:

During this process, it is very likely that our ancestor received help from human's friend-dog. There is myth that spreads many places: there are grain seeds in the celestial court. To bring the seeds to human world, a kind dog rolled around in the barn of the Jade Emperor and its fur was covered with grain seeds. But the seed on its body dropped into the Celestial River, only bringing the seeds on its tail to the human world. Since then, human have had the grain to feed themselves. Although this myth has nothing to do with science. But we can see the rationality in it with a little analysis.

Revised Translation:

During this process, our ancestors may well have received help from humankind's faithful companion—the dog. A legend widely told across China recounts that in the Heavenly Palace, the seeds of grain were stored in the granary of the Jade Emperor. Out of kindness, a dog rolled in the granary, and its fur became covered with the precious seeds. However, on its return journey to the human world, the dog had to cross the Celestial River, and most of the seeds fell into the water—only those clinging to

its tail made it through. From these few seeds came the grains that have since nourished humankind. At first glance, this story appears far removed from science, yet when examined more closely, a certain internal logic reveals itself.

Analysis:

The translator noticed that the original text made a sudden shift in reasoning—from a rational speculation ("kě néng dé dào le gǒu de bāng zhù") to a mythological narrative—without clear logical transition. The initial English version simply listed events sequentially, lacking causal cohesion.

In the revision, logical connectors such as "However" and "From these few seeds came…" were added to explicitly construct a cause-and-effect chain (dog → brings seeds → crosses river → loses most seeds → remaining seeds become crops).

Moreover, the redundant and grammatically incorrect "Although..." "But" structure was replaced with a more natural "At first glance… yet when examined more closely…" pair, which better reflects contrastive reasoning in English discourse. The translator also inserted cultural clarifications—such as "the seeds of grain were stored in the granary of the Jade Emperor"—to make mythological references like "Tiān Tíng" and "Tiān Hé" intelligible to non-Chinese readers.

Example 22:

zài Chūn Qiū Zhàn Guó shí qī, xiǎo mǐ (lì) kāi shǐ jiē tì dà huáng mǐ (shǔ), bù zhǐ shì yīn wèi xiǎo mǐ néng gòu shì yìng Huáng Hé Zhōng Xià Yóu qū yù de qì hòu huán jìng, tóng shí jù yǒu bù cuò de chǎn liàng, hái yǒu yī gè hěn zhòng yào de yuán yīn, jiù shì xiǎo mǐ róng yì chī.

bié xiǎo kàn "róng yì chī" zhè ge tè xìng, shì fǒu róng yì jìn shí huì zhí jiē yǐng xiǎng rén lèi huò qǔ néng liàng de xiào lǜ, jì ér yǐng xiǎng yī zhǒng nóng zuò wù de mìng yùn.

zài zhí wù xìng shí wù zhōng, diàn fěn wú yí shì yī zhǒng yōu liáng de néng liàng lái yuán, dàn shì cóng zhí wù xìng shí wù zhōng huò qǔ néng liàng bìng bù shì yī jiàn jiǎn dān de shì qíng. shǒu xiān, yǒu xiào de huò qǔ diàn fěn jiù shì yī xiàng jù yǒu tiǎo zhàn xìng de gōng zuò.

Initial Translation:

During the Spring and Autumn and Warring States periods, Setaria italica began to replace Panicum miliaceum as the dominant crop. This was not only because Setaria italica was better adapted to the climate of the middle and lower reaches of the Yellow River and produced a decent yield, but also for another important reason—it was simply easier to eat.

Do not underestimate the importance of being "easy to eat". The ease with which a crop can be consumed directly affects how efficiently humans obtain energy, and ultimately determines the fate of that crop.

Among plant-based foods, starch is undoubtedly an excellent source of energy. However, obtaining energy from plant foods is far from simple, and efficiently extracting starch itself is a challenging task.

Revised Translation:

During the Spring and Autumn and Warring States periods, Setaria italica began to replace Panicum miliaceum as the dominant crop. This was not only because Setaria italica was better adapted to the climate of the middle and lower reaches of the Yellow River and produced a decent yield, but also for another important reason—it was simply easier to eat.

Do not underestimate the importance of being "easy to eat". The ease with which a crop can be consumed directly affects how efficiently humans obtain energy, and ultimately determines the fate of that crop.

One major advantage of Setaria italica lies in its lack of a tough outer husk like that of wheat. After cooking, millet softens easily and turns into a pleasantly textured porridge or rice-like dish. In this respect alone, millet clearly outperformed wheat.

Analysis:

The original passage establishes a clear argument—Setaria italica replaced Panicum miliaceum partly because it was "easier to eat". However, the subsequent discussion veers abruptly from this agricultural-historical argument to an abstract explanation of starch digestion and energy extraction. The logical continuity between the ideas weakens, and the focus on Setaria italica's specific advantage becomes diluted.

To restore coherence, the translator repositioned the description of Setaria italica's physical traits ("its lack of a tough outer husk… turns into a pleasantly textured porridge") immediately after the discussion of "ease of eating". This structural adjustment clarifies the causal link between digestibility and crop selection, maintaining smooth thematic progression before the text transitions into the broader topic of starch processing.

Example 23:

zhōng guó de nóng yè fā zhǎn yǔ shuǐ lì gōng chéng jiàn shè shǐ zhōng kǔn bǎng zài yī qǐ, zài Chūn Qiū Zhàn Guó shí qī, rén men jiù yǐ jīng kāi shǐ jiàn zào shuǐ lì gōng chéng. zhè yǔ zhōng guó suǒ chǔ de dì lǐ wèi zhì hé huán jìng jǐn mì xiāng guān.

zhí wù suǒ xū yào de shuǐ zài qí shēng zhǎng zhōu qī de měi yī tiān dōu zài biàn huà, bìng qiě yǒu zhe míng xiǎn de yòng shuǐ gāo fēng.

Initial Translation:

China's agricultural development has always been closely tied to the construction of waterworks. As early as the Spring and Autumn and Warring States periods, people had already begun building irrigation and flood-control projects, a practice closely linked to China's geography and environment.

The water needs of plants vary throughout their growth cycle, with distinct peak periods.

Revised Translation:

China's agricultural development has always been inseparable from the construction of waterworks. As early as the Spring and Autumn and Warring States periods, people had already begun to build irrigation and flood-control systems. This close connection arose from China's unique geographical and climatic conditions: the country's main agricultural regions depend heavily on timely water supply, yet natural rainfall is often uneven.

The water requirements of crops change constantly throughout their growth cycle, with several distinct peak periods when abundant water becomes essential.

Analysis:

The initial translation lacked explicit logical linkage between the two parts: the first paragraph addressed the macro relationship between agriculture and hydraulic engineering, while the next abruptly shifted to plant-level water needs. Without a transitional explanation, the argument appeared disjointed.

In the revised version, an explanatory bridge sentence was inserted—"This close connection arose from China's unique geographical and climatic conditions: the country's main agricultural regions depend heavily on timely water supply, yet natural rainfall is often uneven".—which establishes a causal link between environmental constraints and agricultural dependence on waterworks.

Additionally, "inseparable from" was chosen over "closely tied to" to convey a stronger, more systemic interdependence typical of academic writing. The phrase "had already begun building" was refined to "had already begun to build irrigation and flood-control systems," adding grammatical completeness and thematic cohesion.

This revision ensures that the discussion flows logically from macro-level context (geography and irrigation) to micro-level explanation (plant water demands), thereby achieving clear discourse-level coherence.

Example 24:

qiáng dà de jūn shì lì liàng dōu shì jiàn lì zài wěn dìng de liáng shi shēng chǎn jī chǔ shàng de. zài jīng lì le Chūn Qiū Zhàn Guó shí qī de fèn zhēng、Qín tǒng yī liù guó yǐ jí Chǔ Hàn zhēng dòu hòu, zhōng guó zhōng yú yíng lái le wěn dìng de dà yī tǒng shí qī. Hán Wén Dì hé Hán Jǐng Dì dōu tuī chóng Huáng Lǎo zhī shù, cǎi qǔ "qīng yáo bó fù""yǔ mín xiū xī" de zhèng cè.

Initial Translation:

A strong military is always built upon a stable foundation of food production. After the turmoil of the Spring and Autumn and Warring States periods, the unification of the Six States under Qin, and the Chu-Han conflicts, China finally entered a period of stable, centralized rule. Emperors Wen and Jing of Han embraced the Huang-Lao philosophy, implementing policies of light taxation and giving the people time to rest.

Revised Translation:

A strong military power must rest on a stable agricultural foundation. After the prolonged turmoil of the Spring and Autumn, Warring States, and Chu–Han conflicts, China finally entered an era of unification and peace. To restore agricultural production and consolidate national stability, the early Han rulers adopted policies that reduced the people's burdens. Emperors Wen and Jing, following the Daoist principle of Huang-Lao, implemented light taxation and minimal labor obligations, allowing the land and the people to recover.

Analysis:

This example highlights the importance of logical explicitation in English translation. While the original Chinese text reads fluently to native readers due to the implicit cultural understanding that policies like "qīng yáo bó fù" and "yǔ mín xiū xī" relate directly to agricultural recovery, the logical connection between "liáng shi shēng chǎn jī chǔ" "zhèng zhì zhèng cè" and "shè huì ān dìng" remains largely implicit. For English readers unfamiliar with these historical references, the connection from food production

to governance and social stability may appear abrupt or incomplete.

To enhance coherence, the translator restructured the text and inserted transitional logic. The revised version introduces the phrase "To restore agricultural production and consolidate national stability"—a bridge sentence that explicitly explains why the early Han rulers adopted certain policies. This clause not only clarifies the causal chain ("policy → agricultural recovery → stability") but also creates a smoother narrative progression.

Moreover, the translator's use of causal sequencing mirrors English historiographical writing conventions. In English academic prose, cause-and-effect relationships are typically articulated through conjunctions and infinitive constructions ("to restore...", "in order to..."), whereas in Chinese, they often remain contextually inferred. This modification therefore aligns the translation with target-language rhetorical norms, improving both readability and argument flow.

Lexical choices further refine the tone. Replacing "food production" with "agricultural foundation" elevates the register, reflecting the broader socio-economic scope implied in the Chinese "liáng shi shēng chǎn jī chǔ". Similarly, "must rest on" emphasizes necessity more strongly than "is built upon", reinforcing the interdependence between agriculture and military power.

In describing imperial policies, "embraced the Huang-Lao philosophy" is modified to "following the Daoist principle of Huang-Lao". The addition of "Daoist principle" provides cultural and philosophical context, signaling to readers that Huang-Lao is not merely a personal belief but an organized ideological school that shaped Han governance.

Finally, the inclusion of "allowing the land and the people to recover" restores the cyclical image of harmony between human society and nature—an essential theme in early Chinese political philosophy that the original English draft omitted. The overall result is a translation that maintains historical precision while reinforcing logical clarity and narrative unity.

3.3.2 Stylistic shift

Example 25:

zhòng dì yào gēng tián, zhè shì xiǎo xué shēng dōu zhī dào de cháng shí, dàn shì duì zǎo qī de nóng fū ér yán, qí jì shù nán dù bù yà yú jīn tiān de rén gōng zhì néng（AI）jì shù. shí jì shàng, zuì zǎo de zhǒng zhí fāng shì jiù shì yòng yī gēn jiān tóu mù gùn zài tǔ dì shàng chuō gè dòng, bǎ zhǒng zi fàng jìn qù, rán hòu fù shàng tǔ. zhè zhǒng gēng zhǒng fāng shì shì yǔ dāo gēng huǒ zhǒng pèi tào de—dà huǒ bù jǐn néng qīng chú yǔ zuò wù jìng zhēng de zá cǎo, cǎo mù huī hái kě zuò wéi féi liào, zhǐ yào jiāng zuò wù zhǒng zi diǎn rù kǒng xué zhī zhōng jiù kě yǐ le.

Initial Translation:

Farming involves plowing the fields, a common sense known to even primary school students. However, for early farmers, the technical difficulty was no less than that of today's artificial intelligence (AI) technology. In fact, the earliest way of planting was to poke a hole in the soil with a pointed wooden stick, put the seeds in it, and then cover it with soil. This farming method is in conjunction with slash-and-burn farming - the fire not only removes the weeds that compete with the crops, but also the ash from the plants can be used as fertilizer. All you need to do is burn the crop seeds into the holes.

Revised Translation:

Everyone knows that farming starts with tilling the soil—even schoolchildren do. But for early farmers, mastering this seemingly simple task was no easier than developing artificial intelligence today. As it turns out, the earliest form of cultivation was surprisingly primitive. People used nothing more than a sharpened wooden stick to poke holes in the ground, drop seeds inside, and cover them with soil. This technique was part of the slash-and-burn system: fire cleared the weeds that competed with crops, while the ash served as natural fertilizer. It was simple, efficient, and marked the beginning of agriculture itself.

Analysis:

This passage exemplifies stylistic shift in translation. The original Chinese text begins with a humorous, colloquial tone—"zhè shì xiǎo xué shēng dōu zhī dào de cháng shí"—then gradually transitions to an informative and explanatory style when introducing primitive farming methods. A successful translation must preserve this tonal evolution while maintaining coherence.

The revised translation achieves this by opening with the informal, conversational line "Everyone knows that farming starts with tilling the soil—even schoolchildren do." The dash structure adds rhythm and humor, immediately engaging readers. The following sentence introduces contrast ("But for early farmers..."),

smoothly shifting the register from colloquial to semi-formal.

From "As it turns out" onward, the style becomes expository and descriptive. This transitional phrase functions as a discourse marker common in science communication, signaling a shift from anecdotal commentary to factual explanation. The subsequent sentence—"People used nothing more than a sharpened wooden stick..."—employs parallel infinitive phrases ("to poke... to drop... to cover..."), creating rhythm and clarity typical of scientific exposition.

By the end, "It was simple, efficient, and marked the beginning of agriculture itself" reintroduces a summarizing tone, returning to an informative, declarative register. This controlled movement from humor to exposition and back to reflection mirrors the rhetorical strategies of modern science writing, where accessibility and authority coexist.

Example 26:

kǎo gǔ zhèng jù xiǎn shì, zài Huáng Hé Liú Yù zǎo qī de liáng shi shēng chǎn zhōng, shǔ jì de "lǎo dà" dì wèi shì bù róng hàn dòng de. qiě bù shuō 1 wàn nián qián yí liú de zǐ lì, dān shuō kē yán rén yuán zài Gān Sù Dōng Xiāng Mǎ Jiā Yáo Wén Huà yí zhǐ zhōng fā xiàn le dà liàng kǔn chéng xiǎo bǎ de shǔ jì, bìng qiě zài táo guàn zhōng yě fā xiàn yǐ jīng jīng guò tuō lì jiā gōng de shǔ jì zǐ lì, jiù zú yǐ zhèng míng shǔ jì shì zuì zǎo chū xiàn zài zhōng guó nóng tián lǐ de míng xīng zuò wù.

Initial Translation:

According to archaeological evidence, the "backbone" position of Panicum miliaceum is indisputable in the early production of the Yellow River basin. At Majiayao sites, bundles of shu and ji and their processed remains in pots prove they were China's first staple crops—no need to even mention the 10,000-year-old shu and ji grains remains.

Revised Translation:

Archaeological discoveries show that millet (shu and ji) held an unshakable "leading role" in the early farming of the Yellow River basin. At the Majiayao cultural site in today's Gansu Province, archaeologists found bundles of millet tied together and even jars filled with threshed grains—clear proof that millet was one of the earliest "star crops" in ancient China, long before the age of written history.

Analysis:

This case demonstrates how to manage register consistency while preserving rhetorical liveliness. The Chinese text blends scientific narration with colloquial evaluative expressions like "lǎo dà dì wèi" and "míng xīng zuò wù," creating a vivid yet potentially informal tone. The translator's task is to retain the imagery without compromising the academic credibility of the text.

The initial translation's use of "backbone" and "staple crops" neutralized the stylistic color of the source. The revised version restores rhetorical vitality through the use of quotation marks around "leading role" and "star crops". These marks signal metaphorical awareness—they preserve the figurative force while maintaining objectivity.

Additionally, expanding the geographical reference ("the Majiayao cultural site in today's Gansu Province") enriches historical context, grounding the metaphor in factual evidence. The balanced integration of narrative and data reflects the dual function of modern popular-scientific writing: informative yet engaging.

Example 27:

chú le ràng wǒ men de zuǐ bā hú shàng yī céng "mǐ yóu", nuò xìng xiǎo mǐ hái yǒu yī gè tè shū de yòng tú—xiū chéng qiáng. méi cuò, jiù shì xiū chéng qiáng. gǔ dài méi yǒu shuǐ níng hùn níng tǔ, dàn rén men réng néng xiū jiàn chū yì cháng jiān gù de chéng qiáng, hěn duō shí hou kào de jiù shì xiǎo mǐ zhōu. bǎ āo hǎo de xiǎo mǐ zhōu tóng shā zi hé shí huī hùn hé zài yī qǐ, jiù biàn chéng le tè shū de shā jiāng. zhè zhǒng shā jiāng shì fēi cháng hǎo de nián hé jì, néng gòu bǎ jù dà de chéng zhuān nián zài yī qǐ, shèn zhì néng jīng shòu pào huǒ de hōng jī, kān chēng "gǔ dài de shuǐ ní". rú cǐ duō gōng néng de hǎo liáng shi, zěn néng ràng rén bù ài ne?

Initial Translation:

Besides coating our mouths with a layer of "rice oil", glutinous millet had another unusual use—building city walls. That's right, building walls. In ancient times, without cement or concrete, people were still able to construct remarkably sturdy walls, often relying on millet porridge. When cooked millet porridge was mixed with sand and lime, it became a special type of mortar. This mortar was an excellent adhesive, capable of holding massive bricks together and even withstanding cannon fire, earning it the reputation of "ancient cement". With such a versatile and valuable grain, how could one not love it?

Revised Translation:
Apart from coating our mouths with a layer of "rice oil", glutinous millet had another rather surprising use—building city walls. Yes, you heard that right—building walls. In ancient times, before the invention of cement or concrete, people could still construct remarkably solid fortifications, often thanks to millet porridge. When this porridge was mixed with sand and lime, it turned into a unique kind of mortar. The resulting mixture worked as an excellent adhesive, binding giant bricks firmly together and even withstanding cannon fire—truly a kind of "ancient cement". With such a versatile and admirable grain, who could possibly resist it?
Analysis:
This paragraph vividly illustrates multilayered stylistic transformation. It begins in an expository tone, moves into a conversational and humorous mode ("Yes, you heard that right"), then returns to scientific explanation before closing with rhetorical flourish.
The translator preserves this oscillation by alternating sentence structure and register. The use of direct address ("you heard that right") mimics the interactive rhythm of spoken narration, inviting the reader into a participatory reading experience. Meanwhile, descriptive clauses such as "before the invention of cement or concrete" and "when this porridge was mixed with sand and lime" re-establish factual grounding, ensuring that the passage remains educational.
Finally, the playful conclusion "Who could possibly resist it?" mirrors the Chinese rhetorical question "zěn néng ràng rén bù ài ne", but tones it slightly to maintain elegance. This dynamic interplay of formal and informal diction exemplifies how stylistic hybridity enhances accessibility without sacrificing credibility—an essential feature of effective English science writing.
Example 28:
zài jù jīn 8000 nián qián, zài wài gāo jiā suǒ dì qū yǔ jīn yī lǎng de lǐ hǎi yán àn de mài tián zhōng, zāi péi de èr lì xiǎo mài ǒu rán yǔ shān yáng cǎo shǔ de jié jié mài (Aegilops tauschii) fā shēng le yī cì "wěi dà" de zá jiāo, chǎn shēng le rú jīn de xiǎo mài (T. aestivum). yě jiù shì shuō, wǒ men jīn tiān chī de pǔ tōng xiǎo mài, qí shí yuán yú wū lā ěr tú xiǎo mài、nǐ shān yáng cǎo hé jié jié mài sān gè wù zhǒng de jié hé, tā men de "ài qíng jié jīng" gǎi biàn le shì jiè shí wù de gé jú.
Initial Translation:
Around 8,000 years ago, in the Transcaucasus region and along the Caspian coast of present-day Iran, a remarkable event occurred in the wheat fields: cultivated emmer wheat (Triticum dicoccum) accidentally hybridized with goatgrass (Aegilops tauschii). This "great" cross gave rise to what we now know as common wheat (Triticum aestivum). In other words, the wheat we eat today is the result of a genetic "union" among wild urartu wheat, goatgrass, and Aegilops tauschii—a union that fundamentally changed the course of the world's food history.
Revised Translation:
About 8,000 years ago, in the wheat fields of the Transcaucasus and along the Caspian coast of what is now Iran, cultivated emmer wheat (Triticum dicoccum) happened to cross with a species of goatgrass (Aegilops tauschii), giving birth to modern wheat (Triticum aestivum). In other words, the wheat we eat today traces its ancestry to three ancient species—urartu wheat, wild goatgrass, and Aegilops tauschii —whose "romantic union" reshaped the course of human food history.
Analysis:
Here, the challenge lies in balancing scientific precision and figurative expression. The source text shifts from objective reporting ("fā shēng le yī cì "wěi dà" de zá jiāo") to a playful metaphor ("ài qíng jié jīng"). The translator mirrors this duality through controlled anthropomorphism—"giving birth" and "romantic union"—which soften the scientific tone without undermining factual credibility.
These expressions personify the natural hybridization process, aligning with modern science communication trends that humanize complex biological phenomena to enhance reader engagement. The closing phrase "reshaped the course of human food history" maintains grandeur while grounding the figurative in historical consequence, echoing the source's sense of transformative significance.
Example 29:
xiǎo mài zǐ lì de yíng yǎng fēi cháng fēng fù, bù jǐn fù hán diàn fěn, hái fù hán dàn bái zhì, dàn shì yào xiǎng huò qǔ qí zhōng de néng liàng, què bù shì yī jiàn jiǎn dān de shì qíng. cháng shì guò shēng jiáo mài lì de péng yǒu dōu zhī dào, zhè zhǒng shí wù zhēn de hěn fèi yá. bǎ wèi chéng shú de mài suì fàng zài huǒ shàng shāo shú zhī hòu, cuō diào jiāo hēi de yǐng ké, shèng xià de

jiù shì xiāng pēn pēn de mài lì. dàn shì yào jiāng mài lì jiáo suì, zhēn bù shì jiàn róng yì de shì qíng, hěn duō mài lì huì yǐ wán zhěng de xíng tài chū xiàn zài cì rì de cè suǒ lǐ. rú guǒ dān kào yá chǐ, rén lèi wú fǎ yǒu xiào huò qǔ mài lì zhōng de yíng yǎng, suǒ yǐ jiù xū yào néng dǎ pò yíng yǎng xī shōu bì lěi de gōng jù—shí mò.

Initial Translation:

Wheat grains are highly nutritious—rich not only in starch but also in protein. However, extracting that nutrition is no simple task. Anyone who has tried chewing raw wheat kernels knows how tough they are on the teeth. In ancient times, people would roast unripe ears of wheat over a fire, rub off the charred husks, and enjoy the fragrant grains inside. Yet even then, chewing them thoroughly was no easy feat— many kernels would pass through the digestive system almost intact, reappearing the next day in their original form. Clearly, relying on teeth alone was not enough for humans to access the energy locked within wheat grains. What was needed was a tool capable of breaking down that nutritional barrier—the stone mill.

Revised Translation:

Wheat grains are packed with nutrients—rich in starch as well as protein—but unlocking that energy was far from simple. Anyone who has ever tried chewing raw kernels would know: they're a real workout for the teeth. In early times, people roasted unripe ears of wheat over a fire, rubbed away the blackened husks, and tasted the fragrant grains inside. Still, breaking them down was no easy job; many kernels would pass straight through the body and, quite literally, show up the next day unchanged. Teeth alone could not break the barrier between humans and the nutrition hidden within. What people needed was a way to crush that barrier—the invention of the stone mill.

Analysis:

This passage showcases a gradual stylistic descent from scientific to conversational and back to scientific—a hallmark of engaging science writing. The opening line establishes authority and factuality, using the phrase "packed with nutrients," which balances professionalism with accessibility.

The next sentence marks a deliberate stylistic shift through direct reader engagement: "Anyone who has ever tried…" introduces a participatory tone, while "a real workout for the teeth" injects humor, mirroring the colloquial wit of the Chinese "zhè zhǒng shí wù zhēn de hěn fèi yá". This tone of relatable humor bridges the distance between expert and lay audiences.

The translator's rephrasing of the earthy expression "chū xiàn zài cì rì de cè suǒ lǐ" as "show up the next day unchanged" exemplifies cultural adaptation—retaining the humor while avoiding crudeness. The phrase "quite literally" adds ironic emphasis, mimicking the tongue-in-cheek tone of the original text.

Finally, the concluding lines reassert explanatory clarity: "Teeth alone could not break the barrier... What people needed was... the invention of the stone mill." The repetition of "barrier" functions metaphorically, linking physical grinding with human ingenuity and evolution. This return to academic objectivity completes the stylistic cycle, leaving the reader both informed and entertained—a balance that epitomizes successful cross-cultural science translation.

4. Conclusion

This translation report is based on the Chinese-to-English translation project of C*hina's Food: A History of Grain*, focusing on the overall translation process, including pre-translation preparation, text translation, and post-translation revision. The translator primarily employed explanatory translation and recreative translation, effectively reproducing the original text's treatment of proper terms, classical Chinese expressions, idioms, implicit logical relations within long sentences and sentence clusters, as well as stylistic transitions. This chapter summarizes the key findings, limitations, and suggestions for improvement.

To begin with, the explanatory translation method proved particularly effective in dealing with agricultural terms and book titles. Many of these terms lack standardized English equivalents and are deeply rooted in historical and cultural contexts. Literal translation often fails to convey their academic and cultural significance. By adopting explanatory translation or incorporating brief annotations, the translator preserved the original cultural connotations while ensuring that target readers could accurately understand their referential meaning.

Secondly, in translating classical Chinese texts and common saying, a combination of explanatory and recreative translation emerged as the most practical strategy. Classical Chinese is known for its conciseness, complex syntax, and layered semantics, while idioms and colloquial phrases are vivid, figurative, and

highly contextual. The translator must, therefore, expand or restructure the sentence appropriately—while remaining faithful to the original meaning—to ensure clarity of logic and natural fluency in English, thereby reconstructing both the semantic and rhetorical effects of the source text.

At the textual level, making logical relations explicit and maintaining stylistic flexibility are crucial to achieving textual coherence. The source text relies heavily on implicit cohesion and shared cultural knowledge, which, if directly mirrored in English, can result in abrupt or fragmented transitions. Adding necessary connectors, explanatory clauses, or logical cues helps clarify inter-sentential and inter-paragraph relations, thereby enhancing the coherence and readability of the target text.

Furthermore, the handling of stylistic shifts presented one of the most challenging aspects of this popular-science translation project. The original work blends scholarly depth with a lively, humorous tone—mixing academic discussion with accessible storytelling. To preserve this duality, the translator adjusted tone, word choice, and rhythm to balance formality with engagement. When rendering figurative or metaphorical expressions, devices such as quotation marks or modal adverbs were employed to soften the tone, maintaining vividness without compromising rigor. Through this flexible alternation between academic and popular-scientific registers, the translation achieves both scientific accuracy and reader-friendliness, capturing the approachable character of science communication.

In summary, this translation practice demonstrates that adopting a variety of adaptive translation strategies—including explanation, recreation, logical explicitation, and stylistic modulation—can effectively address the challenges of translating texts that combine academic depth with cultural richness. Such strategies ensure accuracy and coherence while maintaining fluency and cultural acceptability, providing a viable path for the cross-cultural transmission of Chinese food and agricultural culture.

Nevertheless, certain limitations remain. Due to the length of the source text, this report analyzes only selected representative excerpts rather than the entire work, leaving some issues and difficulties in popular-science translation unexplored. Moreover, the translator's limited background knowledge in agricultural history and botany occasionally restricted the depth of cultural and textual interpretation, necessitating repeated consultation and judgment in determining suitable strategies—factors that somewhat affected translation efficiency and confidence.

Through this project, the translator has come to recognize that translation is not merely a matter of linguistic equivalence but a process of cross-cultural reconstruction and meaning regeneration. Many translation difficulties first manifest at the linguistic level; however, their resolution requires a solid bilingual foundation, flexible linguistic application, and a high degree of cultural sensitivity. Translators must develop a deep understanding of the cognitive and expressive differences between Chinese and Western cultures in order to achieve both informational accuracy and effective cultural transmission.

Overall, this translation practice not only strengthened the translator's linguistic competence and text analysis skills but also fostered comprehensive growth in theoretical application, cultural understanding, and critical reflection. Looking ahead, the translator aims to further deepen research into adaptive translation theory, broaden intercultural perspectives, and pursue higher levels of transformation and representation in future translation work—particularly in academic and popular-scientific texts.

Acknowledgment

This work was supported by a project grant from National Office for Philosophy and Social Sciences, China (Grant No. 25BYY073).

References

[1] Shi, J. (2025). *Chinese Food: A History of Grains*. Beijing: CITIC Press Group.

[2] Newmark, P. (1981). *Approaches to Translation*. London: Prentice Hall International.

[3] Newmark, P. (1998). *A Textbook of Translation*. New York: Pearson Education.

[4] Newmark, P. (2001). *Approaches to Translation*. Shanghai: Shanghai Foreign Language Education Press.

[5] Anderson, E. N. (1988). *The Tood of China*. New Haven: Yale University Press.

[6] Nida, E. A. (2003). *Fascinated by Languages*. Amsterdam: John Benjamins

Publishing Company.

[7] Li, C. S. (2012). *Non-literary Translation*. Beijing: Foreign Language Teaching and Research Press.

[8] Chen, H., & Zhang, Y. (2025). An SFL approach to the untranslatability of English and Chinese CLWs: Functional types and stratificational compensation strategies. *Open Journal of Modern Linguistics*, *15*, 736-753.

[9] Djaïb, A., & Oukil, S. (2025). La traduction explicative en contexte universitaire: représentations, apport et impact. *Langues & Cultures, 5*(2), 77-95.

[10] Ge, H. W. (2023). Cultural refraction and cognitive construal in the English translation of agricultural terms in Shangshu. *Journal of Anhui Agricultural University (Social Sciences Edition), 32*(1), 120–125.

[11] Moslem, Y., Haque, R., Kelleher, J. D., & Way, A. (2023). Adaptive machine translation with large language models. *Transactions of the Association for Computational Linguistics, 11*, 227-237.