# Cultural Reconstruction and Cognitive Bias in the Translation Process of "The Art of War" in the Context of Russian Culture

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Abstract: "The Art of War" symbolizes the peak wisdom of ancient Chinese military thinking, contains the positive kernel of excellent traditional Chinese culture, and has been the focus area of Russian militarists and sinologists from ancient times to the present. Taking the development history of the translation and dissemination of "The Art of War" as an entry point, this paper analyzes the selection of translation subjects and the construction of intersubjectivity in the translation process of "The Art of War". Based on the translations of "The Art of War" by three translators, Conrad, Ma Liangwen and Shi Yaohua, a Chinese-Russian corpus of "The Art of War" was constructed through text noise reduction, corpus annotation and word division processing. Based on the corpus comparison, the stylistic changes of different translators in the process of translating "The Art of War" are analyzed, and the differences in translation equivalence and sentence lexical choices of different Russian translations are explored. In the Chinese-Russian corpus of "The Art of War" Conrad's translation has an STTR value of 41.58% and an average FKRE value of 57.84, and its translation is richer in terms of diction and vocabulary than that of the other two translators, and the text is more readable. The three translators have differences in the application of the three rhetorical devices of metaphor, prose and couplet (P<0.05), and less thimble rhetoric (P>0.05). There are certain cultural reconstruction and cognitive bias in the translation process of "The Art of War" in the Russian cultural context, which depends on the social environment and national culture of the translators, but it helps to enhance the dissemination effect of China's "The Art of War" promotion overseas.

Keywords: "The Art of War"; Russia; Translation Process; Corpus; Cultural Reconstruction; Cognitive Bias.

#### 1. INTRODUCTION

"The Art of War" is a brilliant treasure of China's classical military cultural heritage and an important part of China's outstanding cultural

tradition. "The Art of War" is the earliest military book in the world, and also the foundation work of Chinese military science. Its content is profound and profound, its thought is profound and forward-looking, its logic is meticulous and rigorous, and it is full of wisdom of strategy. Since its inception, the book has had a tremendous and far-reaching impact on the development of ancient Chinese military science, and is honored as the "war scriptures" and "the ancestor of the hundred generations of military talk". Successive generations of military scientists and militarists have drawn from it and used it to guide the practice of war and develop military theories. Not only has that, "The Art of War" also been translated all over the world (Moon, 2018; Sun & Tucker-Jones, 2019; Tzu, 2017, 2019). "The Art of War" has become a model of Chinese culture "entering" Russia with its record-breaking spreading effect of Chinese thematic books in Russia. After combing through the three stages of Russian transmission of "The Art of War" in the period of introduction of abbreviated translations in the Chinese academic and military circles, the period of development of full translations and research works in the Chinese academic circles, and the period of peak of applied works in the industrial and commercial circles, it was found that the motivation for its Russian translation and the causes of its wide attention were three, namely, Russia's beginning to pay attention to "The Art of War" under the influence of the Western powers, the achievements made by China arousing the interest of Russia in China, and the classic nature and universal applicability of "The Art of War". . If we want to promote more Chinese culture "into" the hearts of Russian people through translation, we can, as in the case of "The Art of War", attract the Russian side to take the initiative to introduce it by continuously enhancing its own strength and win-win cooperation (Doroszczyk, 2018; Luo, 2020; Tao, 2013; Yuen, 2014). Literature (McNeilly, 2014) emphasizes the influence of "The Art of War" on modern readers and its widespread translation and importance around the world. It reveals that "The Art of War" serves as an important inspiration for anyone interested in strategy and war, including military personnel, business executives, and others. Literature (Shih & Hwang, 2018) discusses Western appropriation of non-Western theories. By analyzing the translation, interpretation and application of "The Art of War" in the field of strategic studies. It is pointed out that the academic field of strategic studies is rooted in the self - other dynamics and at the same time exhibits extreme parochialism. Literature (Kestner, 2024) emphasizes the importance of "The Art of War" and its influence on subsequent generations. However, it is pointed out

that reading and transferring ideas from "The Art of War" to the modern world is not entirely straightforward. Literature (Luo, 2022) examines the translation and reception of "The Art of War" in Western strategic culture. Based on the corpus and using a combination of qualitative and quantitative analysis methods, the correct cultural translation methods and effective measures for cultural reconstruction are discussed. The key stages that the translated "The Art of War" went through before it was enshrined in the Western discourse are revealed. Literature (Joshi, 2019) reviewed previous translations of "The Art of War" to emphasize the influence of their writings on modern strategic thinking. The results show that the translations of the predecessors are able to be applied in the contemporary context with appropriate modifications. Literature (Milevski, 2019) describes Clausewitz's concept of genius, especially in the context of the age of Enlightenment theories of war, and explores the ancient Chinese tradition's concept of supernatural genius compatible with "The Art of War", and concludes with a comparison of the two concepts. Literature (Boorman & Sun, 2024) identifies the wide-ranging influence of "The Art of War" and provides a unique roadmap of Sun Tzu's military and intelligence insights and their application to strategic competition around the world. It also reveals the limitations and blind spots of "The Art of War" and points out that these limitations and blind spots are relevant to adversaries inspired by "The Art of War". Literature (Jing-yi, 2021) describes the core concepts of Bourdieu's sociological theory and its application in translation studies. By analyzing the English translation of "The Art of War", it describes the translation of the same text in different periods, the translator's translation strategy, and other aspects, which can lead us to have an in-depth understanding and orientation of translation. Literature (Lorge, 2022) recognizes the influence of "The Art of War". It also points out the differences between the Western way of interpreting "The Art of War" and the Chinese interpretation. It is emphasized that Western strategic thinkers used "The Art of War" as a personal ideological accompaniment, during which the incorporation of Western military traditions led to its misleading generalizations about Chinese warfare. Literature (Xu & Dechsubha, 2022) emphasizes the importance of "The Art of War" and its influence on later generations, and points out that its study exhibits Peircean pragmatism, illustrates the relevance of Peirce's pragmatism to semiotics, and emphasizes that pragmatism is an important part of Peirce's logical semiotics, which has been neglected by Chinese academics for a long time. Literature (van Emde Boas et al., 2022) explores

"The Art of War", a military work on strategy and war made by Sun Tzu, an ancient Chinese militarist, from the perspectives of logic and mathematics, and utilizes modern mind mapping techniques to present new dimensions, revealing meanings and structures that were previously difficult to witness. The theme of the literature (Li & Yang, 2017) lies in the fact that "The Art of War" has not only influenced Chinese business throughout history, but will also have a significant impact on global business now and in the future. The theme is also discussed in terms of the nature of "The Art of War", its historical relevance, and its modern and global impact. The translation and dissemination of "The Art of War" in the Russian-speaking world has a long and large history, has achieved fruitful results, and presents distinctive features. On the basis of analyzing the development history of the translation and dissemination of "The Art of War", this paper sorts out the situation of subject selection and intersubjectivity construction in the translation construction of "The Art of War". The Russian translation data of "The Art of War" by three translators, Ma Liangwen, Shi Yaohua and Conrad, are selected, and text pre-processing is carried out on the Russian translation data of "The Art of War" by using the methods of text noise reduction, corpus annotation, and lexical processing, with which the Chinese-Russian corpus of "The Art of War" is constructed. Aiming at the cultural reconstruction and cognitive bias in the translation process of "The Art of War" in the Russian cultural context, the translation styles of the Russian translations of "The Art of War" by different translators are compared, and the differences between different Russian translations in the level of translation equivalence and the choice of sentence lexicon are contrasted through difference analysis.

#### 2. "THE ART OF WAR" DEVELOPMENT AND TRANSLATION

"The Art of War" is a well-known ancient military work, known as the first ancient book of war, written by Sun Wu, a man of Qi during the Spring and Autumn Period and the Warring States Period, and the Russian language is the second language in which "The Art of War' has been translated to the West after the French language. The translator of Russian translation of "The Art of War" has supplemented the necessary linguistic and cultural background knowledge for the target language readers by adding preface and footnotes, etc., which reflects the Chinese cultural elements and enhances the effect of foreign translation of ancient Chinese cultural texts. Applying appropriate text translation strategies, through

creative transformation and innovative development, reducing the audience's reading difficulty, promoting the translation and publication of cultural classics, focusing on the communication effect, and promoting Chinese culture to go out.

# 2.1 History of the development of "The Art of War"

# 2.1.1 Period of Development of Interpretation

For thousands of years, "The Art of War" has been carried on the boat of culture, crossing the geographical boundaries, breaking through the language barriers, and spreading to many parts of the world from the inside to the outside, from the near to the far, and from the east to the west, and its everlasting value of military science and deep rich cultural connotation has always been admired and loved by the people of many countries (Chan, 2024). Russia has always been known as a military power, whether it is Tsarist Russia in the age of empire, the socialist Soviet Union in the bipolar struggle for supremacy, or the Russian Federation in the 21st century, without exception, all attach great importance to the development of military power, and therefore must attach great importance to the strengthening of the study of the relevant content of the military field of other countries. China and Russia as a great country on the continent of Asia and Europe, frequent exchanges, close exchanges, "The Art of War" as the highest embodiment of the ancient Chinese military culture and the centralized expression of military thinking, of course, has become the Russian translation and research activities of the most important. The Art of War" has been translated into Russian for thousands of years, and the military ideas and principles of warfare it contains have profoundly influenced the formation and development of Russian military theories. "The Art of War" is also respected and loved by the Russian people for its rich cultural heritage and broad ideological meaning. The translation of "The Art of War" in Russia is the main part of its translation in the Russianspeaking world, and it mainly contains four distinct periods of development, namely the period of early abbreviated transmission (9th century?). ~1700), the period of key translation and introduction in modern times (1701~1916), the period of detailed translation and annotation in modern times (1917~2000), and the period of integration of translation and research in the 21st century (2001 to present). In the course of the translation process, most of the works are only for the purpose of introduction and do not serve the purpose of translation. According to incomplete statistics, up to now, "The Art of War" has more than 60 kinds

of books in Russian translation (different books with the same translation are regarded as two kinds, and the same book reprinted several times is regarded as one kind), and there are more than 40 kinds of books in Russian translation (different books with the same translator are regarded as one kind). Translation of "The Art of War" in the Russian-speaking world has a long and ambitious history, has achieved fruitful results and presents distinctive features (Amadori, 2023).

# 2.1.2 Interpretation and Dissemination Processes

Entering the 21st century, "The Art of War" began to enter the Russian public in a new form and reading perspective. If the previous dissemination of "The Art of War" in Russia was mainly based on translations and studies of Chinese military thought, the dissemination in the new century began to shift to multi-disciplinary application and practice (Parr, 2019). On the one hand, the classic Conrad translation continues to remain in reprint distribution, while new translations continue to reach readers. On the other hand, multidisciplinary applied works began to be published either in translation or directly written by Russian scholars. In view of the fact that few studies have systematically dealt with the translation and dissemination of "The Art of War" in Russia in the 21st century, this article chronologically organizes the process of translation and dissemination of "The Art of War" in Russia, where quite a number of full translations of "The Art of War" into Russian and applied works have been published so far. "The Art of War" spread in Russia in the 21st century is characterized by the following: (1) Steady Russian dissemination began in the 21st century and has been at its peak since 2013. Entering the new century, China's successive miracles of economic and social development began to draw the attention of Western countries to China and its development experience. Shopping malls are like battlefields, and "The Art of War", China's classic work of tactical strategy, has also begun to be reinterpreted and used to guide the practice of business administration and related fields. This heightened attention and reinterpretation contributed to the steady spread of "The Art of War" in Russia in the new century (Paschoud, 2021). (2) More than 30% of the works have been reprinted after the first edition, with the higher number of reprints being translations. From the number of reprints combined with the results of the questionnaire survey on "Reading of Chinese Literature", it is observed that the translated version of "The Art of War" is more popular than the applied version among the Russian public as a whole. (3) Nearly 60% of the works were translated from

English, and most of them were translated from American scholarly editions. Russia is highly concerned about Western powers, especially the United States. This kind of transferring and translating behavior driven by concern for the West runs through the whole process of the Russian transmission of "The Art of War". (4) More than 40% of the writings are applied, most of which are applied to the field of business administration. This can be interpreted as a kind of affirmation by the West of the classical and universal applicability of "The Art of War", which deeply reflects the West's affirmation of China's strategic thinking mode.

#### 2.2 "The Art of War" Translation Constructs

#### 2.2.1 Selection of Translation Subjects

The translation community's discussion on the selection of the main body of translation for Chinese literary works focuses mainly on the selection of translators, and there are different views, mainly the following three:

- (1) Chinese should be the main translator because foreigners are not as good at Chinese language and culture as Chinese people, and sinologists who are proficient in Chinese language and culture are after all a very small minority, so Chinese literature "goes out" mainly relies on Chinese people themselves.
- (2) Foreigners whose mother tongue is the target language should be the main translator, because the translation is more authentic and the expression is more in line with the reading expectations and habits of the target language readers.
- (3) The reason for adopting a cooperative approach between Chinese and foreign translators is that it can make up for the foreign translators' low level of understanding of the Chinese language and culture, and at the same time, it can more accurately understand and convey the spirit of the original text. From the point of view of communication science, the information disseminated should conform to the information symbol system of the disseminated audience, and if the transmitter and receiver do not share a set of information symbol system or differ greatly from each other, the dissemination effect will be seriously affected. Therefore, the English translation of Chinese literature should be consistent with the English information symbol system of native English readers, i.e., the authenticity of the language, the cultural norms of the language, the organization of the language, etc., in order to obtain good communication effects. From this point of view, the translator mode of Chinese literature

should be better in the second or third form, that is, it is better for the translator to be a native speaker of the target language, only in this way can we ensure the consistency of the information symbol system of the transmitter and the receiver, and effectively improve the acceptance of the translated text.

#### 2.2.2 Inter-Subjectivity Constructs

Translation is a kind of communication, which can be regarded as an inter-subjective dialog involving the author, the translator and the reader, and therefore, translation is subjective, and even more inter-subjective. Traditional author-centrism, text-centrism and translator-centrism either put the author of the original text in a supreme position, require the translator to be "invisible", and ignore the subjectivity of the translator. Either they start from structuralist linguistics, separating the text from the interrelationship between the creative subject, the transmitting subject and the receiving subject, overemphasizing the objective expression presented in the text, and neglecting the subjectivity of the author, the translator and the reader. Either the creativity of the translator is overemphasized, which often results in the translation deviating from the original work and the original text. It is for this reason that translation studies should break the single-subject model of subject-object dichotomy and shift from subjectivity to inter-subjectivity. However, no matter whether it is "to see the cleverness due to difficulties" or "to establish the sincerity of rhetoric", in order to correctly convey the meaning of the original text and the real intention of the author, the translator should have a sense of intersubjectivity. Figure 1 shows the process of the translator's construction of intersubjectivity. On the one hand, as a special reader, the translator should respect the subject position of the author, grasp the time and cultural background of the author's life, and strive to cross the time and space differences to establish a spiritual connection with the author behind the text, so as to obtain a correct understanding of the text and realize the fusion of vision with the author. On the other hand, on the basis of accurate predetermination of the knowledge status, emotional attitude and other factors of the imagined "potential" readers, the translator should also actively engage in dialogues and communications with these "potential" audiences, and make efforts to guide them in textual comprehension, so as to realize the integration with the readers' field of vision. The reader's field of vision integration. In short, to realize the fusion of vision among authors, translators and readers in translation, to build a good intersubjectivity, so as to reduce the cultural reconstruction and cognitive bias brought by the translation process.

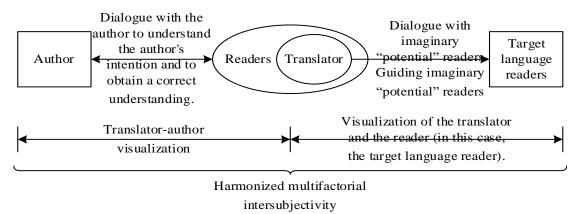


Figure 1: The Translator Builds the Process of Intersubjectivity

#### 3. "THE ART OF WAR" CORPUS CONSTRUCTION

"The Art of War" is a masterpiece of ancient military culture and enjoys a high reputation in the world. Academics from all countries recognize it as the world's oldest surviving work of great military theory. The interpretation of Sun Tzu's thought in the West is mainly based on its English translation, so the study of the English translation of this canon has important academic value and practical significance. The Art of War", as a military scripture, has been translated by translators with different cultural identities, and the translations show a variety of patterns, and there are many differences in the translations of different translators. In order to explore the phenomena of cultural reconstruction and cognitive bias in the translation process of "The Art of War", this paper intends to provide a data source for analyzing the cultural reconstruction and cognitive bias by building a corpus of "The Art of War" and comparing the stylistic changes of different translators.

# 3.1 Corpus Sources and Corpus Construction

# 3.1.1 Selection of Corpus Sources

# 3.1.1.1. Chinese Corpus

Sun Tzu's Explanations was published and distributed by the Military Science Publishing House in Beijing in 1990. The book was edited by Wu Jiulong and co-edited by Yang Bing'an, Wu Rusong, Mu Zhichao, and Huang Parkmin. Using excavated documents such as Han Jianben, combined with ancient books such as Tongdian and Taiping Yuban, the book was finally compiled by detailed proofreading of the original text and

careful tracing of the original meaning. Several editors have been engaged in the research of "The Art of War" for a long time, with rich experience and profound knowledge, and are well-known in the academic circles, and the book is one of the series of books of "The Art of War", which is organized and led by Sun Tzu Art of War Research Association, cohesion of military and local joint efforts, and support from all parties, with certain authority and influence.

#### 3.1.1.2. Russian Corpus

"The Art of War" in Russia has a long history of translation activities, roughly through four periods, in terms of the full translation, since 1943, Voroshilov Military Academy of the General Staff full translation Zhai Linnaeus English translation, according to incomplete statistics, the existing "The Art of War" Russian translation of a total of 20 (excluding reprints reprints), of which the Russian translators translators translation of 15, the Chinese translators translation of 4, anonymous 1, different styles, each has his own strengths. Each has its own strengths. In the light of the principle of academic value (influence), the principle of corpus accessibility, and other factors, we have determined that the translations made by Konrad, Ma Liangwen, and Shi Yaohua are the Russian language corpus. The first one is Conrad's translation, which is taken from the book "Conrad's Selected Writings - Sinology" in 1977, and its reference text in Chinese is "The Art of War" from the book "The Seven Books of the Martial Scriptures" by Sun Xingyan and Wu Renji in the Qing Dynasty, which is included in the "Chinese Texts" in Japan. The second one is Ma Liangwen's translation of "The Art of War" from the book "Chinese Military Strategy" in 2002, with reference to the Chinese text "The Art of War" from the book "Notes on the Ten Schools of Sun Tzu". The third one is Shi Yaohua's translation, which is taken from the book "The Art of War" in 1990, and its reference Chinese text is "The Art of War" in the book "Sun Zi Xue Shu Shu" by Wu Jiulong and others.

# 3.1.2 Corpus Construction Process

The construction of the Chinese-Russian parallel corpus of "The Art of War" consists of the following five main processes, i.e., the overall planning and outline design, the text collection and organization process, the annotation process, and the establishment of the database system and the database management system. The process of building the Chinese-Russian parallel corpus of "The Art of War" designed in this paper is shown in

Figure 2. Firstly, the task of building the corpus is put forward, and the overall design of the corpus building specification and process is carried out according to the specific objectives of building the corpus, and then the text corpus and the specific realization of the corpus are carried out according to the size of the corpus, the selection of the material, the structure, the annotation content and the way, and so on.

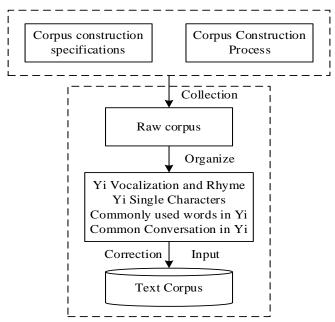


Figure 2: The China and Russia Parallel to the Construction Process

In order to avoid the complexity of the data increasing the degree of difficulty in learning, the collected words and phrases are typical, common and standardized canonical Russian. At the same time, since most of the currently published Russian literature uses the International Phonetic Alphabet (IPA), but not many people can actually understand the IPA and learn the Russian language through the IPA, the phonetic annotations are used in the phonetic annotations as well as in the labeling.

# 3.2 Methods of Corpus Data Preprocessing

# 3.2.1 Noise Reduction in Corpus Text

Text noise reduction can also be called corpus cleaning. If the corpus is not cleaned up, there will be problems such as inaccurate word frequency statistics, collocation statistics, and wrong lexical assignment, which will affect the subsequent lexical analysis. Usually, the text obtained by scanning and recognizing, manual input, etc., may have various irregular symbols or formatting problems. In order to maximize the unity of quality and quantity, and to ensure the scientificity of the later lexical division, in the process of establishing the Chinese-Russian parallel corpus of "The Art of

War", the text is manually cleaned in the following aspects:

#### 3.2.1.1. Format Conversion Problems

The construction of the corpus is ultimately to analyze the lexical features in preparation, therefore, in order to facilitate the statistical work of the later software participle, the text format must be converted to TXT text files. However, the current format conversion software can not be complete and accurate PDF format into TXT format, so first with the help of the software WPS format conversion function, will be converted to PDF format TXT format. Then the converted TXT text file word by word for manual proofreading to ensure the accuracy and integrity of the text.

#### 3.2.1.2. Formatting Issues

In the process of format conversion, punctuation garbled phenomenon is divided into two kinds, one is because of the shape of close to the Chinese character components and is recognized as a Chinese character components generated by the text garbled, and the other is because of the shape of close to the number and is recognized as a number. The existence of the garbled phenomenon seriously affects the completeness and accuracy of the corpus, which is unfavorable to the subsequent operation of word separation. Therefore, a lot of time and effort are spent on proofreading the garbled codes of text files one by one to achieve the completeness and accuracy of the dialog.

# 3.2.2 Proofreading of Corpus Labeling

Because the data used in the corpus construction process of this paper is not a public corpus with positional labels, it is necessary to give data labels in the form of manually labeling the data to facilitate the validation of the data in the subsequent research tasks. The specific labeling process of the corpus is shown in Figure 3. First of all, before labeling the authors develop a good rigorous labeling specification, and develop a different labeling specification document for each topic. In addition to the original corpus, the corresponding Chinese reference translation of the corpus is provided in the annotation document. Secondly, this paper adopts the form of manual annotation, the core of which is collaborative annotation by more than one person, and the method of isolated annotation is used. First, a small sample of corpus is taken out from the corpus, and these same corpora are assigned to two annotators for separate annotation at the same time, and the completion time of the task is given. The given completion

time is calculated based on how much of the corpus to be labeled and how fast the annotators previously completed the labeling task. Then, the annotation results of the small samples are statistically analyzed and the consistency test of the annotation results is conducted. The annotators will discuss the disagreement in the annotation, and then revise the annotation rules according to the discussion results. Finally, the revised annotation rules will be used to annotate the whole corpus according to the above process. After the two annotators have labeled the entire corpus, the resulting disagreement results will be used by the third party annotator, i.e., to decide the final data labeling.

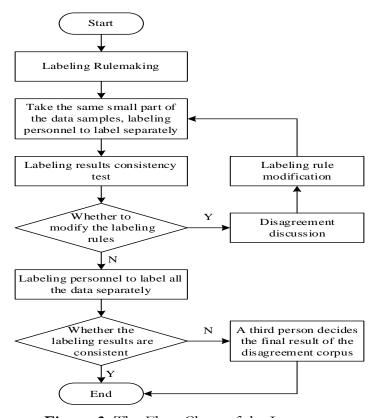


Figure 3: The Flow Chart of the Language

The establishment of markers for quantifiable linguistic units is for the purpose of extracting information on linguistic features, which requires that the processing of the corpus must be quality-assured. Therefore, the results of the fixed phrase, lexical and syntactic labeling of the corpus contained in the Chinese-Russian corpus of "The Art of War" were calibrated and improved to provide reliable data support for subsequent metric studies.

# 3.2.3 Processing of Corpus Disambiguation

In text mining, it is necessary to split the whole text into shorter words

in order to more accurately analyze the characteristics of the sentence, this process is called word splitting. The purpose of word separation is to eliminate ambiguity, effectively retain keywords, whether the correct word separation will directly affect the accuracy of the subsequent analysis of feature analysis, topic extraction and other analysis results. While Chinese expression habits are different from Russian, where words are usually separated by spaces, which is convenient for word separation, Chinese sentences have fuzzy boundaries between words, there is no formal separator similar to a space, and the processing of textual information is more complex. Therefore, it is especially important to choose an algorithm that can accurately separate words in Chinese. In this paper, Jieba algorithm is chosen to process the Chinese-Russian corpus data of "The Art of War" for word segmentation. Jieba provides three modes of word segmentation, i.e., full mode, exact mode, and search engine mode. The full mode is fast, but the results may be redundant and overlapping. Precise mode can cut the text accurately without redundant words, and is often used for text analysis. The search engine mode can cut some longer words and phrases secondly, and is often used in search engine segmentation. In this paper, according to the characteristics of the text under study, Jieba's precise mode is chosen for Chinese word segmentation to obtain more accurate and redundant word segmentation results.

# 4. A COMPARISON OF TRANSLATIONS OF "THE ART OF WAR"

As an outstanding representative of Chinese culture, "The Art of War", which has been in use for more than 1,000 years, has been increasingly valued and respected by dignitaries and people all over the world for its profound and profound ideas and its wisdom for use in the world. "The Art of War" has become a global trend of translation, study and application, forming the phenomenon of "Sun Tzu Culture" which has attracted the attention of the world, and the publication of related writings has become a great phenomenon. The spread of "The Art of War" abroad has demonstrated the unique charm of ancient Chinese military culture represented by "The Art of War", which has become a common spiritual treasure for the people of the world. Exploring the phenomena of cultural reconstruction and cognitive bias in the process of translation and dissemination of "The Art of War" helps to standardize the dissemination of the translated version of "The Art of War".

#### 4.1 "The Art of War" Translation Style

# 4.1.1 Comparison of Translated Vocabularies

The class-token to form-token ratio (TTR) refers to the ratio of the number of all class-token to form-token characters in the corpus, with a larger value of TTR representing a greater lexical variation in the words used in the text, and vice versa. The Standard Class Symbol to Morphological Character Ratio (STTR) is an improvement on the Morphological Character to Morphological Character Ratio and avoids the effect of differences in corpus body size on the TTR value. The classsymbol shape-symbol ratios of the Russian translations of "The Art of War" by three translators were calculated using Word-Smith, and their comparison results are shown in Table 1. The comparison shows that the Conrad translation has the highest STTR value among the three translations, with its STTR value of 41.58%. This indicates that Conrad's translation has more variations in terms, Shi Yaohua's translation has the second highest STTR value (39.65%), and Ma Liangwen's translation has the smallest STTR value (38.42%), the lowest lexical richness, and a more concise expression. When conducting the Russian translation of "The Art of War", Ma Liangwen's translation is the most concise, in which he omits the second half of the sentence and translates the first half of the sentence to strictly convey the semantics of the original text without adding superfluous modifiers. On the other hand, both Conrad and Shi Yaohua translated "The Art of War" in its original language in its entirety, and both of them added modifiers related to the Russian expression in their translations to enhance the semantics. In contrast, Shi Yaohua's translation is more concise, and he would represent some of the verbs as single words, whereas Conrad would use richer Russian descriptions for the verbs, and Conrad has more variations in all the vocabulary because of the use of more complex verb phrases. To a certain extent, this shows that Conrad's translation shows a heavier cultural reconstruction phenomenon, which combines Russian expressions to assimilate the parts of "The Art of War" that are similar to the Russian language, which also causes cognitive bias to a certain extent.

Table 1: Translation Class/Number and (Standard) Class Character Ratio

Translation	Type	Token	TTR	STTR
KangLade	3218	10576	30.43%	41.58%
Maliangwen	2049	9158	22.37%	38.42%
Shiyaohua	2894	10675	27.11%	39.65%

The average word length, i.e. the average length of words in a text,

reflects the complexity of the text's vocabulary. In general, the average word length of a text is about 5 letters, below 5 letters means that the vocabulary used in the text is relatively simple, and vice versa means that the vocabulary used is more complex. Table 2 shows the statistical results of the number of words of each length in the three translations and their ratio to the total number of words in the text, and finally the average word length of each translation is calculated. As can be seen from the table, the average word length of all three translations of "The Art of War" is greater than 5, and the average word length of Ma Liangwen's translation (5.76) is slightly higher than that of Conrad's (5.68) and Shi Yaohua's (5.65). Comparatively speaking, Ma Liangwen's translation of "The Art of War" has a longer average word length, but it is more likely to use shorter word lengths, and the percentage of its words with less than 4 letters can be up to 60.67%. Therefore, it shows that although Ma Liangwen's application of average word length for "The Art of War" is higher, the overall translation control for the translation is lower than that of Shi Yaohua and Conrad, which also reflects the different translation styles of the three translators for "The Art of War" and shows a certain phenomenon of cultural reconstruction.

Table 2: The NUMBER of WOrds, the PROPORtion and the AVERAGE TERM

Word length	Maliangwen		Shiyaohua		KangLade	
	Number	Ratio	Number	Ratio	Number	Ratio
1	206	2.30%	276	2.61%	227	2.14%
2	1843	20.55%	2013	19.02%	2146	20.24%
3	1965	21.91%	2339	22.10%	2215	20.89%
4	1427	15.91%	1751	16.54%	1763	16.62%
5	843	9.40%	1126	10.64%	1154	10.88%
6	869	9.69%	945	8.93%	937	8.84%
7	643	7.17%	738	6.97%	816	7.69%
8	425	4.74%	462	4.36%	538	5.07%
9	364	4.06%	431	4.07%	359	3.39%
10	229	2.55%	236	2.23%	227	2.14%
>10	153	1.71%	269	2.54%	223	2.10%
Means	5.7	76	5.6	8	5.6	5

# 4.1.2 Analysis of High Frequency Words in Translations

Frequency statistics of vocabulary is a lexical analysis research method and an important research area in econometric linguistics. In this paper, by counting the number of occurrences of each word in the Chinese-Russian corpus of "The Art of War" and calculating the frequency of their

occurrences, it is used to understand the overall overview of the words used in "The Art of War" as well as the textual features. Word frequency (TF) refers to the number of times a given word appears in a given corpus, and is the most frequently used and important basic measure for quantitative linguistic research. In this paper, word frequency statistics were conducted on the Chinese-Russian corpus of "The Art of War", in which the top 20 high-frequency words are shown in Table 3. As can be seen from the table, the top 20 words in the frequency of "The Art of War" in the Chinese-Russian corpus contain the words of good war, prudent war, peace, war, use of force, general, soldier, army, attack, victory, etc., all of which are significantly higher than 100 times, with a frequency of more than 1%. Based on the translation of "The Art of War" by the three translators, more combined with their own social context and cultural connotation, the philosophical thoughts of Sun Tzu's good war, prudent war, and peace are interpreted from a brand new perspective, which effectively promotes the dissemination of the military and political wisdom thoughts of "The Art of War" in the world today. Moreover, it is of great practical significance for building a new type of great power relations, building a community of human destiny, and rising peacefully to realize the Chinese dream.

Despite the significant changes in the social context of the work's output, the Russian translators show a strong agreement with the juxtaposition of the work's thesis on war and peace, based on the main theme of diplomacy of peace and development in the multilevel pattern of the contemporary world. In terms of good war, the translators consider the work to be a thought-provoking, colorful, and valuable book that reveals the principles of war in beautiful language, and uses ancient Chinese examples to illustrate how to gain the upper hand on the battlefield, outwit the enemy, and win wars, lessons that have had a great influence on military leaders in the West through the ages. In terms of prudent warfare, "The Art of War", though a book of war, elaborates on the necessity of war, but also points out that war comes at a great cost. Sun Wu's materialistic analysis and dialectical exposition of war, and his comprehensive analysis of the scientific choice of good and prudent warfare and the principles of army management have been highly recognized by overseas translators, and have also inspired them to reflect deeply on the gains and losses of modern warfare and express their yearning for a peaceful world. The translation of "The Art of War" based on the translator's own social situation shows more of the phenomenon of cultural reconstruction, and the cognitive bias based on

the national situation helps to better excavate the philosophical thoughts embedded in "The Art of War", which supports the interpretation of the contradictory and unifying relationship between war and peace, and the deep feeling of the philosophy of peace that has been accumulated by the Chinese nation for thousands of years.

Table 3: High Frequency Words in the Top-20

No.	Word	TF	F	No.	Word	TF	F
1	Good fight	342	2.04%	11	Strategy	99	0.94%
2	Beware	238	1.85%	12	Sortie	82	0.85%
3	Peace	211	1.72%	13	Step	76	0.81%
4	War	206	1.68%	14	Region	63	0.72%
5	Soldier	194	1.54%	15	Combat	58	0.69%
6	General	179	1.37%	16	Enemy	55	0.65%
7	Take	163	1.22%	17	Command	47	0.61%
8	Army	152	1.14%	18	Troops	43	0.58%
9	Attack	137	1.09%	19	Charge	39	0.53%
10	Triumph	106	1.01%	20	Invincibility	31	0.51%

#### 4.1.3 Analysis of the Readability of Translations

Translating "The Art of War" from their own social environment and national conditions may, to a certain extent, result in the phenomenon of cultural reconstruction as well as cause cognitive bias among readers. Therefore, in order to better analyze the readability of the three translators' translations of "The Art of War", this paper chooses the readability analyzer BFSU readability analyzer to compare the three translators' translations of "The Art of War". Table 4 shows the comparison results of readability analysis index of "The Art of War" translations by different translators. The results of FKRE range from 0 to 100, and the larger the value, the easier the text is to read.FKGL corresponds to the age of the Russian school, and GFS is used to estimate the number of years of education needed to read a text for the first time, and the index ranges from 6 to 17, which stands for the reading level of the age of 6 to the level of the university graduates.SI corresponds to the grade level of education, and it is used to estimate the number of years of education needed to understand a certain text. The SI index corresponds to the grade level of education and is used to estimate the number of years of education required to comprehend a text.CLI corresponds to the grade level of Russian students required to comprehend a text, and the ARI index represents the grade level of Russian students required to comprehend a text. From the results of the text readability analysis, among the three translations of "The Art of War" examined, the average value of Conrad's reading ease value (FKRE)

is 57.84, corresponding to a readability level of "Standard", indicating that Conrad's translation of "The Art of War" is relatively easy to read and can be understood by people aged 12 to 15. The Conrad Grade Level Value (FKGL) value of 7.46 indicates that 8th graders are able to comprehend these texts.

The Gunning Fog Score (GFS) has a mean value of 11.75, indicating that these texts are appropriate for high school juniors. The Smoke Index (SI) had a mean of 7.84, indicating that 8th grade students were able to comprehend these texts. The mean value of the Coleman-Leo Index (CLI) is 12.19 and the mean value of the Autonomous Readability Index (ARI) is 6.51. Comparatively, Conrad's translations of "The Art of War" are more readable and suitable for the average Russian reader. This is similar to the view of some scholars who believe that Conrad's translation is intended for the general reader, who do not explicitly explain their criteria or basis for judging a translation to be intended for the general reader, but rather on their intuition or rather on what Gadamer called "foresight" and their reading of Conrad's translation of "The Art of War". For example, by reading Conrad's translation of "The Art of War", one can easily notice that Conrad did not provide the necessary commentary on the original text. However, Conrad does not directly indicate that his translation is intended for a general audience; his main concern in translating "The Art of War" is to make it understandable to both general and specialized readers. Therefore, Conrad's translation of "The Art of War" is more prone to cultural reconstruction and cognitive bias than the other two translations, but it is based on his own social and national situation and lays the groundwork for the wide dissemination of "The Art of War" in the Russian-speaking world.

Table 4: Translation Readability Analysis

		, ,	
Index	Maliangwen	Shiyaohua	KangLade
FKRE	72.51	67.42	57.84
FKGL	6.74	7.69	7.46
GFS	9.59	10.26	11.75
SI	7.35	7.95	7.84
CLI	10.54	12.23	12.19
ARI	6.37	7.06	6.51

# 4.2 Comparative Analysis of Different Russian Translations

# 4.2.1 Translation Equivalence Level

With the support of translation equivalence theory, we compare the

differentiated expressions of different translations of "The Art of War" in the translation process to further explore the cultural reconstruction and cognitive bias of the translations of "The Art of War" in the Russian cultural context. The theory of translation equivalence includes three levels of equivalence: syntactic, semantic and pragmatic. Syntactic equivalence refers to the use of one world language symbol (unit) to replace another under the premise of keeping the syntactic relationship unchanged. Equivalence at the semantic level is composed of two aspects, namely, the semantic sub-level and the referential sub-level. Linguistic equivalence mainly consists of communicative intentional pragmatics, receiver pragmatics, and translator communicative pragmatics. The translation equivalence of three translations of "The Art of War" in the Chinese-Russian corpus is compared to explore the differences in translation equivalence among different translations. The data on the translation equivalence level of the three translations were counted and independent sample t-test was carried out, and the results of the comparison on the translation equivalence level were obtained as shown in Table 5. In the table, \*,\*\* indicates that there are statistically significant differences and extremely significant differences (i.e., P<0.05 and P<0.01) among the three translations, respectively.

- (1) "The Art of War", as a rigorous exposition of military strategy, should also be translated to maintain a high degree of consistency in syntactic form with the original text as much as possible. At the level of syntactic equivalence, there is no significant difference among the three translations of "The Art of War" (P=0.064>0.05), and all three translations fully respect the relevant syntactic forms of "The Art of War", and all of them satisfy syntactic equivalence. However, further comparison of the translations shows that there are differences in the choice of ordinal words among the three translators, with Conrad adopting a direct form of ordinal words, and Ma Liangwen choosing a more written form of expression. The different vocabularies may cause certain cognitive bias, but they can still convey the meaning of the original text effectively without affecting the principle of syntactic equivalence.
- (2) In the semantic equivalence level, the three translations of "The Art of War" show extremely significant differences (P<0.01) in both the denotative sub-level and the referential sub-level, relatively speaking, the semantic equivalence level of Conrad's translation reaches 491 sentences, while there are only 290 and 283 sentences in the translations of Ma Liangwen and Shi Yaohua respectively. "The Art of War" is an ancient text

with strong military specialization, and although the whole book does not have a large number of words, it is not easy for the translators to convey the semantic equivalents contained therein one by one in the process of translating, even though they want to pursue them desperately. The three selected Russian translations of "The Art of War" also contain translations that do not achieve equivalence at the sub-level of the denotations, where equivalence is reached through grammatical transformations. Conrad is more adept at achieving translation of the content of "The Art of War" through grammatical transformations, which to a large extent follow the habits of Russian language usage, reflecting a certain cultural reconstruction of the content more readily accepted by Russian culture.

(3) At the level of pragmatic equivalence, there is a significant difference in the pragmatic equivalence of communicative intention among the three translations of "The Art of War" (P<0.05), and there is an extremely significant difference in the receiver pragmatics and the translator's communicative pragmatics (P<0.01). Regarding the reason for this, the three translators, in the process of translating "The Art of War", focused on the introduction of Russian cultural contexts for the translation of "The Art of War" in consideration of the communicative intent, and their aim was to enhance the receiver's comprehension of "The Art of War". The effect of the same text in one language is definitely different from that in another language, because different language systems carry different cultural connotations. Therefore, the translator should take into account the corresponding cultural backgrounds of the receivers of different cultures when achieving the goal of linguistic equivalence of the receivers. If there is a gap in the background knowledge or psychological preconception of the cultural connotation of the verbal text, some methods should be adopted to make up for this gap or vacancy in the translation process, which fully reflects the phenomenon of cultural reconstruction in the process of translation and mediation. The translator's communicative pragmatics reflects more that different translators will add their own ideas or integrate their own linguistic features into the translation when translating "The Art of War", which will cause certain cognitive bias, but the whole still follows the basic cultural connotation of "The Art of War". Therefore, the translators, taking into account their own national conditions and social context, have certain translation purposes, and their own linguistic characteristics and language habits will affect the translators' translation pragmatic equivalence, which will also make the translated text realize a wider dissemination under the cultural reconstruction.

Table 5: The Comparison of the Equivalent Level

Equivalent of Translation		Maliangwen	Shiyaohua	KangLade	P
Syntax	-	157	168	173	0.064
	Sense level	164	152	239	0.002**
Semantics	Indicative sublevel	126	131	252	0.007**
	Communicate intent	139	113	195	0.043*
Pragmatics	Receiver	148	129	227	0.005**
	Translator communicate	135	142	206	0.000**

#### 4.2.2 Sentence Rhetoric Selection

Analyzed from the perspective of pragmatics, "The Art of War" has a monumental value in terms of linguistic art, and its achievements are reflected in many aspects. The choice of words is highly refined, the syntax is sound and appropriate, the use of rhetoric is colorful, and the reasoning is pure and simple. "The Art of War" utilizes almost all the rhetorical devices of Chinese literature in the pre-Qin period, including metaphor, prose, couplet, and topicality. The application of various rhetorical devices, in addition to being colorful and elegant, also makes the arguments repeated and clear. Three different translations of "The Art of War" are compared and contrasted in terms of sentence rhetorical choices as a means of clarifying the differences between different translators in their translations of "The Art of War". Based on the Chinese-Russian corpus of "The Art of War" constructed in this paper, the sentences in the translations are analyzed and counted in terms of rhetorical frames and analyzed by one-way ANOVA. Table 6 shows the results of the comparison of the variability of sentence rhetorical choices in different translations of "The Art of War". As can be seen from the table, the sentence diction of the three translations of "The Art of War" in the Chinese-Russian corpus possesses extremely significant differences in simile and parataxis, (T=4.589,P=0.002<0.01, T=3.947,P=0.009<0.01), and differences in the choice of platitude diction (T=2.731,P=0.013<0.05), while there is no thimbles diction selection difference (P>0.05). Among them, Conrad's translation of "The Art of War" adopts more prose rhetorics, while Ma Liangwen and Shi Yaohua choose more similes and couplets rhetorics. The topical rhetorical devices can be clearly demonstrated in Chinese, and their translation into Russian may cause some differences, so the topical rhetorical devices are used in less than 10 sentences. In contrast, Conrad's prose rhetoric is more in line with the

cultural context of "The Art of War", but the Russian cultural context is ultimately different from the Chinese language expression. Combined with the previous analysis, it is also clear that Conrad realizes the translation of "The Art of War" through his own understanding, which is a cultural reconstruction of "The Art of War" in the international arena. Although it cannot accurately express the spiritual connotation of "The Art of War", it has become an important way for the wide dissemination and development of Chinese ancient culture. Therefore, in the process of translating "The Art of War", cultural reconstruction can be carried out appropriately in consideration of the social environment and national cultural differences, and the cognitive bias needs to be corrected by Chinese scholars, so as to ensure the correct dissemination of Chinese antiquities and culture, and to better show the charm of Chinese culture.

Table 6: The Difference between the Choice of Sentence Words

Rhetoric	Maliangwen	Shiyaohua	KangLade	T	P
Parable's	67	26	22	4.589**	0.002
Sentence					
Specific Sentence	36	29	84	2.731*	0.013
Dual Sentence	42	73	35	3.947**	0.009
Top Sentence	6	9	7	0.584	0.126

#### 5. CONCLUSION

Based on the Chinese-Russian corpus of "The Art of War", the article compares the translation styles of different translations of "The Art of War", and explores the phenomena of cultural reconstruction and cognitive bias in the process of carrying out the translation of "The Art of War" by different translators. The STTR value of Conrad's translation in the Chinese-Russian corpus of "The Art of War" is 41.58%, and the overall diction is richer and more variable. The reading ease value of Conrad's translation is 57.84, corresponding to a readability level of "standard", indicating that Conrad's translation of "The Art of War" is easier to read. In the translation equivalence level, there is a significant difference between semantic equivalence and pragmatic equivalence (P<0.05), which effectively reflects the phenomenon of cultural reconstruction by different translators under different social environments and national cultural orientations. The sentence diction in the translation of "The Art of War" has a significant difference (P<0.05) in the use of simile, prose and antithesis, but there is no difference (P>0.05) in the application of thimble rhetoric. Therefore, there is a certain phenomenon of cultural

reconstruction and cognitive bias in the translation of "The Art of War" by different translators in the context of Russian culture, but on the whole they are all based on culturally oriented changes, which provides a certain basis for the effective dissemination of "The Art of War" overseas.

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