

A Corpus-based Evaluation of College English Textbooks in China: From the Perspective of Cultural Functions

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Abstract: The development of the new era has put forward strict knowledge requirements, quality requirements, and ability requirements for the cultivation of foreign language majors. The requirements of the times for foreign language talent provide an important basis for examining the cultural functions of English textbooks. This paper uses AntConc software to process data on the presentation of Chinese culture in a corpus of English intensive reading materials for English majors, and to explore the alignment of the design of cultural exercises with Harvey's four levels of intercultural awareness cultivation goals. Results suggest that the Chinese cultural elements are not adequately presented in this set of textbooks, whereas the culture-related exercises in the textbook are designed in accordance with Harvey's cross-cultural awareness theory.

1. Introduction

Foreign language textbooks are the main resource for college students to improve their language skills and build their cultural knowledge. It not only opens the window to target language culture, but also provides a position to clarify one's own cultural identity. The synergistic effect exerted by teaching materials is undoubtedly an important source of cultural education in foreign language courses. Teachers have the responsibility to examine whether the textbooks they use are up-to-date while tapping into moral education factors; and textbook editors need to integrate cultural elements organically in the process of improving textbooks to provide material support and value leadership for the advancement of foreign language courses.

Over the past few decades, China has invested much effort into foreign language education, especially in English language. Textbooks, as the most important object material for foreign language education, have naturally received a lot of attention. At present, the generally agreed view in the academic field is that Chinese culture is neglected in the source of textbook content selection; the proportion of Chinese and Western culture is seriously imbalanced; and the presentation of Chinese culture is too weak, which is not conducive to developing students' intercultural competence and cultural confidence [1-3]. Even though this problem has been improved in newly published university English textbooks, the content and form of Chinese culture presentation is still

relatively homogeneous, dominated by modern cultural content, translation, word choice, and fill-in-the-blank in an implicit way, and it fails to carry out the writing concept to the end [4]. Therefore, university English textbooks should fundamentally improve their self-awareness of the culture of the native language and the deep culture of the target language [5].

However, most of these studies were non-empirical ergo, with no solid data to back up their thesis. Almost all of these studies mentioned above merely used excerpts from different textbooks. Hence, this study here proposes to use the corpus method to study the most widely used English textbooks for English majors in China.

2. Research Questions

This research has taken the curriculum requirements for English majors into consideration, which was published by the Ministry of Education of People's Republic of China. The curriculum requirements emphasize the importance of knowledge of English language and culture alongside knowledge of Chinese language and culture; it also highlights the importance of Chinese sentiment, international perspective, and social responsibility; and it focuses on intercultural competence, critical thinking skills, innovation skills and the ability to judge national conditions.

In view of this, this paper will examine the ideological functions of certain textbooks around the following two aspects: (1) How are Chinese cultural elements distributed in textbooks? (2) For the development of students' cultural awareness, are the textbook exercises designed in accordance with Hanvey's four levels of cross-cultural awareness?

Based on Harvey's stage model of cultural learning, cross-cultural awareness can be divided into four levels [6]. The first level refers to the awareness of superficial or very obvious cultural features, i.e., cultural stereotypes; the second level refers to the awareness of features in the target language culture that contrast with the native language culture; the third level refers to the awareness that the differences between the target language culture and the native language culture are understandable through rational analysis; and the fourth level refers to the awareness of how people in the target language culture view the native language culture [7]. Correctly understanding the differences between Chinese and Western and having critical thinking are necessary cross-cultural skills for foreign language talent. However, it is not achieved overnight and simply cannot be achieved by limited reading and listening texts alone. Therefore, the process of gradually guiding students to engage in cultural thinking through exercises and task design is essential.

3. Methodology

This study uses a corpus-based approach to analyze cultural elements in textbooks. The following section first describes the self-constructed corpus and then explains the method of analyzing the corpus.

3.1. Corpus Design

The self-built English corpus in this paper consists of six student volumes of *Contemporary College English (second edition)*. This set of textbooks are published by the Foreign Studies Agency and are widely used by universities in China. Due to copyright issues, neither of the textbooks is provided as a machine-readable electronic version of a plain text document directly, which means the OCR optical processing is required after scanning in order to get plain text. To ensure accuracy, the authors manually proofread all documents and finally saved the pure text. The exercise manuals and teacher's manuals that accompany the set of textbooks are not included in the scope of this corpus.

To facilitate the search, the authors have made each textbook a separate library file, and the search tool used here is AntConc 3.5.7. The first four volumes each has 16 units, with 2 articles in each unit, while volumes 5 & 6 each has 12 units, with 1 article in each unit. It can be seen from Table 1 that except the third volume, the type/token ratio (TTR) of the other five volumes shows an increasing trend. Due to the reduction of vocabulary list and grammar explanation, the number of word types in the latter two textbooks is less than that in the first four volumes, but the number of word tokens is similar to that in the third volume, resulting in a substantial increase in TTR. The basic data in Table 1 shows that in this set of textbooks, the transition from the basic stage to the advanced stage in English learning is scientific and reasonable.

Table 1: Basic information of self-built corpus

Volume Issue	Number of Units	Number of Word Types	Number of Word Tokens	Type-Token Ratio
Volume 1	16	10,239	116,658	0.088
Volume 2	16	12,447	135,605	0.092
Volume 3	16	13,147	133,945	0.098
Volume 4	16	14,503	154,798	0.094
Volume 5	12	13,599	131,066	0.104
Volume 6	12	13,735	130,489	0.105

3.2. KWIC Design

Table 2: Detailed KWIC of cultural elements

Categories	Concordance Design
Materials	Chopsticks, rice, Beijing roast duck, Jiaozi/dumpling, steamed buns, zongzi, Yuanxiao, tofu, hot pot, spring rolls, dim sum, soy sauce, tea, mahjong, Qipao, Chinese knot, bronze, ceramics, porcelain, silk, paper making, letterpress, black powder, compass, Chinese medicine, acupuncture, sedan chair
Philosophy	Confucius, Lun Yu, Mencius, Taoism, Laozi/Laotse/Lao-tse/Laotzu/Lao-tzu, Zhuangzi/Chuang tzu, Tao Te Ching/Daodejing/Tao Teh King, Shi Jing/The Book of Songs, Iching/The Book of Changes, Li Ji/The Book of Rites, Zhongyong/Doctrine of the Mean, Buddha, Apsaras, Yin, Yang, Feng Shui
Arts	Ink Painting, Calligraphy, Guqin/Gugin, Kunqu Opera/Kun Opera/Kunqu, Zaju, Peking Opera/Beijing Opera, Taiji/Tai Chi, Qigong, Kung Fu, Shadow Play, Dragon Dance, Lion Dance, Yangko, Stilts, Silhouette, Embroidery, The Great Wall, Forbidden City, Imperial City, Summer Palace, Temple of Heaven, Mausoleum, Terracotta Warriors and Horses
Languages	Chinese characters, Mandarin, Oracle bones, academies, Tang poetry, Song poetry, Yuanqu, Peony Pavilion, Peach Blossom Fan, Three Kingdoms, Liangshan swamp robbers, Journey to the West, Dream of Red Mansions/The Story of the Stone, Herb Classics, Lu Xun
Society	Silk Road, Western Regions, Dynasty, Spring and Autumn, Warring States, Hutong, Confucius Institute, Civil Service Examination, Cultural Revolution, College Entrance Examination
Customs	Lunar calendar/Chinese calendar, Spring Festival, Yuanxiao Festival/Lantern Festival, Mid-Autumn Festival, Dragon Boat Festival, Qingming Festival/Tomb-sweeping, winter solstice, Temple Fair, Chinese zodiac, Firecrackers

According to the research questions about the distribution of Chinese cultural elements, the

authors designed them in batches from two aspects. Firstly, input *China*|*Chinese* in Search Term to see all information that involves China or Chinese. Secondly, we include the "Hundred Words of Chinese Culture" developed by Zheng [8] for supplementing the cultural elements that may be missed in the first rough search. In order to dissect the cultural vocabulary in detail, the author adopted six subsystems [9], which can be organized as Table 2.

As for the second research question, the implementation of the theory of Harvey's cross-cultural awareness training in English intensive reading textbooks can be verified by searching keywords such as *China*|*Chinese* and focusing on practice instruction. In order to prevent omission, the author further uses *our country*|*our culture* and *your country*|*your culture* as key words for the probe search, and the symbol * contains possible inflection changes.

4. Results and Discussion

4.1. The Distribution of Chinese Cultural Elements

The cultural imbalance that domestic scholars generally agree on can be attributed to the one-sided pursuit of foreign language skills in education and the neglect of the cultural factors of the mother tongue. The foundation for telling Chinese stories in a foreign language is a deep knowledge of traditional Chinese culture. How to appropriately represent Chinese cultural content in a foreign language is what students need to learn and master through textbooks. Therefore, the first research question designed for this study is to examine the distribution of Chinese cultural elements in foreign language textbooks.

In order to facilitate the research, the authors input Table 2 and used the advanced search function in AntConc 3.2.1 as shown in Figure 1.

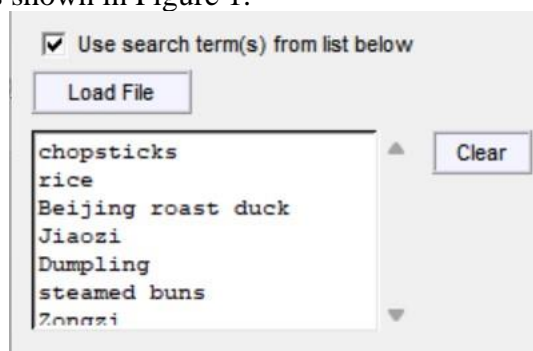


Figure 1: Applying advanced search

After excluding items unrelated to Chinese culture (for example, common items like tea, rice, noodles, etc.), the retrieval results are shown in Table 3.

As it is shown in the above table, there is no obvious trend or pattern in distribution. In the first volume of this set of books, words like "tea" and "rice" appear a lot in almost every chapter, whereas they usually stand for just a common item without bearing any sense of Chinese culture. Although there is no text with Chinese culture as the theme in the second volume, the number of cultural vocabulary is the largest in the first four volumes (basic stage), and the six subsystems of Chinese culture proposed by Zheng [8] have all been covered. Compared with the second volume, the number of culture-loaded words in volumes 3 and 4 is reduced, and the content lacks depth and novelty. Although the important task in the basic stage is to lay a good foundation for language, traditional culture education is a great cause of educating people throughout. In the subsequent revision process, textbook writers may need to design the difficulty and quantity of cultural

vocabulary input according to a reasonable gradient, to achieve the effect of educating students about their own culture thoroughly.

The breakthrough of input intensity of culture-loaded words appears in volume 5, the advanced stage of language study. In volume 5, there is one chapter concentrated on the theme of mahjong, so as we can see that the concordance of “mahjong” has appeared 10 times. Meanwhile, many other new material words like “dim sum”, “compass” and so on were revealed in this volume. However, such phenomena did not last until volume 6.

Due to the absence of Chinese culture in foreign language textbooks, most students' descriptions of Chinese cultural symbols remain shallow for a long time, whether in spoken or written language. Textbooks construct a cultural context through rich vocabulary, which is the first condition for students to obtain the ideology and values transmitted by culture. On this basis, teachers should make full use of the cultural elements in teaching materials, input the essence of traditional culture in various and dynamic forms, and help students gradually build cultural self-confidence. Only in this way can students maintain the right to speak of Chinese culture in foreign exchanges and truly tell Chinese stories well.

Table 3: Concordance hits

Volume Issue	Number of Concordance Hits	Content of Concordance Hits
Volume 1	13	Materials: porcelain (2); Philosophy: Confucius (1); Arts: The Great Wall (2), Silhouette (1); Languages: Lu Xun (1); Customs: Spring Festival (5), firecrackers (1).
Volume 2	17	Materials: Chopsticks (1), acupuncture (2), compass (1); Philosophy: Confucius (5); Arts: Forbidden City (2), Peking Opera (1); Languages: Three Kingdoms (1), Journey to the West (1); Society: Dynasty (2); Customs: Spring Festival (1).
Volume 3	14	Materials: tea (3), silk (3); Philosophy: Confucius (1), Taoism (2), Buddha (1); Arts: The Great Wall (1); Society: dynasty (3).
Volume 4	12	Materials: tea (1), silk (1); Philosophy: Confucius (1), Tao Te Ching (1); Arts: Summer Palace (2), Peking Opera (2); Languages: Lu Xun (3); Society: Cultural Revolution (1).
Volume 5	25	Materials: silk (4), mahjong (10), dim sum (1), compass (1), rice (1), bronze (1); Arts: Calligraphy (4); Languages: Chinese Characters (1); Society: dynasty (2).
Volume 6	13	Materials: rice (1), silk (4), bronze (1) Arts: Calligraphy (1), Silhouette (3) Languages: Academies (1), Lu Xun (1) Society: dynasty (1)

4.2. The Cultivation of Cross-Cultural Awareness

Contemporary College English (second edition) focuses on small and tangible cultural differences and asks students to talk about their home country in English. The authors used *our country*|*our culture* and *your country*|*your culture* as key words for the probe search, as in Figure 2.

Hit	KWIC	File
18	eems to be peculiar ___ _ our culture which traditionally tends	2.txt
19	from Point A to Point B. Our country has become a nation in sear	2.txt
20	ed.(para.2) Paraphrase. 7.Our country has become a nation in se	2.txt
21	y was still unheard of in our country. Nobody in our village sch	2.txt
22	nd note their position. 1.Our country has become a nation in se	2.txt
23	v epoch in the history of our country. (history) 5. In modern so	2.txt
24	d about) energy supply in our country. 3. We_ 4. They believed t	2.txt
25	n just before he died:Why our country has not been able to produ	2.txt
26	m /'patrotizom/ n.love of your country and willingness to defenc	2.txt
27	1. There is no doubt that our country is much better___ than be	2.txt
28	ed doors of opportunity___our country. 6. I am sure we will witr	2.txt
29	waters. 5. The future of our country belongs to all of us. No c	2.txt
30	well. 10. Do not ask what your country can do for you, ask what	2.txt
31	, ask what you can do for your country. Writing Write an outlin	2.txt
32	is that there is still in our culture something that suspects tl	3.txt
33	g is like so much else in our culture: the truth of it is found	3.txt
34	It is said that people in our country read far fewer books per c	3.txt
35	se hope. 5. Traditionally our culture treasured unity, order, as	3.txt
36	Do you know anybody in our country who has been like Bechal	3.txt

Figure 2: Extract of search results

With a total of 59 concordance hits, the most frequent practice instructions that appear in the *china*|*chinese* and *your country*|*your culture*|*our country*|*our culture* search were “compared ... with How do ... and ...? Do you find differences between ...? Are there similar/also ... in China?” Most of them are analytical tasks that aim to achieve a multiperspective and in-depth understanding of the text based on comprehension, identification, comparison, and judgment of its parts and their relationships. This set of English textbooks compared and contrasted two different cultures, demonstrating its hierarchical approach to developing students' cross-cultural awareness. It moves from volume 1's comparison of the superficial things indicated, to volume 2's focus on differences in social patterns, to volume 3's focus on changes in language patterns, and finally to volume 4's guidance of students to think about abstract values. Such a layered design is in line with Hanvey's concept of cultural learning: students first become aware of superficial or obvious features of the target language culture (level 1), then become aware of important features of the target language culture that contrast with the native language culture through cultural conflict (level 2), and then recognize the deeper connotations of the target language culture and the native language culture through rational reflection (level 3).

As to whether students' cross-cultural awareness can rise to the fourth level of Hanvey's theory, this can be argued by examining the practice instructions in the latter two volumes. The author extracted a total of 100 practice instructions from the two volumes and summarized their syntactic features, and found that the interrogative pronouns were mostly “which, what, and how”. These instructions are in line with the characteristics of reasoning-based tasks, which emphasize the formation of conjectures, hypotheses, or reasonable conclusions from relevant information and evidence [10]. Students are required not only to be aware of the great differences between Chinese and Western cultures, but also to have a comprehensive and clear understanding of Chinese culture, and to think and comprehend the respective characteristics of Chinese and Western cultures on their own. Besides, the last two volumes also contain pronouns “Why, Where, in what way” and verb “explain”. These instructions focus on evaluating the content of the text and require reasons or evidence, which are evaluation-based tasks [10]. This undoubtedly places a higher demand on

students to know not only what is true but also why to tell the reasons, roots, and extent, and to explore the deeper dimensions of culture. It is as if students are given the responsibility of being cultural ambassadors, telling the story of Chinese culture to the West while at the same time needing to shift their perspective and consider the historical context in which the long-standing Chinese culture was formed from a Western perspective.

To sum up, volume 5 and volume 6 are a good link to the first four volumes and effectively implement the layers of Harvey's cultural theory by providing students with an understanding of the deeper connotations of the target language culture and the native language culture from the perspective of rational analysis, and then recognizing how other people view their own culture through cultural immersion.

5. Conclusion

This paper analyzes the distribution of cultural elements in college English intensive reading textbooks based on corpus. The macro-frequency-driven and micro-contextual co-occurrence presented by using corpus batch search can avoid the purely subjective and fuzzy evaluation to a greater extent. The conclusions drawn from the data analysis include: 1) Chinese cultural elements are not adequately presented in this set of textbooks. There is no consistency in the intensity of cultural input, nor is there a clear pattern; 2) the culture-related exercises in the textbook are designed in accordance with the four levels of cross-cultural awareness development [6], which help students to examine the national culture correctly and develop cultural sensitivity. In summary, writers should pay more attention to highlighting and reflecting on traditional Chinese culture in the revision process of relevant teaching materials. At the same time, regardless of the guiding ideology, the basic phonological, lexical, and grammatical systems and the language skills of listening, speaking, reading, writing, and translating should always be fully reflected in the textbooks [11].

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References

- [1] Liu, Y. H., Zhang, L. J., and May, S. (2015). *A Study of Textbook Culture Based on a Corpus of Nationally Planned University English Textbooks*. *Foreign Language World*, (06), 85-93.
- [2] Zeng, Y. Y. (2019). *Interpretation of the Guidelines for Undergraduate Teaching in English*. *Foreign Language World*, (06), 2-8.
- [3] Zhang, R. X. (2013). *Chinese Cultural Elements in the New Standard College English Textbook Analysis of Presentation Characteristics - a Corpus-Based Investigation*. *English Teachers*, (05), 53-58+66.
- [4] Zhang, H., and Yu, R. (2020). *A Study on the Presentation of Chinese Culture in College English Textbooks*. *Foreign Language Education in China*, (03), 42-48+91.
- [5] Kang, L., and Xu, J. F. (2018). *Cultural Consciousness and its Realization in College English Textbooks*. *Foreign Language Research*, (04), 70-75. doi: 10.16263/j.cnki.23-1071/h.2018.04.012.
- [6] Hanvey, R. G. (1982). *An Attainable Global Perspective*. *Theory into Practice*, 21(3), 162-167.
- [7] He, A. P., and Zheng, W. Q. (Eds). (2009). *A Study of High School English Teaching Materials and Pedagogy from a Corpus Perspective*. *People's Education Press, Beijing*.
- [8] Zheng, J. (2021). *The Ideological and Political Functions of German Intensive Textbooks from the Perspective of the Guide: a Corpus-based Analysis*. *Foreign Language Education in China*, (01), 69-76+90.
- [9] Zhang, D. N., and Fang, K. L. (Eds). (1994). *Introduction to Chinese Culture*. *Beijing Normal University Publishing Group, Beijing*.
- [10] Chen, Z. H., Zou, M., and Su, X. L. (2020). *The Development of Critical Thinking Skills in Reading English*

Textbooks in Secondary Schools: a Comparison Based on Two Sets of Chinese and German textbooks. Foreign Language Education in China, (03), 49-56+92.

[11] Zhuang, Z. X. (2006). *Building a Foreign Language Teaching Material Writing and Evaluation System with Chinese Characteristics. Foreign Language World, (06), 49-56.*