

Study on the Effect of Different Presentation Methods of Chinese Text with Phonetic Notation

Zimu Li

School of International Chinese Language Education, Beijing Normal University, Beijing, China

Abstract: This study focuses on the effectiveness of the use of annotated texts in international Chinese education. Through text analysis and questionnaire surveys, we investigated the current situation of the use of annotated texts in international Chinese education and summarized the effectiveness of different presentation methods of annotated texts. The study found that: the current Chinese teaching practice has a variety of ways of presenting annotated texts and lacks clear standardization; some teaching materials have more visual factors that are not conducive to reading and learning; some teachers lack the knowledge reserve and teaching motivation to prepare annotated texts efficiently; and there is a mismatch between supply and demand between teaching materials and teachers, teaching materials and students, and teachers and students. Based on the above problems, this paper puts forward targeted suggestions.

Keywords: International Chinese Language Education; Annotated Text; Effect.

1. Introduction

There is a consensus that Pinyin can assist in Chinese reading. In the early stages of Chinese language learning, most teaching resources, including Chinese textbooks and teaching materials, choose texts that present both Pinyin and Chinese characters, so that learners can use Pinyin to activate phonetic information, spell Chinese characters, form, store, and extract accurate lexical phonological representations in mental dictionaries, and establish the link between form-sound-meaning, thus facilitating Chinese reading and learning. It is worth noting that reading is a complex visual processing movement, and the first prerequisite for readers to use the morpho-syntactic information in the annotated text to access the semantic meaning is to accurately notice the linguistic information and recognize the linguistic units from the text, and the different visual typography and text layout will profoundly affect the allocation of attentional resources, and the choice of reading and learning strategies when learners read, which in turn affect the whole reading process and learning effect. In general, the Chinese characters are spaced out naturally and inconspicuously, with no spaces between words or characters. In phonetic texts, however, there is a wide variety of ways to divide Chinese characters from their Pinyin counterparts and to arrange the text in different ways. There is a paucity of research on the reading of Chinese text with phonetic notation, and only a few studies have examined the effects of full-text with phonetic notation, raw word phonetic notation, and unphonetic notation on the learning of Chinese word forms and sounds (Lee & Kalyuga, 2011); and the effects of phonetic notation on Chinese reading (Chung, 2002; Bassetti, 2009). Whether the presentation of the annotated text affects primary Chinese learners' Chinese reading and learning will be the central concern of this paper.

2. Methodology

2.1. Text Analysis

2.1.1. Descriptive Statistics Results

This paper examines the typography of the annotated texts in elementary and intermediate Chinese for foreigners

textbooks. A total of 20 Chinese textbooks for foreigners were included in the data coding, and we coded each textbook for (1) the relative position of the Chinese text and the Pinyin text; (2) the annotation range and annotation mode of the Pinyin text; (3) the spacing form of the Chinese text; (4) the spacing form of the Pinyin text; (5) the correspondence mode of the Chinese text and the Pinyin text, etc. Through the above approaches, we aim to summarize the specific distribution of annotated text presentation in foreign Chinese textbooks.

2.1.2. Text Analysis Results

The results showed that 42% of the textbooks had spaces between Chinese character and character, 31% of the textbooks had spaces between word and word, and 26% of the textbooks had no spaces between Chinese character and character. From a pinyin text perspective, 63% of the textbooks had space between word and word, while the remaining 27% had spaces between each syllable and syllable. Due to the different forms of spaces in the Chinese character part and the Pinyin part, the Chinese characters and Pinyin words in 21% of the textbooks do not correspond to each other in a uniform way. From the perspective of the relative position of Chinese characters and Pinyin, the relative position of Pinyin texts also varies greatly. 63% of the textbooks use a layout in which the Pinyin part is on top and the Chinese character part is on the bottom, while 26% of the textbooks use a layout in which the Chinese character is on top and Pinyin is on the bottom, and another 10% use a layout in which Pinyin and Chinese characters are presented in separate parts.

2.2. Student Questionnaire Results

Based on the survey of textbooks, we selected a series of representative ways of presenting the annotated texts. These include three types of spaces form, three types of Chinese character-pinyin relative position relationships, and two types of Chinese character-pinyin correspondence relationships. and we developed questionnaires for students and teachers. The questionnaire includes dimensions such as familiarity with different ways of presenting the annotated text; frequency of using different ways of presenting the annotated text; reasons for using different ways of presenting the text; and

teachers'/students' evaluation of the effectiveness of different ways of presenting the annotated text.

2.2.1. Descriptive Statistics Results

A total of 81 valid questionnaires were distributed to students from the United States, the United Kingdom, Japan, Korea, Vietnam, Myanmar, Nepal, Thailand, Russia, Mongolia, and other countries; the mother tongue of the students spanned the Chinese culture circle and the Pinyin language family; the language level of the students covered HSK1 to HSK6, which basically included the current international Chinese education field. The sample ensures the authenticity, accuracy and validity of the questionnaire.

2.2.2. The Space Method of Phonetic Annotation Text

For elementary Chinese learners, it is more common to find texts with no spaces and texts with spaces between words. It is noteworthy that elementary Chinese learners generally think that phonetic texts with spaces between words are very helpful for Chinese learning, but the frequency of such phonetic texts is relatively low, which to a certain extent reflects that elementary Chinese textbooks cannot meet students' learning needs. For intermediate learners, as they have already mastered a certain amount of Chinese vocabulary and developed a more mature phonological awareness, the frequency of using annotated texts decreases significantly, and their reliance on them decreases significantly, which is reflected in both the commonness of the types of annotated texts and the evaluation of their usefulness.

2.2.3. Relationship between the Position of Annotated Texts

The result shows that there is a significant difference in the frequency of the text with different word-phonetic positions. Chinese learners generally see text types with Pinyin at the top and Chinese characters at the bottom, and relatively few text types with Pinyin at the bottom and Chinese characters at the top. From the perspective of learners, elementary Chinese learners are very fond of using the Pinyin-on-top and Chinese character-on-bottom text types, while they have a low opinion of the other two types of text types. This inspires textbook writers to take into account the level of the teaching targets and develop textbooks with phonetic transcriptions in a targeted manner.

2.3. Teachers Questionnaire Results

2.3.1. Descriptive Statistics Results

In this paper, a questionnaire was administered to novice and advanced Chinese language teachers, which included the teachers' awareness of the importance of Hanyu Pinyin, their awareness of the norms of using Pinyin, and their evaluation of the common use and effectiveness of different ways of presenting phonetic texts. A total of 84 valid questionnaires were collected.

2.3.2. Chinese Teachers' Awareness of Pinyin Rules

The result shows that both novice and proficient teachers believed that Pinyin plays an important role in Chinese language teaching; however, there is a difference in the degree of understanding of Pinyin rules among teachers with different teaching experiences, with proficient teachers being more aware of Hanyu Pinyin rules than novice teachers, while novice teachers' knowledge base needs to be improved.

2.3.3. Methodology of Making Phonetic Annotated Text

The result shows that teachers with different experience in Chinese language teaching generally use WPS, Office Word,

and Pinyin online conversion software to compose the phonetic annotated text, while a few teachers use manual keyboarding to compose the annotated text. It can be seen that the preparation of pronunciation texts in the field of teaching Chinese as a foreign language has been highly automated and technologically advanced, and most of the pronunciation texts automatically generated by computer technology are presented in the form of spaces between words, while a few are presented in the form of spaces between words or natural hyphenation. On this basis, the majority of Chinese teachers manually adjusted the correspondence between Chinese characters and Pinyin in the text to ensure that the Pinyin and Chinese characters were aligned centrally, while few teachers made further adjustments to the unit cuts. Some teachers even chose to paste the text without any adjustment. Whether or not the technology-generated text is secondarily processed directly determines how the text is presented and how well it is used.

2.3.4. The Space Method of Phonetic Annotation Text

The result shows that novice teachers generally used the type of annotated text with no spaces between Chinese characters and spaces between pinyin, while skilled teachers would use the above types in addition to the presentation of pinyin with spaces between Chinese characters and pinyin syllables and pinyin with spaces between pinyin syllables both as inter-word spaces. Both types of teachers used inter-word space and pinyin word syncopated texts less frequently. Further analysis of the results showed that teachers used text types without spaces between Chinese characters and with spaces between pinyin and pinyin more often to save time and cost. Teachers used the text types with spaces between Chinese characters and pinyin and with spaces between pinyin and pinyin more for aesthetic typography. The teachers made the text with spaces between words to conform to Hanyu Pinyin norms and the reading habits of second language learners. From the above analysis, it can be seen that the cost of text production, teachers' awareness of norms, and teachers' attitudes toward text aesthetics are the main factors that influence teachers' production of different annotated texts.

2.3.5. Relative Positioning of Chinese Characters and Pinyin Sections

The results showed that both novice and proficient teachers often used the pinyin-on-top and the Chinese character-on-bottom text presentation style, and rarely used other text types. Further analysis revealed that good teaching effectiveness was the main reason why teachers chose to use this text type. Since teachers seldom see texts with Chinese characters on top and Pinyin on the bottom and texts with Chinese characters and Pinyin separated from each other, they cannot make accurate expectations about their effectiveness. However, text analysis and student surveys show that both types of texts exist in Chinese teaching practice and are effective in helping students learn Chinese. Therefore, it is necessary to further investigate these two types of texts empirically to clarify their effectiveness and conditions of application.

3. Conclusion

This paper focuses on the use of Chinese second language annotated texts, and takes the presentation and effectiveness of annotated texts as the research object. The results of the study show that: the current Chinese language teaching practice has a wide variety of annotated texts with low

standardization; some teaching materials have more visual factors that are not conducive to learning; some teachers lack the knowledge and motivation to use annotated texts for production; and there is a mismatch between supply and demand between teaching materials and teachers, teaching materials and students, and teachers and students. Based on the above problems, we propose the following suggestions: 1. teachers should investigate more into the types of annotated texts that exist in current teaching materials; 2. teachers should fully consider the Chinese language level and learning needs of their students, and create annotated texts efficiently for different knowledge types and teaching objectives; 3. teachers and textbook publishers should consider the visual experience and learning psychology of learners, update the presentation of teaching materials in a timely manner, and avoid the visual factors that hinder Teachers and textbook publishers should consider learners' visual experience and learning psychology, update the presentation of textbooks in a timely manner, and avoid the visual factors that hinder Chinese learning; 4. Researchers should pay more attention to

annotated texts and actively conduct relevant empirical studies to provide scientific basis for the efficient use of annotated texts.

References

- [1] Bassetti, B. (2009). Effects of adding interword spacing on Chinese reading: A comparison of Chinese native readers and English readers of Chinese as a second language. *Applied Psycholinguistics*, 30(4), 757–775.
- [2] Chung, K. K. H. (2002). Effective use of hanyu Pinyin and english translations as extra stimulus prompts on learning of Chinese characters. *Educational Psychology*, 22(2), 149–164.
- [3] Chung, K. K. H. (2007). Presentation factors in the learning of Chinese characters: The order and position of Hanyu Pinyin and English translations. *Educational Psychology*, 27(1), 1–20.
- [4] Lee, C. H., & Kalyuga, S. (2011). Effectiveness of different Pinyin presentation formats in learning Chinese characters: A cognitive load perspective. *Language Learning*, 61(4), 1099–1118.