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Ten different methods and strategies on teaching Chinese characters to second language learners

Abstract

Through the investigation and evaluation of several previous studies concerning the theory of teaching Chinese writing and reading, this paper aims to contribute to the Hanzi pedagogy. We believe that the methods presented here can be appropriately applied in classrooms where students have a first language in which the writing system has no connection to Chinese characters. All students whose first language's writing system is appreciably different from Chinese writing system are in the same situation when they start to learn and acquire reading and writing skills in Chinese. The target demographic of the following teaching methods is broad, and includes students with varying level of Chinese language knowledge. Methods tailored to beginner and more advanced students are discussed as well.

Ten different methods and strategies on teaching Chinese characters to second language learners are presented here. It should be noted that there is no sharp line that separates the different theoretical approaches – this is to say that they do not exhibit mutual exclusivity. The various approaches, conceptual frameworks and considerations are categorized as follows, moving from theoretical proposals to more practical ideas: the *Liu Shu* (Liù shū 六書) approach; the stroke-oriented habit-forming approach and rote memorization; the holistic method and delayed approach; the focus on recognition approach; developing grapho-phonological awareness; the character color-coding approach; mnemonic strategies and wild association; on the unit of instruction: word or character?; learning through hand- or typewriting; characters similar in form (xíngsì zì 形似字) and homonymic characters (tóngyīn zì 同音字).

Keywords: teaching Chinese writing, Hanzi pedagogy, Chinese as a second language

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针对二语学习者的十种汉字教学理论与实践策略

摘要

通过对多项关于中文写作与阅读教学理论的已有研究进行调查与评估, 本文旨在为汉字教学法的发展做出贡献。我们认为, 本文所提出的方法适用于母语书写系统与汉字不同的学习者。在开始学习和掌握中文的读写技能时, 所有母语书写系统与汉字有显著差异的学习者都面临的是相似的起点。这些教学方法适用于广泛的受众群体, 包括不同中文水平的学习者, 本文还探讨了针对初学者与较高水平学习者的不同教学策略。

本文介绍了十种针对二语学习者进行的汉字教学方法和策略。需要指出的是, 这些理论方法之间并没有绝对的界限, 亦非互相排斥。我们将这些不同的教学方法、理论框架与思路按从理论到实践的顺序进行了分类, 具体如下: 六书教学法; 以笔画为导向的习惯养成法与机械记忆法; 整体识记与延后识字法; 识别优先法; 图音意识培养法; 汉字颜色编码法; 联想与记忆术策略; 教学单位应以词为主还是以字为主; 通过手写或打字学习; 形似字与同音字教学法。

关键词: 汉字书写教学, 汉字教学理论, 中文作为第二语言

Liu Shu (Liù shū 六書) approach

When researchers, teachers or even textbook writers attempt to categorize Chinese characters, *Liu Shu* is the most often quoted resource. *Liu Shu*, or the *Six Methods of Forming Chinese Characters*, refers to the post face (xù 叙) written by Xu Shen for the earliest dictionary, the *Shuowenjiezi* (说文解字), compiled in 100 AD. In the post face of *Shuowenjiezi* Xu Shen categorized the Chinese characters under six groups, based on their structure: ideogram (zhǐshì 指事), pictogram (xiàngxíng 象形), picto-phonetic character (xíngshēng 形聲), compound ideograph (huìyì 會意), transfer character (zhuǎnzhu 轉注) and loan character (jiǎjiè 假借).

Pictograms can be explained as simplified drawings of what is to be represented. For example: person *rén* 人, sun *rì* 日, and mountain *shān* 山. Ideograms express an idea through an iconic form. For instance: above *shàng* 上, below *xià* 下, and one *yī* 一. A picto-phonetic character consists of two parts: a semantic element and a pronunciation part. The semantic element indicates the meaning of the character, and the phonetic element is used for its sound value alone, independent of its meaning, to represent the pronunciation of the graph. The character eyebrow *méi* 眉 can be taken as an example. With the addition of different determinatives different words are formed, as follows: with the ‘water’ determinative, the meaning of the character is river bank 涯; with the ‘woman’ determinative, we get the character for attractive 媚; with a ‘tree’ determinative, the character means lintel (of a door) 楣; and, when it is preceded by the ‘gold’ determinative, the meaning is americium 镅. In contrast, the compound ideographs are compounds of two or more pictographs or ideographs, based on their meaning: two trees form the character for grove *lín* 林, and three trees in one character makes the character for forest *sēn* 森. Transfer characters are not very common, and also the least understood. Xu Shen only mentioned 考 (kǎo to verify) and 老 (lǎo old) as examples. Finally, a loan character is used to write a verb based on their common pronunciation. For instance, the character for wheat was borrowed to write the verb come *lái* 来, based on their identical pronunciation.

Several scholars have highlighted the defects of the Liu Shu method. The first argument against the Liu Shu approach concerns the fact that Xu Shen wrote the postface in which this approach was detailed almost 2000 years ago. Since that time, there have been several changes to the Chinese writing system, for example the character simplification movement in the 1940s, which is seen by many as an arbitrary language reform. Furthermore, Xu Shen did not possess any information about the oracle bones either, hence he could not trace back the origin of characters. Therefore, in the light of current knowledge, certain examples of Xu Shen need to be recategorized. For example, according to Xu Shen 信 (xìn to believe, to trust) is a compound ideograph, but now we are able to reconstruct Old Chinese and know that this character is a typical case of picto-phonetic category. Second, some characters’ categorization is not clear. For instance, the character for root *běn* 本 can be explained as either an ideogram or a pictogram. Third, Xu Shen’s ideogram and pictogram categories both cover pictographs, with the latter being used to represent concrete pictures and the former for more abstract

forms. The line between these two categories is therefore somewhat vague, and does not provide instructions on how to classify the characters that fall between these two categories. Finally, the category of compound ideographs is debatable as well, with some scholars (e.g. William Boltz: *The Origin and Early Development of the Chinese Writing System*) even claiming that there is no such thing as compound ideographs: Chinese characters are simple pictographs or phonetic-semantic compounds.¹

In summary, Liu Shu can be used to explain ancient characters and is a good method for making the Chinese writing system appear systemized for beginners. Liu Shu is part of the literary heritage of the Chinese language, and hence, as we will see later, using the *Shuowenjiezi* and Liu Shu approaches in classrooms can help to bring Chinese culture closer to students. However, noting the shortcoming presented above, we must recognize that a comprehensive character teaching curriculum should not be based purely on the Liu Shu method.

The stroke-oriented, habit-forming approach and rote memorization

The stroke-oriented, habit-forming approach originates in traditional calligraphy training. The strategy of this teaching approach is to illustrate strokes, stroke order and stroke directions step by step to help students learn characters. The students reproduce (copy) the characters, following the exact stroke order.

The way the information transfers from the short-term memory to the long-term memory is analogous to the process of forming a habit, whereby a process is continually repeated until a habit is formed and transferred into the long-term memory. However, the pertinent question which must be asked is to what extent it can be stated that language learning is a habit-forming process. It has been said that such a purely behaviourism-based view of learning “ignores the internal-state and structure of a human’s memory and information processing and thus fails to recognize the active engagement of a human’s cognitive capabilities in the process of learning and memorizing.”²

¹ Sampson–Chen 2013: 256.

² Chu 2006: 244.

Chu Chengzhi considers another theoretical problem regarding the stroke-oriented, habit-forming approach, and states: “Chinese characters are most suitably analysed as a three-level hierarchical construction: stroke-component-(whole) character. Several strokes form a component. Certain components constitute a character. The immediate building blocks of characters are not strokes, but components.”³ This explanation emphasizes the importance of character components during the learning process, and brings into question the merit of a stroke oriented approach.

However, it is true that the number, writing order and direction of the strokes are primary elements of characters that students are confronted with when learning to write characters, and therefore a good sense for strokes is necessary to successfully acquire Chinese characters. We believe that this stroke sense can and must be developed at the very beginning stage of language learning. An introduction on stroke types and the basic rules of stroke order can provide students with a strong theoretical foundation with which to further character learning, and acquiring the simplest characters through copying tasks quickly enables students to become sensitive to strokes.

When the stroke-oriented, habit-forming approach is heavily utilized, a threshold level can be reached at which the learning process turns into a rote memorization exercise. The students copy characters one after another without logical thinking or analysis of the components. When comparing the effects of four different teaching methods on beginner Chinese as a foreign language learners in terms of character recognition and usage, Caitríona Osborne, regarding the group that used a rote memorization learning strategy, found that “the ability to use the language was quite limited in this group, suggesting that memorization had occurred without a thorough understanding of the characters.”⁴ Several studies have concluded that only a limited number of characters can be learned through rote memorization. When students can no longer effectively use rote memorization to learn and remember further characters, or wish to memorize a large amount of Chinese characters, they must rely on analogy or rules to relate similar characters.⁵

Following the above-mentioned idea of Chu, that the characters are not directly formed with strokes, we believe that, after obtaining an essential sense

³ Chu 2006: 245.

⁴ Osborne 2016: 221.

⁵ Lam et al. 2001: 121–122.

for strokes while acquiring the basic characters, rote character copying during the language learning process ceases to be useful as students become more advanced. After the initial stage of character acquisition, practicing characters through copying becomes a time-consuming and frustrating endeavour. Once the student is able to automatically and intuitively write strokes in the correct order and direction, focusing on character components instead of strokes becomes much more meaningful. Due to the two problems mentioned above, we believe the stroke-oriented; habit forming approach—although useful at the initial stage of character learning—should not be utilized as the predominant way of teaching Chinese characters.

The holistic method and delayed approach

The pertinent question underlying the evaluation of the holistic method and delayed approach is: when should character teaching begin? The holistic (also known as integrated) teaching method introduces characters at the very beginning stage of language learning. It simultaneously focuses on all four core language skills: reading, writing, speaking and listening. In other words, all aspects of the language are treated as a part of a whole, and there is no distinct or special focus on memorizing characters. The holistic method is widely applied in tertiary level institutions. On the other hand, with the delayed (also known as time lag) approach, characters are not introduced at the very beginning stage of language learning, allowing students to instead focus on developing basic speaking skills first. After the students have developed limited speaking skills, the development of character recognition skills begins. When the student can identify a certain number of characters, they begin the phase in which they learn how to write characters, slowly, step by step, and practice all skills through compound, complex tasks. The presentation of characters can be delayed both in reading and writing exercises or only in writing, and the length of time they are delayed for can also be varied. As we will see later, there are several methods which wholly or partly use the delayed method, e.g. focus on recognition approach and learning through hand- or typewriting.

There is no consensus on the effects of time delayed character teaching. Some scholars see it as a beneficial to the character learning process because this method is similar to how native speakers acquire reading and writing

skills; that is, speaking precedes the use of characters. By using a delay, the learning of characters also results in the review of words which have already been learned, since previously learned oral vocabulary is transcribed with characters. On the other hand, some believe that, since sooner or later the character curriculum must catch up to oral vocabulary, the delayed approach only postpones the character learning process, and does not do so in a way that is beneficial to the student, as it leaves them with a shorter time in which to learn the characters. Another argument against time delayed character teaching is that writing characters might have a positive effect on acquiring oral vocabulary. When character learning is delayed, this potential positive impact is certainly lost.⁶

Focus on recognition

One subtype of the delayed approach is the focus on recognition method. Some researchers suggest that learners should focus on recognition of characters rather than their production. In this way, characters can still be taught in classrooms, but because learning to recognize characters is not as time consuming as acquiring writing skills, students are left with more time to develop speaking and listening skills first.

As Allen states, the importance of character recognition probably exceeds the importance of producing characters, at all levels. “Given the widely acknowledged difficulty in writing Chinese characters, no one finds disparities between reading and writing abilities odd. This is true for the native speaker as well as the student of Chinese or Japanese as a foreign language.”⁷ As he further notes, character recognition ability plays an important role in using electronic media. For typing on a computer or smart phone, one has to be able to recognize and choose from the homophonic characters that appear on the screen side by side. With this technology, character ‘writing’ is left to the computer, but the user still has to be able to accurately recognize characters.

Several Chinese reports note that such a focus on recognition revolution (often mentioned as *duō rèn shǎo xiě* 多认少写) has already started in China. According to Hao Lixia:

⁶ Packard 1990: 167.

⁷ Allen 2008: 244.

The literature and language class curriculum for primary school formulated in 1992 required first and second year students to learn 1150 characters, while the curriculum criteria of 2001 required them to learn to write only 800-1000 characters. The curriculum criteria of 2001 still required students to be able to recognize 1600-1800 of the most commonly used characters, but from these it was only required for them to learn to write 800-1000 characters. This type of requirement clearly reflected the idea that being able to recognize characters does not equate with being able to write characters. It guaranteed that by recognizing a certain number of characters elementary students were able to read somewhat independently by the end of the first year. The current first year textbook of the People's Education Press only requires students to write 100 characters (and recognize 400). The approach of "recognizing many, writing a few" has already become the consensus for teaching writing to primary school students. Reducing the number of characters that the students must learn to write makes it possible for the students to feel less of a heavy burden when tasked with writing new characters. Increased character recognition aims to accelerate reading, while writing fewer characters results in students learning to write effectively and quickly later.⁸

As Zhou Qiong notes, this approach is worth taking into account, especially in children's education. Children at the beginning of their education are at the optimal age for learning, at least in terms of their memorization abilities. Therefore, it is worth considering an approach in which they are made to learn to recognize and read as many characters as they can, and in which expectations and demands regarding character writing are lowered. This lays a good foundation for later stages of the character learning process, where the writing of characters can be more emphasized. While focusing on recognizing the characters, they develop a good sense for strokes, which will help them in writing characters in the long term.⁹

As a subtype of the delayed method, the focus on recognition approach has the same advantages and disadvantages that were mentioned previously.

⁸ Hao 2010: 129.

⁹ Zhou 1999: 18.

However, as we have noted before, the different aims and abilities of students must always be taken into account. Therefore, for students who do not wish to reach high proficiency in Chinese, focus on recognition might be a successful teaching method.

Developing grapho-phonological awareness

Grapho-phonological awareness refers to an understanding of how orthography encodes phonological information. For example, in Spanish “h” is generally not sounded, and, once the learner has mastered this basic pronunciation rule, they can transfer this knowledge to new words and likely pronounce those correctly.

According to Zhu, only about 10% of Chinese characters belong to pictographic or ideographic categories, while 90% are phonetic compounds.¹⁰ These characters have a meaning component and a phonetic component, and the latter gives a clue on the pronunciation. The more accurately the phonetic part encodes the pronunciation of the character, the more regular the character is. There are approximately 200 radicals and 800 phonetics in Chinese (Hoosain, 1991). Radicals and phonetics can be independent characters with their own meaning, or unpronounceable graphic units. In the case of regular phonetic compounds, the phonetic part of the character gives a useful clue for the readers on the pronunciation of the whole character. If the phonetic part is a real character on its own and the reader knows its pronunciation, the reader can derive the pronunciation of the whole character from the sound of its phonetic, or at least suppose that Chinese characters that have the same phonetic may sound similar.¹¹

The majority of researchers do not think that the orthography-phonology correspondence is regular enough to assist reading (e.g., Hoosain, 1991; Wang, 1973). In support of this, researchers assumed that readers directly derive the pronunciation of the character from the sound of its phonetic and highlighted that the predictive accuracy of the pronunciation of the phonetic compound

¹⁰ Zhu 1988: 85.

¹¹ Connie Suk–Han Ho–Peter Bryant 1997: 279.

from its phonetic component is only about 40%.¹² The predictive accuracy is even lower if the tone is also taken into account.

Although Chinese phonetic compounds might seem quite irregular phonologically, other studies have shown that Chinese readers do tend to use the phonetic component when reading Chinese characters (e.g. Chen and Allport 1995, Seidenberg 1985, Zhu 1988, Fang, Horng and Tzeng, 1986). These findings suggest that although the orthography-phonology correspondence is not taught to native Chinese learners, they gradually pick up and apply the phonological regularities at some stage in the process of learning to read Chinese. Some researchers (e.g. Connie Suk – Han Ho – Peter Bryant, 1997, Richard C. Anderson, Wenling Li, Yu-Min Ku, Hua Shu and Ningning Wu, 2003) suggest that these results have important implications, and can be used to guide the formulation of new strategies to help young Chinese learners with poor reading abilities to improve their reading.

The application of the orthography-phonology correspondence for learning Chinese characters has resulted in the creation of computer games for native speakers to assist their learning. A study examining the effect of a game platform for strengthening the association of phonological components in Chinese characters with the pronunciations of the characters was carried out in a Taiwanese elementary school. The results indicated that playing the games helped students to strengthen the association of the phonetic components and the pronunciations of Chinese characters.¹³

It is true that Chinese orthography-phonology relation cannot be compared to the consistency of correspondence that, for instance, Spanish has. However, certain semi-regular characters, phonetic and tone variations might be compared to the English phonetic system, where one letter often represents different sounds, e.g. the “o” letter in *rose* and *women*. Explaining the logical foundation of characters and drawing attention to the partial information about pronunciation available in regular or semi-regular characters might help foreign students to learn characters. Therefore, it would be an interesting research subject to find out how and to what extent orthography-phonology correspondence can be useful to Chinese as a foreign language learners, and to what extent the learning process accelerates once the student has grasped the essence of pronunciation markers.

¹² Zhu 1988: 85.

¹³ Huang et. al. 2012: 5.

Character color-coding

Color is said to be the most powerful visual stimulus experienced by humans. Many studies have shown how color has an important influence on cognitive processing and the human brain. In marketing, colors are used to entice people to read advertisements. In clinical settings, involved interventions using specific wavelengths of electromagnetic radiation in the visible range are used to treat patients with memory-related problems, such as learning disorders, autism and dyslexia. Research on attention and cognition has shown that colors are able to increase humans' attention level. The more attention is focused on a specific stimuli, the more likely the stimuli will be transferred from working memory into a more permanent memory. Thus, colors can help us in memorizing information.¹⁴

Due to the supportive role that colors have in the learning process, a few online Chinese dictionaries and phone applications, as well as a few books (e.g. Dummitt 2008), have already started to apply character color-coding (e.g. Pleco, MDBG). The characters are colored according to their tones; for instance, Pleco uses red, green, blue and purple for first, second, third and fourth tones, and grey for neutral tone.

Caitríona Osborne, when comparing the effects of four different teaching methods on beginner Chinese as a foreign language learners in terms of character recognition and usage, used character color-coding as the main teaching method for one of the four groups. The study showed that color-coding each character depending on the tone of the character aids memorization, maintains the students' attention in class, and increases the learners' focus on and awareness of tones and pronunciation.¹⁵

Although character color-coding is not an individual teaching method, it can be used as an effective supplementary learning tool, as characters do not represent tones, and even the most regular characters' phonetic components usually do not indicate tone. Despite the scientific evidence in support of character color-coding and the benefits that colors play in memorization, character color-coding is not widely utilized in Chinese language books.

¹⁴ Dzulkifli – Mustafar 2013: 3.

¹⁵ Osborne 2016: 223.

Mnemonic strategies and wild association

According to Wang and Thomas, mnemonics are: “Learning strategies that make elements of abstract information more familiar and encourage students to form meaningful association to these familiar elements.”¹⁶ Mnemonic strategies are learning strategies, consisting of either visual images or words that can make the memorization process easier and increase recall of information.

The dual-coding theory of Paivio¹⁷ explains how mnemonic strategies aid in memorization. Based on this theory, human memory consists of two independent, but connected subsystems, one verbal and one visual. The theory claims that pictures are more effective memory aids than words. However, it also suggests that when information is dual coded (verbally and visually), better recall can be expected.

Many studies have examined the effects of dual coding and mnemonics strategies on language learning (e.g. Paradis, 1978, Wang et al. 1992, Mantyla and Nilson, 1983, etc.). Research has shown the positive influence mnemonic strategies have on language learning, and also that self-generated strategies appear to be more useful than supplied mnemonic cues. However, other studies suggest that some students may have difficulty generating effective mnemonic strategies, since creating such cues require appreciable effort and creativity.¹⁸

In the case of Chinese character learning, mnemonic strategies (often called the wild association method) involve creating stories which relate to character components and imagining characters as vivid pictures. For example, the components of ‘house’ and ‘pig’ make the character ‘home’ 家 (jiā). For this character, Gilbert C. Remillard in *Chinese Blockbluster* proposes the following mnemonic: “When at home, in their own House, some people live like Pigs.”¹⁹

Admittedly, wild association is the least scientific or linguistically appropriate approach to character learning, and it is certainly not a pedagogical method. However, as presented above, there is an empirical explanation be-

¹⁶ Wang – Thomas 1996: 104.

¹⁷ Paivio 1986.

¹⁸ Kuo–Hooper 2004: 25.

¹⁹ Remillard 2017: 322.

hind its usage, and it is at least useful for its ability to make students more deliberately analyze characters and ponder their components.

On the unit of instruction: word or character?

The question here is: what should be the basic unit of instruction, word or character? This dilemma is similar to the meaning-centered approach versus character-centered approach debate, which mainly arises in the field of teaching Chinese as a first language. The meaning-centered approach is consistent with the idea of adopting words as the unit of instruction (*cí běnwèi* 词本位), while the character-centered approach is analogous with teaching characters as the basic element of learning (*zì běnwèi* 字本位).

The meaning-centered approach stresses that the purpose of learning to read is communication; therefore, characters (or rather words and expressions) are introduced in the sequence in which they appear in the textbooks' dialogues. This is the mainstream method that textbooks follow. Regarding characters, this approach makes character teaching somewhat distributed, and there is no attempt to introduce together characters or categorize them based on some criteria, for example teaching characters together that share the same graphic components. This means that the expression 你好 (*nǐ hǎo* hello) is taught sooner than, e.g., components of *hǎo* 好: 女 (*nǚ* woman) and 子 (*zǐ* child), because greetings are elementary and fundamental to communication. In other words, these are more meaningful and useful for students in communication.²⁰

In contrast, the character-centered approach teaches Chinese characters by dividing them into groups based on certain linguistic features. The criteria for making such groups can be for example a common radical, or they can be organized and taught sequentially starting with simple characters and progressing to compound characters.²¹ For instance, with the character-centered approach characters that share the same component (e.g. *xìng* 性 nature, *kuài* 快 fast, *qíng* 情 feeling, *pà* 怕 fear, *máng* 忙 busy, *màn* 慢 slow) could be taught in the same group. Similarly, 女 (*nǚ* woman) and 子 (*zǐ* child) would

²⁰ Li et al. 2014: 290.

²¹ Li et al. 2014: 291.

precede 好 (hǎo good), because the latter is the combination of two more simple characters.

Although the majority of the most commonly used textbooks apply the meaning-centered method, there are some proponents which support the character-centered approach. For instance, Zhang Mingming wrote in *Comparison between word-based teaching method and character-based teaching method* (*Cí běnwèi jiàoxuéfǎ hé zì běnwèi jiàoxuéfǎ de bǐjiào* 词本位教学法和字本位教学法的比较, 1992) that making words the basic unit of teaching is suitable for languages like English and French, where there are a limited number of letters representing sounds, but due to the fact that Chinese characters represent both sound and meaning, the word-centered approach is not the only suitable method of teaching Chinese. Wang Junin “*The “Zi-centered” Theory and TCFL (“Ziběnwei” lǐlùn hé duìwài Hànyǔ jiàoxué “字本位” 理论和对外汉语教学*, 2005) calls our attention to classical Chinese where characters represented words, and although the Chinese writing system underwent significant changes, the connection between character and meaning still exists. Another supporter of the character-centered approach, Bai Lesang, selected 400 commonly used characters to illustrate the teaching method that takes characters as the unit of teaching. He explains the strokes’ type and order, character components, structure, origin, meaning, pronunciation, as well as the characters’ ancient forms as they appeared on oracle bones and vessels. Lü Bisong also supports the character-centered method, and claims that strokes should be taught first, followed sequentially by stroke orders, simple characters, more complex characters, and finally words and sentences. He believes that in the writing of further teaching materials, such as textbooks, this question concerning the unit of instruction should be considered, and among the first questions examined.²²

Although there is no consensus among scholars, a comparative study of the two methods has shown the beneficial effect on character recall that the grouped method has in comparison with the distributed approach. This result was shown in a delayed recall test, while no differences were observed in the immediate recall test that was conducted. The authors stated that “[t]his delayed effect may suggest an underlying mechanism of learning and retention-instructional effects might be delayed because they boost long-term memory

²² Yu 2017: 184–185.

more than initial learning.”²³ The study’s overall results suggest that “learning characters presented in a grouped sequence can strengthen the orthographic constituents over a period of two week.”²⁴

Learning through hand- or typewriting

Considering the striking change arising in our writing habits with the extended use of mobile phones and computer keyboards, and the progressive disappearance of traditional handwriting from our everyday life, the question of the contribution of handwriting movements to visual perception of characters is of growing importance. Computers are now widely used both at work and in education. Therefore, in the field of teaching Chinese as a second language, the question arises as to whether Chinese characters should only be taught through typewriting, and whether traditional handwriting should be eliminated from classroom.

Jen and Xu introduced a fairly radical approach to Chinese character teaching by suggesting “abolishing the requirement for writing Chinese characters by hand at the beginning of the Chinese language learning process, and utilizing Chinese word-processing software instead.”²⁵ According to their “penless Chinese character reproduction method”, beginners, using well-designed word-processing software, only need to be able to input on a keyboard the romanized letters representing the sound of a character and to recognize the intended character from among the homophone characters presented. For this, students only need to acquire the correct pronunciation and to master their character recognition skills. Hence, Jen and Xu’s method strengthens speaking and reading. With word-processing software, the students will be able to “write” exactly as much as they can both speak and read. If they make mistakes in “writing” Chinese characters, this reflects problems the students have in either speaking or reading. Jen and Xu claim that with the penless approach writing becomes integrated with two other tasks in Chinese language learning: speaking and reading. During typing, the characters appear side by side on the screen for students to choose, so the penless

²³ Li et al. 2014: 298.

²⁴ Li et al. 2014: 298.

²⁵ Jen and Xu 2000: 4.

method also provides opportunity for the students to become aware of the structural differences and similarities among characters. Furthermore, students will be conscious of homonyms as well.

The approach of Jen and Xu is a subtype of the delayed method, the potential advantages and disadvantages of which have been discussed previously. Several studies not related to the Chinese language strongly suggest that motor knowledge acquired through learning to write contributes to the visual recognition of letters. Finding letters on the keyboard has little motor contribution to this learning process. A study comparing the visual recognition of graphic shapes that had been taught through traditional handwriting or typing found “stronger and longer lasting (several weeks) facilitation in recognizing the orientation of characters that had been written by hand compared to those typed.”²⁶ If the findings of these studies investigating the neural basis of the motor contribution to writing are taken into account, the strategy suggested by Jen and Xu is an incomplete and insufficient Chinese language teaching method. Furthermore, the penless method presupposes that every classroom is equipped with computers, which is usually not the case.

Characters similar in form (xíngsì zì 形似字) and homophonic characters (tóngyīn zì 同音字)

The two types of characters discussed in this section are collectively responsible for the most common mistakes made by foreign learners of Chinese; therefore, it is important to raise special awareness to these pitfalls, even in more advanced classes.

Regarding similar characters (xíngsì zì 形似字) Chen Wuyun writes in *Explanation of Similar Characters in Modern Chinese* (现代汉字形似字初探 *Xiàndài Hànzì Xíngsì zì Chūtàn*): “Similar characters’ forms are similar to each other. There are five criteria that need to be taken into account: form of strokes, number of strokes, components, length [of strokes] and structure of characters. Characters similar in form can be defined from these five aspects.”²⁷

²⁶ Longcamp et al. 2008: 803.

²⁷ Chen 1989: 17.

In connection with characters similar in form, Liang Mingxuan and Zhang Yang²⁸ mention the plus/minus one stroke method (jiā jiǎn fǎ 加减法). They suggest making a list of all the characters that look similar and highlighting and explaining the differences. One stroke added or subtracted can make a big difference in meaning and for beginners it is difficult to remember the difference between such characters. Liang and Zhang also suggest an exercise on the similar characters to reduce confusion, proposing the classroom activity of adding one stroke and making a new character, and then reducing one stroke and making a new character (jiā yī bǐ biàn xīn zì, jiǎn yī bǐ biàn xīn zì “加一笔变新字，减一笔变新字”).

Liu Zhigang, when discussing teaching Chinese as a second language, also calls attention to characters which are similar in form, and gives further examples: 日 (rì sun), 目 (mù eye), 厂 (chǎng factory), 广 (guǎng wide), 木 (mù tree), 禾 (hé grain seeding), 办 (bàn do), 为 (wèi act as), 犬 (quǎn dog), 太 (tài highest), 弋 (yì shoot a retrievable arrow), 戈 (gē dagger-axe), 戔 (jiān small), 凉 (liáng cool), 惊 (jīng surprise), 性 (xìng nature), 姓 (xìng surname), 环 (huán ring), and 坏 (huài bad).²⁹

Regarding homophonic characters (tóngyīn zì 同音字), Su Peicheng states in *Modern Chinese Character Study Essentials* (Xiàndài hànzi xué gāngyào 现代汉字学纲要): “Homophonic characters are similar in pronunciation but are not the same in meaning. Among them, the similar pronunciation can be said to exist in a broad sense or a narrow sense. Characters which are homonymic in narrow sense have the same initial, final and tone, for instance: 但 dàn (but), 蛋 dàn (egg), 淡 dàn (light). Characters which are homonymic in broad sense include characters for which the initial and final are identical, but for which their tone is not the same, for instance: 公 gōng (collective), 供 gōng or gòng (to supply or present offerings), and 拱 gǒng (arch).”³⁰

Wu Zhen gives a detailed explanation³¹ on how he would teach the characters 度 (dù degree) and 渡 (dù to cross a river, sea, etc.), from which we can elucidate how homonymic characters might be effectively managed and taught. 1) As part of a PowerPoint presentation, the teacher shows a short animation about a man who crosses the river in a boat from one side to the other. The animation is intended to help grab the students’ attention. After the

²⁸ Liang–Zhang 2015: 147–148.

²⁹ Liu 2008: 85.

³⁰ Cited in: Wu 2016: 88.

³¹ Wu 2016: 89–90.

animation, the teacher tells the students that the topic of the video was crossing the river (*dù hé* 渡河). 2) On the screen, the teacher shows the pronunciation and the stroke order of the character 渡. Then the teacher writes the character on the blackboard, and asks the students to copy it a few times. 3) The teacher shows and explains the components of the character on the screen and tells the students that this character belongs to the category of picto-phonetic characters. The teacher then explains to the students the meaning of the picto-phonetic character category. 4) The teacher asks the students to make other words with this character, like *dù guò* 渡过, and *dù jiāng* 渡江. 5) The teacher explains the difference between *dù* 渡 and *dù* 度, with the help of the expressions *dù guò* 渡过 and *dù guò* 度过. 6) The students are asked to use these two words to fill in the gaps in the following sentences: A) 我开心地 () 了周末。 B) 我想坐船 () 黄河。 C) 你 () 这条河就能找到他。 D) 她 () 了她一生最好的时光。 7) The teacher makes a conclusion about the difference between the two words: *dù guò* 渡过 is in space while *dù guò* 度过 is in time. 8) After explaining the words *guòdù* 过度 and *guòdù* 过渡, the teacher asks the students to use these two words to fill in the gaps in the following sentences: A) 中国现在处于发展中国家向发达国家 () 时期。 B) 我今天感觉特别累, 应该是学习 () 了。 C) 大学阶段是我们从幼稚 () 到成熟的阶段。 D) () 饮酒会伤害身体。 9) The teacher makes a conclusion about the difference between the two words: *guòdù* 过度: excessive and *guòdù* 过渡: pass from one stage to another. 10) The teacher explains two idioms which include the characters *dù* 度 and *dù* 渡 (*gòngdù nánguān*, *dùguò nánguān* 共度难关, 渡过难关). 11.) Finally, as a group work classroom exercise, the students are asked to make a story using the above mentioned four words and the two idioms. While one group is telling the story, whenever the characters *dù* 度 and *dù* 渡 are mentioned, the other group has to decide which character is used.

Characters similar in form and homophonic characters are always difficult to differentiate for students learning Chinese. Calling the students' attention to these similar characters can help them overcome these difficulties.

Conclusion

Teaching is a field of research where we can never be satisfied with our results, and a field where there is not only a single good answer. What we can do, is to summarize experience and learn from each other. We believe that the teachers' job is to provide students with the tools they need to learn the reading and writing of Chinese characters, and that later on students can decide for themselves how to use the provided methods and the obtained knowledge to achieve their individualized goals. If someone wants to become a translator, he or she will actively use Chinese characters, and for that high proficiency in character writing and reading will be necessary. Others might decide instead to, given their language aspirations, deemphasize Chinese characters, in which case there would be no need to be highly qualified in character writing. With time, students will decide what they want to use the language for.

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