

A Critical Analysis of the Various Ways of Teaching Chinese Characters

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Abstract

This article asks the question: What are the various important ways of teaching learners to read Chinese characters? It will attempt to answer this question by analyzing the most influential approaches proposed and practiced for teaching beginning reading of Chinese characters. The different approaches reveal the debate among educators over the underlying assumption of how Chinese characters should "best" be taught. One side of the debate holds that the recognition of a large number of the characters is a pre-requisite to reading, thus beginning reading instruction should focus centrally on the teaching of the characters (*called character-centered approach*). The other side is concerned that reading for meaning is the purpose of teaching learners to read, and learners naturally learn to recognize the characters while reading. Thus, right from the start, meaningful reading should be emphasized (called *meaning-centered approach*). This review and analysis of the various approaches of teaching Chinese characters. More particularly, the implications of these various approaches will be discussed in the context of teaching Chinese as a foreign language.

1 Introduction

The question of how to improve the teaching of Chinese characters is certainly not new. Probably, it dates back to when people began to use the characters three thousand years ago. But, until now, the debate over the best way to teach the characters has still not yet been settled. The most controversial issues center around the dichotomy between character- and meaning-centered approaches (佟樂泉、張一清, 1999; 施茂枝, 2001; 關之英, 2000; 戴汝潛、郝嘉杰, 1999). Some educators (張田若, 1991; 張志公, 1999; and others) argue that learners should learn a large number of characters before they read and write texts (i.e. learning the *characters* intensively before reading and writing). Other educators (斯霞, 1978, 1982, 2001; 李楠, 1985; and others) hold the view that learners should learn to read and write meaningful texts right from the beginning so that they will pick up the characters naturally from the texts (i.e. learning the characters through *meaningful* reading and writing).

To a large extent, this parallels the controversy over phonics teaching and the whole language approach in learning to read English words (Chall, 1967; Adams, 1994). As Chall (2000) puts it: "Since the 1920s there have been debates on whether teaching the recognition of whole words is better than teaching phonics, whether the alphabet should be taught before or after words are taught, and whether the child's first reading material should be stories dictated by the children, children's literature, or selections in primers and readers." (p. 58) Similar debate has been witnessed in the history of teaching Chinese characters. In this article, various proposals to enhance the teaching of Chinese characters will be discussed in relation to the two opposing views.

It must be pointed out that most of the approaches mentioned in this article have been seriously tried out only in the context of teaching native Chinese-speaking children, who are already able to speak and understand spoken Chinese. This should not be completely identical to the Chinese as a foreign language (CFL) situation, where learners are mostly adult and have learned at least one other language. However, some aspects of what works for native Chinese-speaking children should also be applicable for teaching CFL learners, since the characters to be learned are the same. It is the intent of this article to bring new insight to CFL teaching. In what follows, I will discuss the various approaches to teach Chinese characters categorized under character-centered, meaning-centered and hybrid approaches, in this order.

2 Character-centered approach

2.1 Three, Hundred and Thousand 三百千

The most traditional way to teach Chinese characters is the use of Three Character Scripture 三字經, Hundred Family Names 百家姓 and A Thousand Characters 千字文, or in short Three, Hundred and Thousand 三百千. They had been in use widely all over China for more than a thousand years (張志公, 1999). They certainly reflect the experience that teachers in ancient times gained in how to teach characters effectively to learners. As an example, the first few lines of the oldest Thousand are shown below.

天地玄黄	宇宙洪荒	Dark sky and yellow soil. Spacious is the universe.
日月盈昃	辰宿列張	The sun and moon wax and wane. The sky is full of stars.
寒來暑往	秋收冬藏	Seasons come and go. Harvest in autumn, stock in winter.
雲騰致雨	露結為霜	Cloud rises to become rain. Dew freezes as frost.

Fig. 1: The beginning of Thousand.

Rhythmic text. As seen above, each line is regularly composed of 4 characters, which gives rise to a rhythm in recitation. Moreover, the last characters in the even lines are basically in rhyme, namely, $\tilde{\pi}$ huang1, $\tilde{\pi}$ zhang1, $\tilde{\pi}$ zang4 and π shuang1. All these are helpful to learners in memorizing the text.

High density of characters. As the name Thousand implies, there are altogether a thousand characters with basically no repetition, that is, all of the characters are distinct. This is to condense the occurrence of new characters so that learners can learn more characters without having to memorize a lengthy text (i.e. learning the characters intensively).

Learning the characters first before reading. The rationale behind this traditional approach is to teach intensively a large number of characters at the beginning (張志公, 1999). Learners were required to concentrate their efforts on learning about two thousands characters in the first year. Only after that would the teachers ask them to read classical texts, poetry, legendary tales and others (i.e. learning the characters first before reading 先識字, 後讀書).

Separating learning to read from learning to write. Another important characteristic of this traditional approach is to separate the teaching of reading from that of writing (張志公, 1999). The teachers recognized that the ability to write the characters was developed much slower than that to recognize the characters. Thus, in order not to hinder the learners from learning how to recognize a large number of characters, the teachers often did not require them to precisely write the characters in Three, Hundred and Thousand. Instead, the learners were asked to practice writing characters of fewer strokes, for example, "上大人,丘乙己 [In ancient time, there was a superior man called Confucius]".

Three, Hundred and Thousand are no longer used since early last century. But undeniably the idea of intensive teaching of the characters continues to have remarkable influence today.

2.2 Intensive learning of the characters 集中識字

Beiguan Experiment School 北關實驗學校, where the teachers first teach a large group of characters to the learners and only upon completion do they give the learners readings as a consolidation of the characters (i.e. Intensive Learning of the Characters 集中識字). After that, they move on to another group of characters. The question that the teachers faced is how to organize the characters into groups.

The experience of the teachers is to recognize the importance of analyzing the characters into semantic radicals and phonetic radicals. A series of characters were chosen from a basic character; for example, from 巴 to 疤 'scar' ba1, 把 'handle' ba3, 爸 'father' ba4, 吧 'the sound of "ba" ba1 and 肥 'fat' fei2 (張田若, 1991). From learning other characters, the learners were already familiar with the semantic radicals f 'illness,' \ddagger 'hand,' 父 'father,' \square 'mouth' and β 'meat'. Therefore, the meanings of the list of new characters could be easily figured out. For example, adding a f 'illness' to 巴 results in 疤 'scar' ba1. For the sounds of the characters, even though some of them are not exactly identical, for example, \square ba1 and 爸 ba4, the learners were usually pronounced in the context of words, that is, ba4ba 爸爸 but not ba4ba4. Furthermore, even though the character \mathbb{R}^{-1} , which is pronounced as fei2, is irregular, from the experience of the teachers, learning it as an exception does not cause much problem to the learners. Of particular importance here is the idea of teaching the characters in groups that share the same phonetic radicals radic.

By doing so, the experiment school reports that the children completely mastered 2,500 characters within two years (張田若, 1991, p. 17). Another successful example for implementing this approach is Jingshan School 景山學校, where the children could satisfactorily recognize 2,200-2,500 characters after two years of instruction (劉曼華, 1993)².

2.3 Learning the characters by components 部件識字

Su 蘇靜白 (1988, 1991) proposes a systematic training to organize the characters from the simple to the compound (i.e. the essence of Learning the Characters by Component 部件識字). Su thoroughly analyzed a total of 3,755 characters in such a way as to divide the character 韶 'ancient melody' into 音 'music' and 召 'to invite', and in turn into 立 'to stand,' 日 'sun,' 刀 'knife' and 口 'mouth,' as depicted below.



Fig. 2: The analysis of the character 韶 'ancient melody'.

Teachers are then recommended to teach the characters in the reverse order, that is, going from the simple characters 獨體字 (i.e. 立 and 日), through the simple compound characters 簡單合 體字 (i.e. 音) finally to the complex compound characters 複雜合體字 (i.e. 韶). In this way, learners not only can make use of the familiar characters to learn the unfamiliar ones, but also can revise what has been learned while learning the new. (See also 黃沛榮, 2003, pp. 81–122)

Verbally describing the composition of the characters. Through careful analysis, Su obtained a set of basic components. Every one of the basic characters was then given a name, including those that are not characters by themselves. By doing so, the composition of any compound character

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can be orally described, as a mnemonic device for memorization. For example, the description of the character 掌 'palm' is "尚字頭, 手字底 [尚 'yet' at the top and 手 'hand' at the bottom]." Similarly, the character 握 'to grasp' is described as "提手旁, 屋字邊 [手 'hand' on the left and 屋 'house' on the right]." This is conceived to be a systematic way for the learners to learn the compound characters.

This attempt is undeniably a painstaking linguistic analysis of the characters. However, to the best of my knowledge, no evaluative reports on the implementation of this approach in schools have been published. Beside this, the characters are unavoidably divided into piecemeal, thus making the components devoid of meaning to the characters. For example, the meanings of $\dot{\underline{\Sigma}}$ 'to stand' li4, $\underline{\Box}$ 'sun' ri4, $\underline{\mathcal{D}}$ 'knife' dao1 and $\underline{\Box}$ 'mouth' kou3 have nothing to do with $\dot{\underline{B}}$ 'ancient melody' shao2, and thus learners can only memorize the composition of $\dot{\underline{B}}$ as a collection of unrelated components.

2.4 Learning the characters by rationales 字理識字

A more meaningful way to learn the characters is to take advantage of the historical origin of how the characters were created in ancient times (i.e. Learning the Characters by Rationales 字理 識字). Using this approach, Jia 賈國均 (2001) suggests teaching simple characters jointly with a picture of what the characters were originally created for and how they came to the present forms. An example is shown in Figure 3:



Fig. 3: Pictorial origin of character 鼠 'mouse'

This approach is particularly useful in helping learners to memorize how to write the characters precisely. To illustrate this, note the three vertical hooked strokes at the bottom of the character 鼠 'mouse.' Affected by the first two, learners often erroneously add two dots to the third (See the error in Fig. 4 below). Using the above picture, teachers can explain to the learners that the character represents a mouse sitting up and the first two vertical strokes are the feet of the mouse where the two dots indicate the nails. Thus, obviously the third, which is the tail, has no nail. After having seen the picture, the learners will probably not make the same error again (施茂枝, 2001).



Fig. 4: Error in writing the character 鼠 'mouse'

To evaluate this approach, Jia conducted a test on 192 random-sampled second graders from 4 schools, where this approach has been adopted in the teaching of the characters. After the children had been taught for two years, they were found to correctly recognize 1,663.9 characters (賈國均, 2001, p. 83).

2.5 Wild association 奇特聯想

Instead of making reference to the historical origins of the characters, Li 李衛民 (1994a, 1994b) suggests a more liberated approach to learn the compositions of the characters. His approach called Wild Association 奇特聯想 is to encourage learners to come up with their own explanation, as imaginative as possible, of why the characters are composed in such a way. As an example, a child described the character fa 'happy' yu2 as a (-) man (Δ) with a knife (\mathcal{D}) going to the moon (β) and feeling (ψ) happy. (See also Ann, 1987) However, since this approach deviates too much from the severe historical account, most conservative Chinese linguists do not recommend this at all.

Common to the above approaches is that learning the characters is considered to be of crucial importance. Only upon the mastery of a large number of characters, can learners move on to substantial reading and writing. However, it is often argued that in this way, the development of reading and writing skills has to be delayed unnecessarily in order for teachers to squeeze out the time for learning the characters. As opposed to character-centered approach, meaning-centered approach suggests that learners should read meaningful texts right from the beginning, which is discussed below.

3 Meaning-centered approach

3.1 Extensive learning of the characters 分散識字

The essence of the approach of Extensive Learning of the Characters 分散識字 is that the reason to learn the characters is only to provide the conditions for meaningful reading and writing. Developing reading and writing skills (i.e. to communicate in print) is a natural continuation of their listening and speaking competencies. Otherwise, if learners have to wait until they know every character in a text in order to read it, they will be forced to read something at a maturity level lower than their mental age, especially for children, because only such content can be expressed with the limited characters. Thus, using this approach, teachers should teach meaningful texts right from the start and only teach those characters used in the texts. By reading along, the learners will naturally pick up the characters (i.e. learning the characters while reading the texts 邊讀書, 邊識 字; 斯霞, 1978, 1982, 2001).

Explaining the characters in context. In meaningful texts, the characters can be learned in concrete contexts rather than in a decontextualized manner. For example, the character 讀 'to read' should be taught in a word like 讀書 'to read books,' which should be put into a meaningful sentence such as 老師會讀書 'teachers can read books' (i.e. the characters should not be detached from the words, the words from the sentences, or the sentences from texts 字不離詞, 詞不離句, 句不離文; 斯霞, 1978, 1982). This is helpful in the learning of characters because the meanings of some characters such as $\overline{\mathcal{R}}$, 突 and $\overline{\mathcal{W}}$ are by themselves incomplete and should be learned in meaning-bearing words such as $\overline{\mathcal{R}}$, 'glass,' 突然 'suddenly' and $\overline{\mathcal{W}}$, 'must.' Similarly, it is difficult to make sense of conjunctions such as 其實 'actually,' 甚至 'even,' 因此 'for this reason,' 即使 'even though' and 由於 'because of', except that they are sensibly put to use to illustrate the relation between the meanings of adjacent sentences.

Putting the characters in context can also illustrate to learners the ambiguities of the characters. For instance, some characters have more than one meaning or sound. The same 打 'to hit' actually has different meanings in 打鼓 'to beat the drum,' 打架 'to fight,' 打交道 'to make social connection,' 打毛衣 'to knit' and 打燈籠 'to carry the lantern' (佟樂泉、張一清, 1999, p. 110). Likewise, the sounds of some characters can only be determined in words; for example, the sounds of 强 as in 强大 'big and powerful' *qiang2da4* and 倔強 'stubborn' *jue2jiang4* are different, and so are those of 覺 as in 覺得 'to feel that' *jue2de* and 睡覺 'to sleep' *shui4jiao4* (斯震,

1978, 1982). Put in a context, the specific meaning and sound of these characters that is being referred to can be made explicit.

Stressing the use of the characters. In addition, such an approach places emphasis on illustrating the characters in use. The teachers can use a variety of activities, in which the learners have a chance to use the characters that they have learned. For example, learners can be asked to write notes to teachers, to write a diary to record activities in the class, to read the names of other classmates, to recognize road signs, and so on (斯震, 2001). Fluency in using the characters is important because, in the actual reading of a text, there is no time to fully analyze every one of the characters.

Since the characters are learned in actual use, learners are exposed to texts of a vast diversity of genres, including narrative, poetry, prose, and others. In terms of content, the learners read widely about various topics that can be interesting and relevant to their life. As such, extensive reading not only helps the learners to learn the characters but also facilitates other aspects of their cognitive and language development.

One of the Chinese teachers well-known for using such an approach is Sixia 斯霞. In a trial study, she taught a total of 2,049 characters to children over two years. The children were found to recognize 92.4% and to write in dictation 89.1% of the characters. In the year that follows, she taught a total of 2,218 characters, and the children could recognize 98.7% and write 92.1% of the characters on average (斯霞, 1978, pp. 12–13).

3.2 Using Pinyin to enable early reading 注音識字

Another meaning-centered approach is the proposal of using pinyin to enable early development of character reading and writing (i.e. Using Pinyin to Enable Early Reading 注音識字, 提前 讀寫; 李楠, 1985). The need to acquire numerous characters within a short period of time is considered as the major obstacle to learning Chinese. To overcome this problem, pinyin is introduced to allow learners to read unknown characters annotated with their pronunciations in a text such that extensive reading can possibly start an earlier time. Strictly speaking, the use of pinyin is not an approach for learning characters. But pinyin can be viewed as "crutches", which provide support to facilitate learners' learning of the characters. Once the learners can "walk on their own feet" (i.e. can read the actual characters), they can put aside the pinyin "crutches". Accordingly, the learners begin to read texts completely in pinyin, moving on to texts with both pinyin and characters. After that, only those characters which are difficult are given pinyin, and eventually the texts are learned entirely in characters. In the same way, the learners are allowed to write in such a way as "高高的 de bi2 lia2ng 上架著— fu4 眼鏡 [On top of the high bridge of the nose hangs the glasses]" as a transitional stage before they can manage to write the whole sentence in characters.

On this basis, Li 李楠 implemented the pinyin approach in 3 schools. The children entering school were taught to speak standard Putonghua and to use pinyin in the first few weeks (丁義成、 李楠, 1985). After that, only a limited number of 350 characters were directly taught in detail. The children had to learn other characters all by themselves through extensive reading, where there was no strict requirement on which and how many characters they needed to learn. After two years, the children in the 3 schools were found to correctly recognize on average 2,509, 2,291 and 2,289 characters and to write 1,712, 1,823 and 1,557 characters in dictation (李楠, 1985, pp. 156–157).

3.3 Listening for learning the characters 聽讀識字

Similar to this, the approach of Gu 谷錦屏 (1994, 2000) is to let pre-school learners listen to the recitation of texts everyday as a preparation for later actual learning (i.e. Listening for Learning the Characters 聽讀識字). Each time, the teachers either read the texts or play audiotapes to the pre-schoolers for 20 minutes. After becoming familiar with the texts, the pre-schoolers are given the texts in print, from which they can try to connect the characters to the sounds in their memory.

The purpose is to develop an affective appreciation toward the act of reading before the start of formal learning in primary schools. By doing so, in one kindergarten, 70% to 80% of the pre-schoolers could recognize more than 500 characters upon graduation.

The above proposals are consistent in that there was an emphasis on teaching the characters in meaningful contexts. However, one of the problems of meaning-centered approach is that teachers are not given any clear and explicit guideline to teach the characters. When some teachers are not well trained with linguistic knowledge about the characters (e.g. χ / \Rightarrow , they have no choice but to teach learners to rote-learn the characters. Moreover, since characters sharing certain linguistic features are learned in different places, the learners' understanding of these features cannot be consolidated in an organized manner. Furthermore, it is also commonly reported that the learners were confused by the homophonous characters.³

Character- and meaning-centered approaches may not be necessarily viewed as incompatible. As a matter of fact, those teachers who adopt a character-centered approach do give examples of relevant words and sentences to illustrate the characters in use (i.e. putting the characters in context). Likewise, in a meaning-centered approach, teaching general knowledge of the characters such as the rules of stroke order and the compositions of the characters is also what the teachers commonly do. Thus, the two approaches actually work well together in practice. In the following, proposals trying to reconcile both sides will be described.

4 Hybrid approach

4.1 Texts of a family of characters 字族文

Adopting a hybrid approach, Yan 鄢文俊 and Lu 盧正體(四川省井研縣教育局課題組, 1994; 盧正體, 1995) use meaningful texts in which a family of characters with certain shared features are used (i.e. 字族文 texts of a family of characters). In each piece of text, a "parent" character such as 青 'blue or green' *qing1* was chosen to generate a list of "dependent" characters such as 清 'clear' *qing1*, 晴 'sunny' *qing2*, 蜻 'dragonfly' *qing1*, 睛 'eye' qing1, 情 'feeling' *qing2* and 請 'to invite' *qing3*. All these characters were then put together into a meaningful text. An example is given in Figure 5:

小青蛙	Little frogs
河水清清天氣晴,	Clear is the river and sunny is the sky.
小小青蛙大眼睛。	Little frogs have a pair of big eyes.
保護禾苗吃害蟲,	Protect young plant and eat the injurious insects.
做了不少好事情。	Having done lots of good things.
請你保護小青蛙,	Please protect the little frogs.
它是莊稼好衛兵。	They are the guard of the crops.

Fig. 5: A text of a family of characters.

To teach such a text in the classroom, teachers are recommended to follow the sequence from whole to part, and then back to whole (i.e. whole \rightarrow part \rightarrow whole 整體 \rightarrow 部分 \rightarrow 整體). In other words, learners should briefly grasp the meaning of the whole text before they come to analyze the unknown characters in the text, which should at the end be followed by a review of the whole text again (i.e. text \rightarrow character \rightarrow text $\dot{\chi} \rightarrow \dot{\gamma} \rightarrow \dot{\chi}$). In the same way, the learners are first taught the family of characters as a group; they then look at the features of each individual character, and finally revisit the whole family again to confirm the common features across the characters (i.e. family of characters \rightarrow character \rightarrow family of characters $\dot{\gamma}$ k \rightarrow $\dot{\gamma}$ \dot

As an evaluation of this approach, one class of children in a school was taught a total of 2,498 characters in two years and was then asked to write 300 characters in dictation. The children were found to be able to recognize 2,428 (i.e. 97.1%) and to write 283 of the characters (i.e. 94.3%). The average final score of the class in the school was 98.8 as compared to 70.7 of another control class (四川省井研縣教育局課題組, 1994).

One of the weaknesses of this approach is the limited availability of this kind of specially designed texts (施茂枝, 2001). Different from this, using meaning-centered approach, teachers can choose from a vast variety of texts, including classics of proven value. Moreover, occasionally, the derived rather than the original meanings of some characters have to be used in order to fit into the meaning of the overall text. One example is the ff as in 事情 'matter' above, where the meaning of 'matter' has nothing to do with that of the semantic radical $\dot{\omega}$ 'feeling'. If instead teachers teach the characters independently, as when using character-centered approach, they can talk about the original meaning 'feeling' of the character ff, where the reason why the semantic radical $\dot{\omega}$ is used can clearly be seen.

Another hybrid approach is that of Tse 謝錫金 (2002), who suggests the use of a fair mix of character- and meaning-centered approaches to more effectively teach the characters. On this basis, a set of textbooks was developed with a variety of different texts and activities (謝錫金, 2000).

4.2 Learning the characters with information technology 資訊科技

Closely related to Tse, the Dragonwise Projects 現龍計劃 are chiefly led by Ki 祁永華, Chung 鍾嶺崇 and Lam 林浩昌, in which a variety of online instructional learning objects have been developed for helping learners to recognize the important features in the characters (i.e. Learning the Characters with Information Technology 資訊科技; Ki, et al., 2003; Lam, et al., 2004; Lam, Ki, Chung, & Dragonwise Team, 2004). The design of the learning objects is characterized by drawing on the phenomenographic approach of learning (Ki, et al., 2003; Lam, 2006) and taking into account the learning experience of learners such as how they often make errors. For example, Figure 6 shows learning objects that deal with (a) stroke sequence, (b) stroke relative length, (c) features for identifying characters, (d) organization of a semantic-phonetic character, (e) common component in characters, (f) common phonetic radical in characters, (g) children's song, (h) classic poem, and (i) story reader.



Fig. 6: Learning objects for learning the characters⁴

5 Implications for the teaching of Chinese as a foreign language

5.1 Using more diverse approaches in CFL teaching

Thus far, I have discussed a diverse variety of approaches for teaching Chinese characters. The next question is how we can draw on these ideas for CFL teaching, perhaps taking into account the difference between CFL learners and native children. One problem commonly reported in the lite-rature concerns the strategies that CFL learners use for learning the characters, which were often found to be limited to repetitive copying of the characters and mechanical memorization (印京華, 2003; 江新、趙果, 2001). In comparison to this, native children, even very young ones, are able to use a diverse variety of strategies to analyze characters unknown to them (Lam, 2008). This reflects a severe limitation in the ways that CFL learners have been exposed to how the characters can possibly be learned. Moreover, CFL teachers may have focused only on a very narrow band of approaches for teaching the characters.

Seen in this light, the various ways of teaching the characters discussed earlier will surely be useful. They can shake up the way CFL teachers think. I would like to recommend CFL educators to introduce the various approaches to CFL teachers. In this way, not only do CFL teachers have access to a wide variety of possibilities that exist, they are also less likely to be indoctrinated into only one way of teaching the characters. From such a menu of possibilities, CFL teachers may find a way of thinking that satisfies the specifics of their particular situations. CFL teachers are invited to explore the possibility of putting the various approaches to use in their own teaching of the characters.

There are indeed CFL educators who advocate for applying some of the above approaches. For instance, Cui 崔永華 (1997a, 1997b) suggests using components of the characters to help CFL learners to learn the characters (See also 張旺熹, 1997; 施光亨, 1997), which is congruent with the above-mentioned approach of Learning the Characters by Components. The learners are taught to learn the character 倍 'fold' as 4 'people,' 立 'to stand' and \square 'mouth.' The learners are familiar with this way of orally describing the composition of the characters, which probably matches their previous experience in learning the orthography of their own native languages; for

example, learning to spell the word "cat" as "c," "a" and "t" as for English speaking learners. In a sense, here the learners are taught to "spell" the Chinese characters. In this way, the CFL learners' experience of learning their own language is taken into account in enhancing the teaching of the characters.

Despite this, such use of the components to teach the characters can only encourage learners to rote-learn the components in the characters. It still falls short of making full use of the rationales behind why the characters appear as they are, thus hindering the learners from learning the characters in a more meaningful manner. Rather than this, some other CFL educators (e.g. 李俊紅、李坤 珊, 2006) recommend the use of Learning the Characters by Rationale approach for teaching characters to CFL learners. In fact, one of the reasons why many CFL learners learn Chinese has to do with their fascination with the characters and their delight in cracking the "code" (石定果、萬業馨, 1998; 王碧霞、李寧、種國勝、徐葉, 1997). The learners probably have a strong interest in exploring why the characters are written as they are. Furthermore, CFL learners, as compared to native children, are mostly adults who are cognitively mature enough to understand the intricacy of the historical origins and changes of the characters. This approach of explaining the rationales behind the creation of the characters thus suits the specific curiosity as well as ability of the CFL learners.

Further to this, I would suggest putting a greater emphasis on the use of character-centered approach in CFL teaching. Character-centered approach is deemed a beneficial form of instruction over the long history of teaching characters in China. Current CFL teaching that emphasizes communicative competence is to some extent dominated by the use of meaning-centered approach. In complement to this, character-centered approach should bring not only inspiration to CFL teachers but also efficacy to their teaching. One example is the Intensive Learning of the Characters. After a teacher has taught the character 馬 'horse' *ma3* to learners, the teacher can review the words 馬來西亞 'Malaysia' *ma3lai2xi1ya4*, 碼頭 'pier' *ma3tou2* and 媽媽 'mother' *ma1ma*. The purpose is not only to consolidate the learners' understanding of the common 馬 that is embedded in some of the characters but also to expand their understanding through introducing more new characters with a 馬 such as 罵 'to scold' *ma4*, 螞蟻 'ant' *ma3yi3*, and others. In line with this, CFL material developers can give consideration to designing rhythmic texts that cover a high density of characters (cf. the Three, Hundred and Thousand) for CFL learners to learn clusters of the characters intensively. More discussion on the design of courses that place a stronger emphasis on character-centered approach will be made in due course.

5.2 Debate on the unit of instruction

Before going deeper into the question of effective teaching of the characters to CFL learners at a course design level, I inevitably have to take a look at the larger picture of CFL teaching first. This touches on the controversy in the CFL literature about whether the word or the character should count as the appropriate unit of instruction (張朋朋, 1992a, 1992b), and this controversy bears close similarity to the debate over character- and meaning-centered approaches.

On one side of the controversy, educators adopt the use of the word as the unit of instruction 詞本位. Primary emphasis is paid to the communicative function of the language, stressing the importance of teaching learners to express meanings in Chinese, which is in line with the meaning-centered approach. Under this view, 謝謝 'thank you' and 你好 'how are you' often come as the first two expressions to be taught at the beginning. In other words, learners are first taught those words most relevant and meaningful to them.

For educators on the other side, where the character is adopted as the unit of instruction $\Rightarrow \pm \dot{\Omega}^5$, the characters to be taught are organized from the simple to the compound, according to certain linguistic features of the characters, which is consistent with the character-centered approach. For example, the characters \pm 'girl' and \mp 'son' are taught prior to the character \pm 'good,'

which is composed of the characters \pm and \neq . In this way, when the learners learn a new character, they can make use of what they have already learned.

The underlying assumptions held by the two groups (i.e. taking the word or the character as the unit of instruction) seem to be inherently conflicting. In the above example, those educators in the first group may prefer to teach the character \mathcal{G} right at the beginning when the learners begin with learning the sentence 你 \mathcal{G} . The characters \mathcal{G} and \mathcal{F} , which make up the character \mathcal{G} , can however be left to a later time. Conversely, the character \mathfrak{B} in the word \mathfrak{B} is considered difficult by those educators in the other group and should not be taught until all of the three characters \mathfrak{F} 'speech,' \mathfrak{F} 'body' and \mathfrak{T} 'inch' have been taught. For this reason, the two sides of the controversy look conflicting in nature. However, as similar to the case of the ostensibly opposing character- and meaning-centered approaches, the adoption of the two different units of instruction may not necessarily be viewed as binary opposites and can in fact work in harmony together. The following section discusses one such case at a course design level, which is my recommendation to CFL course developers.

5.3 Separate courses on spoken and written Chinese

As discussed earlier, due to historical reasons, there is now an overemphasis on the adoption of the word as the unit of instruction and the use of meaning-centered approach in teaching, which for now has a wide influence on the way that CFL teachers are teaching the characters to learners (張 朋朋, 2007; 呂必松, 2005, pp. 13–27). For instance, one common approach used in teaching CFL is to teach learners to write the characters for what they have just learned to speak. But as Yin (2006) clearly points out, "teaching students how to write these characters is like teaching students who have no knowledge of the English alphabet how to spell a multi-syllabic English word" (p. xvii).

Indeed, one of the common problems found in CFL learners is that they take no notice of how a word is made up of its characters, i.e. they only memorize the word as a whole. For example, learners might use a word in a wrong situation such as the word 牛奶 'milk' in the sentence "在 火車上, 我看見一個小孩正在吃媽媽的牛奶。[On a train, I saw a child eating the cow milk of his mother]." Obviously, the use of the character 牛 'cow' here is inappropriate (周健, 2007, p. 122). Another similar example is that some CFL learners write a character of a word incorrectly, for example, writing 再見 'see you again' zai4jian4 as 在見 zai4jian4 (陳绂, 1999; 1996). This happens probably because the learners do not realize the meaning of 再 'again' in the expression 'see you again.' The problem is thus a lack of understanding of how the characters in a word are related to the word as a whole. We are thus in need of a kind of instruction that gives prominence to this character-word relation. This means, for instance, after learners have been taught the character 學 'learn', the teachers can teach a list of words such as 學生 'student,' 學習 'to study,' 學校 'school' and others (張朋朋, 1992a). This arrangement of teaching the characters shares the same rationale as the adoption of the character as the unit of instruction as well as the inclination to move CFL teaching towards using character-centered approach.

Considering this, several educators come to the proposal of an increased need to organize the characters to be taught according to certain features of the characters. It is proposed that the teaching of spoken and written Chinese can be conducted separately when CFL learners first study Chinese (張朋朋, 2007; 印京華, 2007; Yin, 2006). In other words, an elementary course on Chinese can be divided into two courses. One of the courses, called Hanyu course 漢語課, focuses on the teaching of everyday conversation in Chinese. This course adopts the use of the word as the unit of instruction and can be taught in primarily a meaning-centered approach, that is, begin with teaching how to say 謝謝 'thank you.' While the focus of the other course, called Hanzi course 漢字課, is on the teaching of the written characters. For this course, the character can be taken as the unit of instruction with the use of a more character-centered approach in teaching, that is, teach

how to write the characters 女 and 子 before the character 好. In this way, the two courses differ in the arrangement of the characters to be taught to CFL learners and use a different way of teaching the characters as deemed appropriate. Yin (2006, pp. xvii–xx) has actually implemented such a proposal at the University of Vermont with a separate course on Chinese characters offered alongside the regular elementary Chinese course. This serves as a case of how the two apparently conflicting units of instruction and the opposing character- and meaning-centered approaches can work well together in CFL teaching.

Character-Centered Approach Meaning-Centered Approach Extensive Learning of the Characters Intensive Learning of the Characters 分散識字 集中識字 Texts of a Family of Characters 字族文 Learning the Characters by Components 部件識字 Using Pinyin to Enable Early Reading 注音識字 Learning the Characters by Rationales 字理識字 Listening for Learning the Characters Wild Association 聽讀識字 奇特聯想 Learning the Characters with Information Technology 資訊科技

Fig. 7: The various ways of teaching Chinese characters

6 Conclusion

This article discusses the various endeavors to enhance the teaching of Chinese characters (see Figure 7 below for a summary). To conclude, I would like to say that there is no one-size-fit-all solution to CFL teaching. Teachers have to be well equipped with the wide variety of possibilities that exist in how to teach the characters. Only in this way can the teachers make appropriate judgments based on the specific requirements of their own situations. For instance, to raise the aspiration of CFL beginners to learn Chinese, teachers should adopt a meaning-centered approach that emphasizes the communicative function of the language so that the learners can see what they can potentially achieve if they can read the characters. But as the learners pick up more of the characters, they often become confused about those characters that are similar either in sound or in form. In such cases, the teachers should adopt a character-centered approach that explicitly teaches the learners to differentiate the situations in which each of the characters should be used. The purpose of this article is to expose CFL teachers to the wide range of possibilities so that they can reason about their own ways of teaching Chinese characters, specifically for their own situation. Then, as Kumaravadivelu (2001) rightly points out, the pursuit of professional development among foreign language teachers should "involve keeping one's eyes, ears, and mind open in the classroom to see what works and what does not, with what group(s) of learners, and for what reason, and assessing what changes are necessary to make instruction achieve its desired goals" (p. 550).

Notes

¹ Actually the character 肥 'fat' fei2 is a Logical-aggregate character 會意字, where the β signifies 'meat' and the 巴 signifies 'a person down on his knees.'.

 $^{^{2}}$ Most of the figures quoted in this paper, similar to this one, must be taken with caution. The research reported lacks rigor with no mention of a sufficiently clear definition of the research methods and programs under study. Thus, the evaluation of the implementation of the approaches should be looked at in a critical way. Despite this, the experience learned from these various attempts to enhance the teaching of the characters is valuable.

³ Other researchers argue that the frequent occurrences of erroneous homophonous characters are simply the result of the fact that the children have learned a large amount of characters in junior grade levels, thus only revealing this inevitable problem at an earlier time (孫曼均, 1999).

⁴ All these learning objects are downloadable from the Dragonwise Project 現龍計劃 website at http://www.dragonwise.hku.hk.

⁵ Zhang 張德鑫 (2006) suggests the use of the term "character-centered 字中心" in place of "character as the unit of instruction 字本位", as the latter implies that the characters must be taught one after another, while the former is more fuzzy and diversity in teaching approaches is appreciated.

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