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RESEARCH ON THE ATTITUDE OF OVERSEAS STUDENTS (FROM NON-SINOGRAPHIC COUNTRIES) TOWARDS CHINESE CHARACTERS

Zhang Yumei
PhD (Chinese Philology), Professor
School of Humanities, Shanghai Jiaotong University
800 Dongchuan Road, Minhang District, Shanghai
zhangyumei2007@sjtu.edu.cn

A. Brovko
MPhil (Chinese Philology), Current Student
School of Humanities, Shanghai Jiaotong University
800 Dongchuan Road, Minhang District, Shanghai
brovko.anastasiya.s@gmail.com

In the form of a questionnaire, investigate and study the attitudes and learning situation of learners in non-Sinographic cultural circles: 92 respondents from 23 countries, majority coming from Ukraine. The questionnaire data shows that the survey respondents generally consider learning Chinese is important. However, their problems mainly focus on wasting the resources of Chinese characters such as radicals, components, character origins and other resources for associative memory. Therefore, methods and other suggestions were made in order to show how to fully use the potential of Chinese language, especially the characters and what is hidden in their structure. The paper also found out that learning characters by the means of pinyin, emphasis on vocabulary learning and the habit of ignoring Chinese character reading and explaining prove to hinder language learning progress. This work provides explanation of anxiety related to Chinese characters and the need for Chinese character segmentation, the mentality of "illiterate" who only learns Chinese but not Chinese characters. It is revealed that good motivation without knowing the right way to learn can lead to troubles while mastering Chinese. In other words, due to peculiarities of the language, teaching and learning of Chinese language need scrutinizing. Thus, the final part of the paper provides coping strategies: recommendations on how to use associations related to the origins of Chinese characters, radical and phonetic associations, comprehensive associations and other methods to learn and memorize Chinese characters. The results of the analysis are considered and used to advise on the compilation of Ukrainian picture dictionaries or multilingual Chinese dictionaries. Paper provides ideas to revise the prefixes and entries of Chinese characters in the dictionaries mentioned above.

Keywords: non-Sinographic cultural circles; Chinese character attitude; ideographic characters; etymological association; Ukrainian Chinese character learners.

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ДОСЛІДЖЕННЯ СТАВЛЕННЯ СТУДЕНТІВ (З НЕСІНОГРАФІЧНИХ КУЛЬТУРНИХ КІЛ) ДО КИТАЙСЬКИХ ІЄРОГЛІФІВ

Чжан Юймей, А. С. Бровко

У формі опитування були досліджені і вивчені ставлення до китайських ієрогліфів та ситуація навчання студентів у несінографічних культурних колах (92 респонденти з 23 країн, більшість з яких – з України). Дані анкети показують, що респонденти загалом вважають вивчення китайської мови важливим. Однак проблеми в переважно зосереджені на втраті ресурсів самих китайських ієрогліфів, таких як радикали, компоненти, походження ієрогліфів та інші ресурси для асоціативної пам'яті. Тому були запропоновані методи та інші пропозиції, щоб показати, як повною мірою використати потенціал китайської мови, особливо ієрогліфів, та те, що приховано в їхній структурі. Пильна увага приділяється ролі стародавніх китайських ієрогліфів та способам розкриття знань, прихованих за їх компонентами. У роботі також було встановлено, що вивчення китайських ієрогліфів за допомогою системи піньїнь, акцент на вивченні слів та звичка ігнорувати те, з яких ієрогліфів складаються слова, а саме детальне значення кожного з компонентів слова, - усе це перешкоджає навчанню. Іншими словами, через особливості мови питання викладання та вивчення китайської мови потребує додаткового вивчення. Проаналізовано тривогу, пов'язану з китайськими ієрогліфами, та необхідність сегментації китайських ієрогліфів, менталітет «неписьменних», які вивчають лише китайську мову, а не китайські ієрогліфи. Хороша мотивація за незнання правильного способу навчання може призвести до неприємностей та неправильного розуміння мови. Таким чином, заключна частина статті містить стратегії подолання вищезгаданих проблем. Рекомендується використовувати асоціації, пов'язані з походженням китайських ієрогліфів, радикалами та фонетиками, комплексні асоціації та інші методи для вивчення та запам'ятовування китайських ієрогліфів. Усі методи супроводжуються детальними прикладами. Результати аналізу були розглянуті та використані для надання порад щодо складання українських словників із зображеннями чи багатомовних китайських словників. Під час дослідження використовувалися сучасні китайсько-українські та багатомовні словники. У статті подано ідеї щодо перегляду префіксів та записів китайських ієрогліфів у словниках, згаданих вище.

Ключові слова: несінографічні культурні кола, ставлення до китайських ієрогліфів, ідеограми, етимологічна асоціація, студенти з України, які вивчають китайську мову.

With the accelerating process of globalization and integration, more and more people begin to learn foreign languages. Pierce believes that the process of second language acquisition is the process of investment. Learners are fighters, fighting to become the leaders of the topic. [Pierce 1995, 17] They are also investors who study hard in order to get good social returns. Since China's international reputation has been greatly improved since the COVID-19, more two language learners have turned their attention to the field of Chinese characters. This paper takes the questionnaire survey as the starting point, focuses on the front-line practice of Chinese international education, investigates and studies the Chinese character attitude and learning

situation of Chinese learners in non-Sinographic cultural circles, and puts forward countermeasures and suggestions.¹

1. Design of questionnaire: attitude towards Chinese characters

The title of the questionnaire is "Research on Chinese character learners' attitude towards Chinese characters (non-Sinographic circle)". The design purpose is to understand the attitudes and methods of Chinese character learners in non-Sinographic culture circles. The questionnaire adopts the bilingual interface of Chinese and English. There are three forms: single choice questions, scale questions and blank filling questions. There are 36 questions in total, of which the last three blank filling questions are subjective and the first 33 questions are objective. The questionnaire adopts the form of Likert five-point scale in multiple-choice questions (1 = totally disagree, 2 = disagree, 3 = partially agree, 4 = agree, 5 = absolutely agree). The questionnaire is distributed and shared with the help of the questionnaire application "Wenjuan Xing" to collect statistical data.

The content of the questionnaire is divided into four parts. The first part (questions 1-8) aims to understand the basic situation of the respondents, including nationality, age, highest educational background, major, when the respondents started learning Chinese, how long they have learnt Chinese characters, Chinese proficiency test level, whether the respondents often see or deal with Chinese characters in their own country, etc.

The second part (questions 9–21) focuses on Chinese characters, including the respondents' motivation to learn Chinese characters, their understanding of Chinese characters' radicals and their meaning, Chinese characters' font, characters with similar writing, Chinese characters' phonetic side, Chinese characters' origin, Chinese characters' nature, and the relationship between Chinese characters and syllable phonemes.

The third part (questions 22–28) mainly focuses on Chinese "words" and examines their relationship with Chinese character learning, including learners' understanding of the ideographic relationship of Chinese characters and words, the reading psychology of Chinese characters without word segmentation and hyphenation, etc.

The fourth part (questions 29–36) mainly investigates the methods of learning and memorizing Chinese characters, issues and problems, and the understanding of the relationship between oral language and Chinese character acquisition, etc.

2. Basic information of respondents: Chinese character learners in non-Sinographic culture circle

The first part of the questionnaire shows that there are 92 Chinese learners from non-Sinographic culture circle countries who participated in finishing the questionnaire. Their nationalities are: Ukraine, France, the United States, Bulgaria, Croatia, the United Kingdom, Georgia, Armenia, Nigeria, Indonesia, Pakistan, Malaysia, Russia, Azerbaijan, Kazakhstan Mexico, Thailand, Norway, Austria, Switzerland, El Salvador, Sweden, Madagascar, etc.

¹The questionnaire was distributed on June 16, 2020 and collected on August 11, 2020. The number of samples investigated is approximately 100. 100 questionnaires had been distributed, 95 received, and 92 valid questionnaires are actually retained except for 3 belonging to Chinese character cultural circles. This paper mainly studies the first 33 objective questions. The form is anonymous, facilitating respondents to answer truthfully and with willingness. Generally speaking, the survey data has good reliability and validity.

Question	Distribution	Amount	(%)
What is your highest level	High school	26	28.26%
of education completed?	Bachelor's degree	41	44.57%
	Master's degree	20	21.74%
	PhD	5	5.43%
What is your major?	Humanities	71	77.17%
	Sciences	14	15.22%
	Engineering	7	7.61%
How old are you?	18–22	51	55.43%
	23–27	29	31.52%
	Other	12	13.05%
At what age did you start	Less than 18	57	61.96%
to learn Chinese?	18–22	23	25%
	23–27	6	6.52%
	Other	6	6.52%
How long have you	More than 6 years	12	13.04%
been studying Chinese	6 years	16	17.4%
characters?	5 years	13	14.13%
	4 years	13	14.13%
	3 years	13	14.13%
	2 years	6	6.52%
	1 year	13	14.13%
	Less than 1 year	5	5.43%
What is your HSK level?	HSK2	3	3.26%
·	HSK3	11	11.96%
	HSK4	15	16.3%
	HSK5	38	41.3%
	HSK6	15	16.3%
	Other	10	10.87%
Do you often see Chinese	Not often	69	75%
characters in your country?	Sometimes	13	14.13%
	Often	10	10.87%

Figure 1. Basic information about respondents

The age of the respondents is mainly young, within 18–27 years old, accounting for 86.95%, of which the largest number is between 18–22 years old, accounting for 55.43%; The respondents as a whole have a good educational background, all of whom have a high school degree or above. The largest number are undergraduates, accounting for 44.57%, many master degree students, accounting for 21.74%, and a small number of doctoral students. Age and formal school education are closely related to foreign language learning ability. Young people who have received systematic school training have strong learning ability. The respondents of the questionnaire have learning advantages in age, educational background and time of starting learning Chinese. In addition, they have a good foreign language learning ability.

More than 86% of the respondents started learning Chinese earlier, of which 61.96% started before the age of 18, and 25% started from the age of 18–22. More than 70% of the respondents studied Chinese characters for 3 years or more,

accounting for 72.83%. HSK score information shows that more than 85% of the respondents are at the intermediate level of level 3-6, and 41.3% reached level 5. The respondents generally do not often see or deal with Chinese characters or only sometimes come in contact with Chinese characters in their own country, accounting for nearly 90%.

In other words, the 92 respondents in the non-Sinographic culture circle have significant similarities: they are in a language environment where they do not often contact Chinese characters, but because they began to learn Chinese at a school-age, they finally achieved intermediate or even better Chinese proficiency test results through three years of efforts. They have a direct and perceptual understanding of the characteristics of Chinese characters.

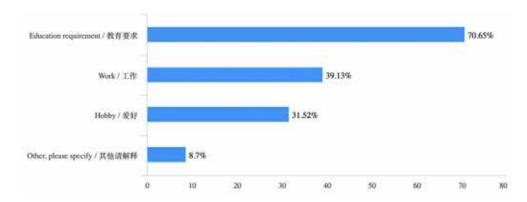


Chart 2. Motivation of Chinese character learning of respondents

As shown in figure (2), the multiple-choice question "Why do you learn Chinese characters?" is a survey of Chinese character learning motivation. 70.65% of the respondents studied Chinese because of educational requirements, 39.13% because of work, and 31.51% of scholars because of hobbies. Some of them do not have a single motivation, but both work and two or three other learning motivations. Psychological research shows that learning motivation is an important factor affecting the process and effect of foreign language learning.

Learning motivation can be divided into external motivation and internal motivation. Educational and work needs belong to external learning motivation, while interests and hobbies belong to learners' personal internal learning motivation. Generally speaking, external motives, especially those for education and work, are more likely to make people succeed, because they are linked to obtaining education and job performance. [Edward Burkley 2020, 60–62] Foreign language learners with internal motivation are more likely to master the language, which is determined by their sincere interest in learning. Therefore, on the whole, most of the respondents have strong learning motivation, whether out of educational needs, work needs, personal learning interest, or non-single motivation. If properly guided, they are easier to achieve ideal learning results and academic achievements.

3. Classification and analysis of survey data: main problems

The second and third parts of the questionnaire, including questions 10–12, 15, 17–28 and 29–33, mainly reflect the respondents' understanding of Chinese character radicals, components, phonetic radicals, word origins, Chinese character properties,

Chinese syllable phonemes and characters with similar writing, problems in learning Chinese words and characters starting from Pinyin, anxiety related to Chinese characters, word segmentation and hyphenation between Chinese characters. The following is the classification analysis:

3.1 Radicals, components, phonetic elements, Chinese character origins

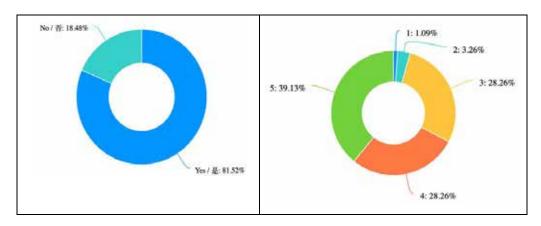


Chart 3. Radicals, components, Chinese character origins

On the left of the above chart (3) is a single choice question 10 "Do you know the radicals of Chinese characters?" 81.52% of the respondents said they knew the radicals of Chinese characters, and less than one fifth said they did not know the radicals. On the right is question 11 "Do you know the radicals of Chinese characters and their meaning, for example 1, 一, 木?". The average score is 4.05. Only a very small number of people "completely" do not know the radicals and their meaning. It shows that even non-Sinographic cultural circle learners pay close attention to this aspect of Chinese characters. The next scale question is question 17 "Do you try to guess the meaning of an unknown Chinese character by its components?". The average score is 3.91. Only a few people do not guess the meaning of the word with the radical. We should strengthen the teaching of the radicals, because it helps to improve the efficiency of Chinese characters learning.

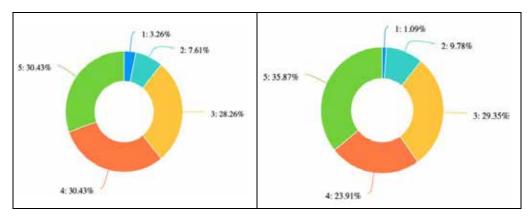


Figure 4. Phonetic element and Chinese character origins

On the left of chart (4) there is a question 12 "Do you know phonetic elements in Chinese characters?". The average score is 3.8. It means that only a few people don't know the phonetic elements. Chinese phonetic element is helpful to Chinese character learning, but how to deepen the knowledge of phonetic side needs to be further discussed. On the right of the chart there is question 15 "Do you think it is important to know the idea behind every Chinese character?". The average score is 3.83. 35.87% of the respondents thought it was important to know the origin of Chinese characters, and a considerable number of respondents (29.35% + 23.91%) had a "quite important" attitude. It shows that morphological and semantic characteristics of Chinese characters and its origins plays a significant role in the teaching process, thus improves the learning results.

Summary

The survey results show that as the survey studies non-Sinographic culture circle, the basic concepts of Chinese characters such as radical, components, phonetic radicals and word origin have been deeply rooted in the hearts learners. When learning, they will guess the meaning of the word according to radicals, components and word origins. They may know the existence of sound radical, but are often confused by its role. It can be seen that improving the efficiency of Chinese character learning should focus on these basic concepts of Chinese character learning.

3.2 The nature of Chinese characters, syllable phoneme, shape and meaning of Chinese characters

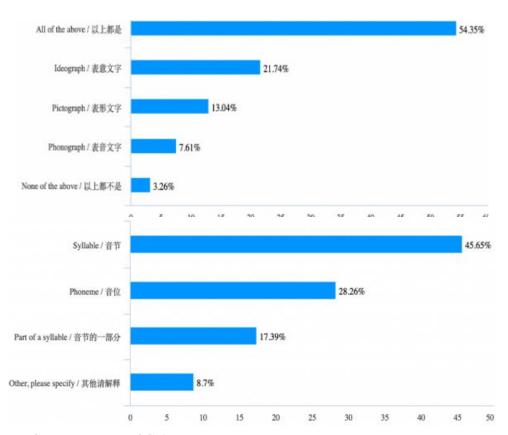


Chart 5. Nature of Chinese characters, characters and syllables, phonemes

On the left of chart (5) is the single choice question 18 "Do you think Chinese character is: phonograph, ideograph, pictograph, all of the above". The setting of this question is not to intervene in the academic discussion on the nature of Chinese characters, nor to mind which is right or wrong, but to observe the respondents' feelings on the shape, sound, meaning and relationship of Chinese characters. The result reflected in the answer sheet is that more than half of the people chose the answer of "all the above", more than one fifth chose "ideographic" characters, and 13.04% chose "pictograph", which shows that the prominent character characteristics of Chinese characters have a profound impression on the vast majority of people. On the right of chart (5) is a single choice question 19 "Chinese character represents... Please choose the most appropriate answer..." For linguistic terms such as "syllable" and "phoneme", ordinary Chinese learners may not know their meaning accurately. Moreover, even Chinese people do not know their meaning if they are not majoring in linguistics. The survey results are quite intriguing. 45.65% of people choose "syllable", which is consistent with the characteristics of Chinese characters as monosyllabic morphemes, that is, they have a better understanding of the phonetic characteristics of Chinese characters.

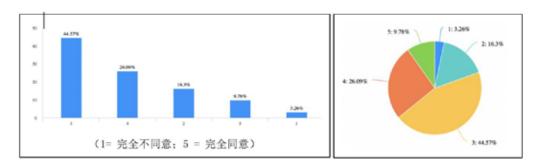


Chart 6. Chinese characters with similar writing

On the left of the chart (6) is the question 20 "Do you often misread characters that have similar writing?". The average score is 3.22. Only 9.78% of those who chose "fully agree", indicate that few people ignore the similarity of Chinese characters, and most learners know how to intentionally recognize words with similar characters. However, due to the similar shapes, the correct and error rate is about half (3:44.57%). On the right of the chart (6) is question 21 "亨享 堂党 酒 西 Do you think these Chinese characters have similar meanings?". The average score is 2.1. 44.57% of the respondents "totally disagree" that they are similar. The high proportion of 26.09% and 16.3% shows that the respondents generally have a more rational understanding of similar characters. They know that the difference of a stroke may represent the difference of word meaning, but it also shows that the similarity of characters causes great trouble for them in identifying word meaning.

Summary

The vast majority of respondents are deeply impressed by the prominent morphological and semantic characteristics of Chinese characters. Although they may not know the meaning of linguistic terms such as "syllable" and "phoneme" accurately in theory, they have a good understanding of the linguistic characteristics, for example, that Chinese characters are monosyllabic morphemes. From the perspective

of specific word examples, they also consciously recognize and distinguish similar words. Therefore, how to get better guidance, including how to distinguish the shape of similar words, is particularly important in the follow-up study.

3.3 Pinyin, Chinese words, form and shape of Chinese characters

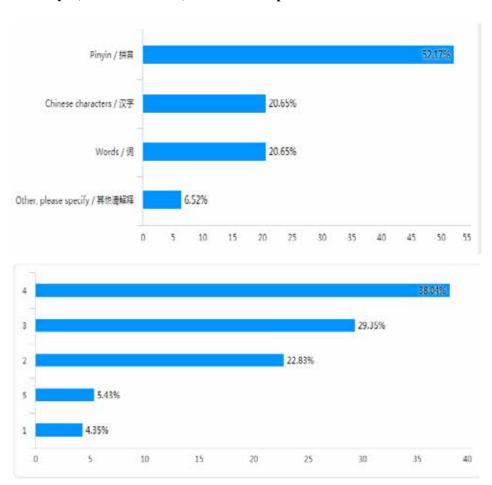


Chart 7. Pinyin, Chinese words and Chinese characters

On the left of the chart (7) is a single choice question 22 "You started to learn Chinese from____". More than half of the candidates began to learn Chinese characters with the help of pinyin. For beginners of Chinese, especially for beginners with alphabetic mother tongues, it is easier to learn Chinese with the help of pinyin. However, pinyin can also become an obstacle, which will make learners rely on this system, and later affect the reading of Chinese characters and the memorization of Chinese characters. On the right of the chart (7) is a question 23 "When learning new words do you know the meaning of all the characters in them?". The average answer to this question is 3.15. Among the respondents, the two extremes of "completely agree" and "completely disagree" are relatively small, and the middle three options account for the highest proportion, indicating that the respondents generally have a vague grasp of the element meaning of Chinese words. In other words, students lack of Chinese characters literacy and word meaning accuracy.

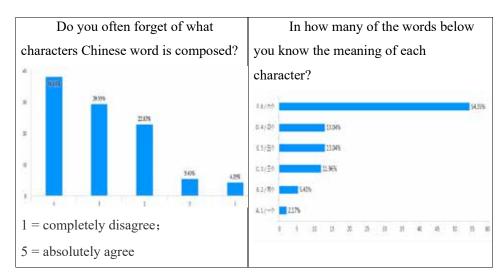


Chart 8. Pinyin, Chinese words and Chinese characters

On the left of the chart (8) is a question 24 "Do you often forget of what characters Chinese word is composed?". The average score is 3.07. In terms of whether respondents fully agree that "they often forget of which Chinese characters Chinese words are composed", the number of people at both extremes is small, indicating that most people "often" forget Chinese characters, the constituent unit of Chinese words. That is, learners lack accurate reading or memorization techniques.

On the right of the chart (8), the 6 words listed in question 25 are relatively simple and belong to primary HSK vocabulary. For the respondents who have reached HSK level 3-6, it is an easy question, so more than half (54.35%) of them showed that they know the meaning of single words by choosing six words, while for the remaining 42, they do not know at least one Chinese character, which also proves the existence of the problem in question 24 above. At the same time, it also shows that on the basis of accurately mastering the shape, sound and meaning of Chinese characters, learners can fully grasp the Chinese words composed of Chinese characters.

3.4 Anxiety related to Chinese characters, word segmentation and the importance of Chinese characters

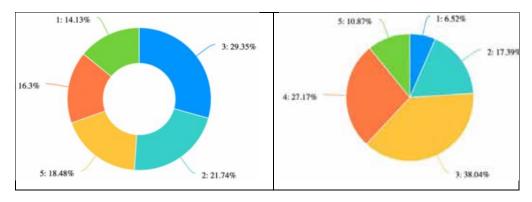


Chart 9. Anxiety related to Chinese characters, Chinese words segmentation

On the left of the chart (9) is a question 26 "Do you feel anxious when looking at pages with many Chinese characters?". The average score is 3.07. Looking at pages with Chinese characters and not feeling anxious is the best learning psychology. However, the problem is that this accounts for the least among the answers, only 14.13%, indicating that more people have varying degrees of anxiety. Anxiety originates from the desire to understand and learn. Therefore, the way to solve the problem is to design better learning materials or auxiliary tools for non-Sinographic cultural circle learners, resolve their psychological anxiety, or guide their anxiety to active effective learning. On the right of the chart (9) is question 27 "When looking at Chinese text for the first time, can you clearly distinguish each word?". The average score is 3.17, indicating that most people are usually confused about Chinese words. Only 10.87% of the people were completely clear, indicating that the unclear writing boundaries of Chinese words is a great trouble and obstacle in reading, which is also an important reason for anxiety related to Chinese characters.

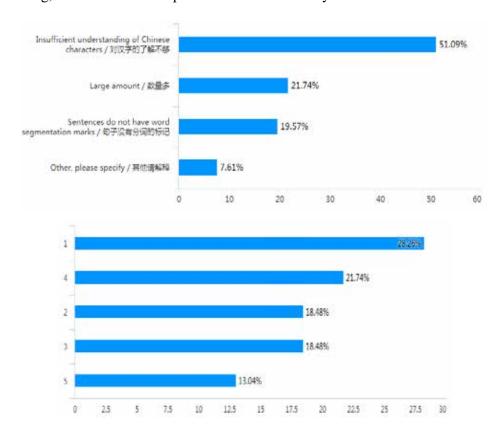


Chart 10. Chinese character anxiety and Chinese text

On the left of the chart (10) is question 28 "Do you wish Chinese texts had spaces between words?". The average score is 2.73. 28.26% of respondents completely disagree with the addition of word segmentation spaces in Chinese texts, which is not a small amount and exceeds the expectations of the research. Still more people tend to agree with the idea, indicating that there is still a great demand for the Chinese character writing format of word segmentation and hyphenation

among intermediate level learners. On the right of the chart (10) is a single choice question 30 "In your opinion, what is the biggest difficulty when reading Chinese characters?". More than half of the people choose "not enough understanding of Chinese characters", which shows that it is necessary to strengthen the teaching of Chinese characters and Chinese character culture. One in five people choose "a large number of Chinese characters", and nearly one in five (19.57%) choose "sentences without word segmentation marks", which shows that the objective fact of a large number of Chinese characters needs to find better learning strategies. Technically, improving the writing form in textbooks and word segmentation marks will help learners improve their reading efficiency.

Summary:

From the perspective of learning psychology, in view of the characteristics of non-Sinographic cultural circle learners, especially their Chinese character anxiety, it is an expedient measure to provide reading materials for Chinese character word segmentation and continuous writing. However, this auxiliary tool is similar to pinyin. With the improvement of Chinese language level, word segmentation becomes irrelevant. The respondents generally do not know enough about Chinese characters, which should be taken into consideration, indicating that it is necessary to strengthen the study of Chinese characters.

3.5 Conclusion

The problems such as the first type related to "radicals" and the second type connected to the "nature of Chinese characters" analyzed above positively show that the learners are deeply influenced by the prominent nature of the shape and meaning of Chinese characters, and they have a good grasp of the language characteristics, for example, that Chinese characters are monosyllabic morphemes. The third type of problems such as "starting learning the language with pinyin" and the fourth type of "Chinese character anxiety" analyzed above just illustrate the inertia of linear character thinking such as learning from pinyin and the need of word segmentation as well as continuous writing from the opposite side. They also point to the lack of cognition and memory of the characteristics of Chinese characters. Both positive and negative aspects point to the same substantive crux – the focus of Chinese characters with the unity of form, sound and meaning.

Another question in the questionnaire is particularly noteworthy. Single choice question 31 "Which of the sentences below describes you best?". Up to 81.52% of the respondents chose "I have been learning new Chinese characters and know that learning Chinese characters is an inseparable part of mastering Chinese", which shows that they know the importance of Chinese characters. Such a positive cognitive attitude towards Chinese characters is conducive to guiding students to learn more Chinese characters. At the same time, 26% chose "I can communicate orally in Chinese without learning Chinese characters", and 8.7% chose "I know some basic Chinese characters and do not need further learning. I can communicate orally in Chinese easily", indicating that the "illiterate" psychology of learning Chinese characters is also common, and this "illiterate" psychology is important. For the reason that Chinese characters are closely related to learning Chinese, how can we really learn the language well without learning Chinese characters? There have been two official policies to eliminate illiteracy in Chinese history. Their theoretical basis will not be discussed here.

Based on the information above, it can be concluded that for Chinese character learners in non-Sinographic culture circle, Chinese characters are the key and focus problem for them to learn Chinese well. Their positive cognitive attitude towards Chinese characters is good, and this problem can be solved with the help of ideographic characteristics of Chinese characters.

4. Coping strategies: Taking Chinese learners from Ukraine as an example

The largest number of respondents in this survey are Ukrainian students, 59 of the 92 respondents, accounting for 64.13%.2 This section takes this typical Ukrainian student group with the characteristics of non-Sinographic cultural circle as the object of further analysis, continues to deeply explore the problems and seek countermeasures. 59 Ukrainian students are from Kiev National University and Kiev language and Literature University, majoring in Chinese language and literature. Among them, there are 28 undergraduates, 17 high school students and 14 master students. Generally speaking, these Ukrainian students have a good language foundation and have a certain understanding of the characteristics of linguistics and Chinese. But as shown in question 22, most of them start learning Chinese from pinyin, which seems to be the same as Chinese primary school students. However, through the interview, we know that in fact, their methods of learning pinyin are quite different from those of the Chinese. Usually, Ukrainian students like to start reading pinyin directly. In other words, they directly recognize Chinese syllables as a whole and do not learn how to read initials and vowels separately. The main reason is that they unconsciously go into a misunderstanding: they have learned English, and they are not unfamiliar with pinyin letters, so they read Chinese pinyin directly frequently according to the pronunciation of English. This is clearly wrong.

The first level of coping methods: foreign students' pinyin learning, especially in their own countries. Learners must start from initials and finals, and then enter the whole syllable spelling. For learners in China³, teachers should pay attention in reminding students to overcome the wrong way of directly spelling Chinese pinyin as in English. As long as the pinyin problem is realized, it is not difficult to solve.

"When learning Chinese words, do you know the meaning of each character in the word?". The average score of the question 23 is 3.17, which shows the hesitation of the respondents when giving the answer. After the actual interview, it can be found that Ukrainian students often directly memorize the words in Chinese. Moreover, Chinese textbooks written in Ukraine also have texts, listing new words, followed by grammar or culture related information. Thus, the students look at and remember the new word list directly. As a result, the student did learn many new words, but he did not necessarily know which Chinese characters those new words were composed of. For example, there is the word "sun" in the new word list, and the students learned the word. That's all. They don't care that "sun" is composed of two characters, and they don't know that both of them have their own word meanings and complete form, sound and meaning respectively. "Do you often forget which Chinese characters Chinese words are composed of?". The question 24 is similar to question 23, with an

² The distribution of this survey was mainly during the period of COVID-19. Most of the students were not in school. Therefore, the questionnaire was spread through the Internet circle of friends. The prominent nationality of the respondents also made the study more distinctive.

³ Learners in China generally do not have this problem. Chinese universities or training institutions generally have teaching stages of initials and finals.

average score of 3.05, showing the same confusion when students were providing an answer. It is an undeniable fact that with the deepening of learning, students will often encounter problems such as Chinese homonyms, polysemy of one word, polysyllabic of one-word, similar characters and so on. These are the characteristics of Chinese characters that cause difficulties in the process of a second language acquisition. If learners do not focus on the crux and core of Chinese characters, the existing problems may be complicated to fundamentally solve.

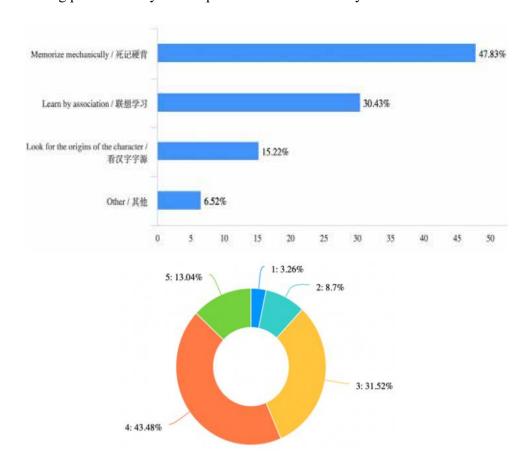


Chart 11. Chinese character memorization

Questions 13, 14 and 16 in the questionnaire are related to the "memorization" of Chinese characters. On the left of chart (11) is question 13 and on the right is question 14 "I can learn a new Chinese character fast." Question 13 of the questionnaire showed that 47.8% of the respondents remembered Chinese characters by "rote learning" and 30.4% remembered Chinese characters by "associative learning". The average score of question 14 "I can remember new Chinese characters quickly" is 3.52, which shows that students are very confused and find it not easy to remember Chinese characters.

The so-called "memorization" is "the process in which the human brain remembers, maintains and reproduces the experienced things". [Yang Zhiliang 2016, 308] "Associative memory" is "memorization through the connection of

various knowledge units". [Yang Zhiliang 2016, 313] Nearly half of the respondents remember Chinese characters by "rote memorization", which also explains why the option "I can remember new Chinese characters quickly and forget them quickly" in question 16 "Which option describes you best?" is as high as 45.65%. In contrast, what is more worth recommending is the "associative memorization" which does not account for too much at present. Moreover, if we can associate the "image memory" of Chinese characters with "associative learning", we can properly solve the confusion of memorizing Chinese characters and help learners get out of the dilemma of Chinese character memorization.

"Form memory" or "image memory" refers to "memorizing with the perceived image of things as the content". Francis Bacon, who is proficient in "memory", often uses "allegorical pattern", that is, "to reduce the image of thinking into a perceptible image and enhance the stimulation of memory". [Francis Yeats 2015, 355] Graphic learning can help memorize very effectively. [Nagata Takashi 2014, 5] Psychological research shows that people's memory has rules to follow, and resorting to the learning of "image" and "pattern" is helpful to help memorize and produce long-term memory. What about Chinese characters? It is precisely "hieroglyphics". The image memory of Chinese characters is not only a memory that appeals to vision, but also a memory that appeals to semantic association. It is undoubtedly a great waste of memory resources to rely solely on rote memorization and ignore the coexistence of shape, meaning and sound of Chinese characters.

Chinese characters have a long history of "hieroglyphics". The ancient characters starting with the inscriptions on oracle bones and bronze can be traced back as the source. The Chinese character system has the traditional six categories of Chinese characters originating from Xu Shen's "Shuowen" in the Han Dynasty.

Most importantly, the latest research results in the academic circles in recent years show that the ideographic nature of Chinese characters has not changed, especially at the level of "modern Chinese high-frequency characters" most often read by foreign students and ordinary readers. The notion of the six categories of Chinese characters is still strong: "Pictographs have been persistent in taking images from simplicity since ancient times, accounting for the absolute mainstream." [Zhang Yumei 2020, 20] "Image taking by the ideograms is absolutely stable". [Zhang Yumei 2018, 176] "The vast majority of ideographic characters (including ideographic and phonographic characters) are stable in their taking of images, six methods of forming Chinese characters and their form." [Zhang Yumei 2017, 98] High frequency pictophonetic characters are the mainstream because of their complexity. However, nearly 30% of pictophonetic characters have lost their phonetic function, which has brought trouble to literacy and memory. That is to say, the commonly used pictographs, reference words and understanding words that express meaning in form have little change in the mainstream of ancient and modern times, and can be used to help "image memory". The phonetic element of pictophonetic characters can also be used in the studying process. At the same time, we should pay attention to the phonetic complexity of phonetic element in Chinese characters.

Coping strategies at the second level: several coping strategies based on Chinese character research theory are provided for "image memory" and "associative learning" of Chinese character learners in non-Sinographic cultural circles:

4.1 Etymological association

"From more than 600 modern Chinese high-frequency characters, we summarize the evolution law of Chinese characters since the oracle bone inscriptions of the Yin and Shang Dynasties as follows: pictographs, ideograms and associative compound characters. They all show the mainstream of ideographic representation and simple image taking, accounting for 52.31% of the total number of high-frequency characters." [Zhang Yumei, Tao Shen 2018, 144–146] In other words, more than half of the most commonly used modern Chinese characters can be traced back to their origins, and their form is not complex, with little change from ancient to modern times.

Let us take a look at character "国", its ancient writing form is **6**, original meaning is whirling water vortex, later evolved to the meaning back and forth etc. Another character is "几",its ancient form is 几, meaning a long narrow table, bench. In modern days this character is used in the word "茶几" tea table. One more example is "交"with its ancient form **1**. The original meaning is human's legs crossed. High frequency ideograms like 引、元、本、大、 片 etc., high frequency combined ideograms including 出、定、季、知、守、路 etc., all provide associations.

4.2 Root Association



The root association method can be used for the six categories of Chinese characters. Some scholars have summarized and sorted out 920 Chinese roots, which can be used for regular learning and memorization of Chinese characters. For instance, "戔", which means something shallow and small, and the simplified word is "戋". It forms a series of monosyllabic words (ancient Chinese is monosyllabic, corresponding to modern Chinese that has monosyllabic morpheme words with complete form, sound and meaning). Chart (12) shows 16 monosyllabic words (characters) formed by the root "戋", of which the commonly used words (characters) are: 残 (缺),栈 (桥),(杯) 盏,(低) 贱,浅 (水),(金) 钱,(针)线,实(践),(信) 笺,饯 (行),(喷) 溅 and other 11, all these characters closely connected to the meaning of shallow and small. 4

⁴ Limited to space, we will not analyze the meaning of these 16 words here. The latter "comprehensive association method" takes the root "交" as an example. Root theory and word examples are selected from the root dictionary "Hanyu cigen cidian" compiled by Huang Yuezhou, Chinese language teaching press, 2015, page 14.

4.3 Association related to phonetic element in a Chinese character

Modern Chinese high-frequency pictophonetic characters are still phonetic, so they can be used to help identify and remember pictophonetic characters. At the same time, the function of phonetic component s is greatly weakened, and the phonetic situation is complex. For example, the phonetics sometimes have different pronunciations or tones, so it is necessary to remind learners to pay close attention to them. For example, analyzed above character "交(jiāo)", there are following characters using it as phonetic: 蛟(jiāo)姣(jiāo)佼(jiāo)郊(jiāo)茭(jiāo)茭(jiāo)蛟(jiāo)蛟(jiāo)蛟(jiāo)蛟(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)皎(jiāo)characters, first 7 ones have the same pronunciation as the phonetic "交". 10 other characters have a different initial, final or tone. As far as non-Sinographic cultural circle learners are concerned, adding pinyin near each character is very useful. One the one hand, it can show that pinyin of these characters is similar, thus can provide good association for memorization. On the other hand, it shows that pinyin has differences, therefore, they need close attention.

4.4 Comprehensive association method

The first three associative memory methods are not unrelated to each other. In actual memorization, two or three methods can be used at the same time. For example, character "交", except tracing its ancient source that depicts an intersection of people's legs as well as association with 17 characters with the same phonetic, learning "交" can become possible with the help of root association memory. Below let us take a look at 19 characters with "交" as their phonetic (at the same time root) and their meaning, in order to see its connection with the root meaning. "姣 (jiāo)" a woman who is both beautiful and has good manners, 《慎子•威德》: "毛嫱,西施,天下之至娇也。"("Shenzi Weide": "Mao Yi, Xi Shi, is the most charming in the world.") "姣" or also used as "佼(jiāo)" refers not only to females but also males. "郊(jiāo)" is the intersection of one region and another, "郊外" "suburb". "茭(jiāo)" is translated as water-oat shoots or " 茭白", their leaves crisscross. "骹(jiāo)" is the core of the intersection of bone and meat. "鲛 (jiāo)" is translated as shark. "咬 (yǎo)" has the meaning of upper and lower teeth forced against each other to clamp things or cut them into pieces. "饺(jiǎo)" is semicircular noodles made of skin. "绞(jiǎo)" means to form a rope with more than two slender strips. "校 (xiào)" is a wooden sign. "Shuowen" explains the character as "木丛也。" what can be interpreted as prisoner bound by wood. It also has the meaning of a place where teachers pass on excellent morality, knowledge and abilities to students. "校" can be pronounced as (jiào), to replace "b" with "a", that is, "proofreading". "胶 (jiǎo) " has the same pronunciation as "皎 (jiǎo)", bright. "较 (jiǎo)" is the intersection of two vehicles, the meaning was extended to "compare".

Summary

For non-Sinographic culture circle learners, subjective recognition of Chinese characters is very important, objectively, supplemented by Chinese character association learning method, the problems encountered in Chinese character learning can be solved by themselves.

5. Comments: suggestions on the compilation of Ukrainian (or multilingual) Chinese Dictionary

Question 29 of the questionnaire is a single choice question "If there are too many unknown Chinese characters in text do you look them up in a dictionary or ignore them?". Compared with 17.39% choosing "ignore" and 11.96% choosing "other explanations", more than 70% (70.65%) of learners will check dictionary when they encounter unknown words, indicating that it is very important to write a good dictionary for an easy retrieval of words in memory and learning new ones. However, at present, we believe that there is still room for improvement in the compilation of multilingual Chinese learning dictionary.

Generally speaking, both in terms of name and compilation theory, "汉语词典" (Chinese dictionary) and "汉语字典" (Chinese character dictionary) are two types of reference books, which are not the same thing. Therefore, if a dictionary is determined as "Chinese" dictionary rather than "Chinese character" dictionary, it is natural that it does not need to put the content of Chinese characters in it at all. However, in view of the close relationship between Chinese and Chinese characters, especially in view of the many problems mentioned above encountered by non-Sinographic cultural circle learners, the problem of Chinese characters has obviously become the key to their learning and refinement, or even more seriously, whether they become "illiterate" of Chinese characters. Therefore, at the end of this paper, I would like to take two Ukrainian Chinese dictionaries as examples to express a view, or put forward the following compilation suggestions:

First, just as there are many "dictionaries" in China, foreigners learning Chinese need a compiled "Chinese character dictionary", which can be bilingual or multilingual. Secondly, in view of existing problems, adjustments are needed in the compilation concept or compilation methods. On the basis of the existing bilingual or multilingual Chinese dictionaries, we need to add the elements of Chinese characters and even ancient characters, as well as improve old dictionaries and their effectiveness. As for the latter suggestion, let's take a Ukrainian dictionary as an example.



Figure 13. Three examples of table of contents page of Ukrainian English Chinese illustrated dictionary

Figure (13) is from the table of contents page of Ukrainian English Chinese illustrated dictionary. [Oksana Lesniak 2018] For number 14 on the left, there is too much deviation between the matching degree of "person" and the "person" of Chinese character. Using the image according to the word origin, a side of a standing human and adding an ancient character in next to it would work better. It is also suggested to remove the misleading shoe patterns. The "Home" labeled 36 in the chart might as

well be directly changed to "home" and add ancient character of or next to it. It is also suggested to remove the picture of grandpa wearing a hat and take the image according to the word origin, "pigs under the roof" and replace it with the picture of a simple pet pig sleeping in the house. The "On the go" section in the chart labeled as 104 is changed to character "行" with ancient character $\frac{1}{7}$ near it. At the same time, it is suggested to replace the coffee cup with the road picture with intersection, because the ancient characters of "行" $\frac{1}{7}$ is a pictograph, four-way road.

Among the dictionaries available on the market at present, we also found a newly compiled Ukrainian Chinese Dictionary issued by the Commercial Press. Similarly, we also suggest that it add Chinese characters as the prefix when revising and republishing, or put Chinese character elements in it, and use this idea to re plan the compilation of Chinese entries. If so, it will help non-Sinographic cultural circle learners better understand and be familiar with Chinese characters, so as to improve the effect of Chinese learning.

Finally, the paper would like to echo the theme of this paper: our analysis and elaboration are based on the questionnaire "investigation and research on Chinese character attitude of foreign students in non-Sinographic circles". It is the so-called "attitude" that determines the direction and results. The studied "Chinese character learners in non-Sinographic culture circle" have a subjective attitude of "Chinese characters to be important". If the objective aspect can be supplemented with supporting teaching, teaching materials and dictionaries, there will be more ways to solve the Chinese character problems students encounter.

A survey and research on the attitude of overseas students (from non-character-using countries) towards Chinese characters

非汉字圈留学生的汉字态度观调查与研究 Survey/调查问卷

Hello! I am a Master's degree student from the School of Humanities of Shanghai Jiao Tong University. My major is Chinese language and literature. This survey aims at better understanding of the attitude of overseas students (from non-characterusing countries) towards Chinese characters. The survey is anonymous and is comprised of 30 questions. Please complete the survey. Thank you!

您好!我是上海交通大学人文学院的中国语言文学专业的研究生。为了更好地了解非汉字圈留学生对汉字的态度,进行问卷调查。本次调查为匿名形式。问卷一共有35个题目。请您填写完整。谢谢!

问卷链接: https://www.wjx.cn/m/81884574.aspx

1. What is your nationality? / 您的国籍是什么?	
2. How old are you? / 您的年龄是多少?	
18 岁以下 18-22 23-27 28-32 33-37 ≥38	
10.9 1/2 23-27 20-32 33-37 230	

3. What is your highest level of education completed? / 您的最高学历是什么?
High school / 高中 Bachelor's degree / 本科 Master's degree / 硕士
博士 / PhD degree
4. What is your field of study? / 您的专业是什么?
Humanities / 文科 Sciences / 理科 Engineering / 工科
5. At what age did you start learning Chinese? / 您什么时候开始学中文?
18 岁以下 18-22 23-27 28-32 33-37 ≥38
6. How long have you been studying Chinese characters? / 您学习汉字多久?
7. What is your HSK level? / 您的汉语水平考试是第几级?
HSK2级 HSK3级 HSK4级 HSK5级 HSK6级
8. Do you often see Chinese characters in your country? / 在您的国家你经常接触汉字吗?
Completely disagree/完全不同意 Absolutely agree/完全同意
1 2 3 4 5
9. Why do you learn Chinese characters? / 您为什么学习汉字?
Hobby / 爱好 Education requirement / 教育要求 Work / 工作
Other / 其他
Other, please specify / 选其他请解释

10. Do you know radicals in Chinese characters? / 您了解汉字的部首吗? Yes / 是 No / 否 □ □	
11. Do you know character components and their meaning (e.g 1 , 口, 木)?/您知道汉字的	
偏旁和它的意思吗?	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	
12. Do you know phonetic elements in Chinese characters? / 您知道汉字的声旁吗?	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	
13. How do you memorize Chinese characters? / 您如何记住汉字的字形?	
Learn by association / 联想学习 Memorize mechanically / 死记硬背	
Look for the origins of the character / 看汉字字源 Other / 其他	
Other, please specify / 选其他请解释	
14. I can learn a new Chinese character fast. / 我可以很快记住新的汉字。	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	
15. Do you think it is important to know the idea behind every Chinese character? / 您认为是否	
重要知道每个汉字的字源?	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	

16. Which option describes you best? / 哪一个选择最佳地描写您?		
A I learn new characters fast, and forget them fast. / 我能很快记住新的汉字,也很快忘记它。		
B It takes me a lot of time to learn new characters, I remember them for a long time. / 我需要很长时间来记住汉字,可是掌握了之后,记得很长时间。		
☑I learn new characters fast, and remember them for a long time. / 我能很快记住新的汉字,		
并且,记得很长时间。		
Other, please specify / 其他请解释		
Answer / 答案: □		
17. Do you try to guess the meaning of an unknown Chinese character by its components? / 如果		
不知道汉字的意思,您是否按照它的偏旁猜测它的意思?		
Completely disagree/完全不同意 Absolutely agree/完全同意		
1 2 3 4 5		
18. What is your attitude towards modern Chinese characters? / 您认为现在用的汉字是:		
Phonograph / 表音文字 Ideograph / 表意文字		
Pictograph / 表形文字 All of the above / 以上皆是		
19. Chinese character represents Please choose the most appropriate answer: / 汉字代表请选		
择最合适的答案:		
Syllable / 音节 Part of a syllable / 音节的一部分 Phoneme / 音位		
20. Do you often misread characters that have similar writing? / 您经常弄错字形相似的字吗?		
Completely disagree/完全不同意 Absolutely agree/完全同意		
1 2 3 4 5		

21. 亨享 堂党 酒洒 Do you think these Chinese characters have similar meanings? / 亨享 堂党
酒洒 您认为这些汉字意义上相似吗?
Completely disagree/完全不同意 Absolutely agree/完全同意
1 2 3 4 5
22. You started to learn Chinese from / 您是从 开始学习汉语?
Pinyin / 拼音 Chinese characters / 汉字 Words / 词
23. When learning new words do you know the meaning of all the characters in them? / 学习汉
语词的时候,您知道这个词的每个字的字义吗?
Completely disagree/完全不同意 Absolutely agree/完全同意
1 2 3 4 5
24. Do you often forget of what characters Chinese word is composed? / 您经常忘记汉语词由
哪些汉字组成的吗?
Completely disagree/完全不同意 Absolutely agree/完全同意
1 2 3 4 5
25. In how many of the words below you know the meaning of each character? / 下列的两字词
中有几个你知道每个字的字义:
工作 商店 杯子 丈夫 颜色 对不起
1/一个 2/两个 3/三个 4/四个 5/五个 6/六个
26. Do you feel anxious when looking at pages with many Chinese characters? / 看有很多汉字
的页面时您感到焦虑吗?
Completely disagree/完全不同意 Absolutely agree/完全同意
1 2 3 4 5

一次看汉语文本的时候,您可以清楚地区分每个词吗?	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	
28. Do you wish Chinese texts had spaces between words? / 你是否希望汉语文本里的词与词	
之间有空格?	
Completely disagree/完全不同意 Absolutely agree/完全同意	
1 2 3 4 5	
29. If there are too many unknown Chinese characters in text do you look them up in a	
dictionary or ignore them? / 如果文本里有太多不认识的字,您查字典还是忽略那些字?	
greater means of greate	
Look up in a dictionary / 查字典 Ignore / 忽略 Other / 其他	
Other, please specify / 其他请解释	
30. In your opinion, what is the biggest difficulty when reading Chinese characters? / 读汉字最	
大的困难是什么?	
A Large amount / 数量多	
B Sentences do not have word segmentation marks / 句子没有分词的标记	
C Insufficient understanding of Chinese characters / 对汉字的了解不够	
D Other, please specify / 其他请解释	
Answer / 答案: □	

31. Which of the sentences below describes you best? / 下列句子中,哪一个最佳地描写您?
51. Which of the sentences below describes you best. / / you 拟E起调与心。
□ I can communicate orally in Chinese and see no need in learning Chinese characters. / 我能用汉语进
行口头交流,不需要学习汉字。
☐ I know some basic Chinese characters and do not see the point in learning more of them, I can easily
communicate orally in Chinese. / 我知道一些基本的汉字,不需要进一步学习,我可以很容易地用汉
语进行口头交流。
☐ I am constantly learning new Chinese characters and know that it is an inseparable part of mastering
Chinese. / 我一直再学习新的汉字,并且知道学汉字是掌握汉语密不可分的部分。
- 1
□ Other, please specify / 其他请解释
32. What is your attitude towards learning Chinese characters during online Chinese classes? / 对于在线
汉语课学习汉字您怎么看?
A Learning characters during online Chinese classes is more efficient that in classroom. / 在线学习汉字
比课堂学习更有效
B Learning characters in classroom is more efficient that during online Chinese classes. / 课堂学习汉字
比在线学习更有效
C No difference / 没有差别
日 No difference / 没有差別
D Other, please specify / 其他请解释
A /
Answer / 答案: □
33. Please choose the most appropriate answer. / 请选择最合适的答案:
A During online Chinese classes teacher and students can share screen, make notes, participate
in group discussions, etc., which is helpful to master Chinese characters effectively. / 在线上汉
语课的可以分享屏幕、注释、小组讨论等,有助于有效地掌握汉字。
BI can't concentrate and study well during online Chinese classes. / 在线上汉语课不能集中注
意力,学习得不好。
C There are more opportunities to learn Chinese characters in classroom. / 课堂学习汉字有更
多学习的机会。
D Other, please specify / 其他请解释
Answer / 答案:□

34. In your opinion, what is the biggest difficulty in learning Chinese characters? / 在学习汉字	
过程	星中,什么是最大的问题?
35. In your opinion what age is the most proper to start learning Chinese characters? / 在您的看	
来,	什么年龄最适合开始学习汉字的?

Thank you! / 谢谢!

REFERENCES

Pierce, Bonny (1995) "Social identity, investment, and language learning", TESOL Quarterly 29, p. 17.

Edward Burkley, translated by Guo Shucai (2020) "Motivation Science", People's Posts and Telecommunications Publishing House, pp. 60–62.

Yang Zhiliang, Hao Xingchang (2016) "Dictionary of psychology", Shanghai Lexicographical Publishing House, pp. 308–313.

Nagata Takashi, translated by Ma Xiao (2014) "Graphic learning method", People's Posts and Telecommunications Publishing House, p. 5.

Zhang Yumei (2020) "Tracing the origin of «image taking» of high frequency pictographs and its aesthetic value", Social scientist, Volume 11, p. 20.

Zhang Yumei, Tao Shen (2018) "Tracing the origin of image taking of high frequency characters in modern Chinese: the stability and application value of image taking in ideograms", World Chinese Teaching, Volume 1, pp. 144–146.

Zhang Yumei (2018) "'Chinese cultural confidence' from the perspective of Linguistics", Social Scientist, Volume 4, p. 176.

Zhang Chunming, Chen Piaofeng, He Min, Huang Xin, Pan Min, Oksana Lesniak, Vasyl Ivashkiv (2018) "Ukrainian English Chinese illustrated dictionary", Shanghai Foreign Language Education Press.

Huang Yueying (2013) "New Ukrainian Chinese Dictionary", Commercial Press.

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