

The Study on Chinese Character Acquisition Errors of Foreign Students

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Abstract—As being ideographic system, Chinese characters are different from the phonetic system. Therefore, for the learners of non-Chinese character culture circle, the role of Chinese character teaching must be emphasized. According to the characteristics of Chinese characters, this paper systematically summarizes Chinese character acquisition errors of foreign students.

Index Terms—error, stroke, component, overall configuration

I. INTRODUCTION

Acquiring a language means not only communicating in spoken language but also in written language. Written language appears after the characters are produced, which means that the characters are the basis of written language. Chinese characters have no specific phonetic symbols to record Chinese because of the characteristics of Chinese phonetic structure. As being ideographic system, Chinese characters are numerous and are difficult to remember. Especially for the learners who are not in the Chinese character culture circle, there is a certain degree of difficulty in acquiring Chinese characters. Therefore, the role of teaching Chinese characters must be emphasized in Teaching Chinese as a Second Language.

II. REVIEW

At present, the academic circles pay less attention to Chinese character teaching. Only some articles theoretically discuss how to develop Chinese character teaching. Wang Ning (1997) believes that the component should be used as the basic unit of Chinese character teaching from the perspective of the features of Chinese character configuration [1]. Cui Yonghua (1998) believes that, it can't meet the needs of Chinese character teaching only from the aspect of components, and the components that can't be called accurately will reduce the efficiency of Chinese character teaching, so we should regard the components and parts of single Chinese characters as the basic units in Chinese character teaching [2]. Zhu Zhiping (2002) thinks that Chinese characters belong to the ideographic system and the form is the major component of Chinese characters, so Chinese character

teaching should start with forms teaching [3]. Zhang Xichang (2007) analyses the relationship between phonetic symbols and pictophonetic characters, and points out the role of the phonetic symbols in the teaching of pictophonetic characters [4]. Li Yunfu (2014), from the three aspects of form, constructions and function, analyses the difficulties in Chinese character teaching, then proposes corresponding teaching strategies based on these characteristics of Chinese characters [5]. Wan Yexin (2015) analyses that learning Chinese pinyin at first can help the learners to avoid some difficulties in Chinese and Chinese character teaching, at the same time, she also points out Chinese pinyin can't substitute Chinese characters [6].

There are also some articles that analyze Chinese character acquisition errors of foreign learners. Xiao Xiaoqiang (2002) analyses Chinese character errors of foreign learners from the perspective of the components [7]. Sheng Jiyan (2013) summarizes the standards of Chinese character stroke: stroke direction standard, cornering stroke standard and stroke order standards, and points out that, stroke direction has the most significant effect on the correct writing of Chinese characters in Teaching Chinese as a Foreign Language, followed by cornering stroke standard, and that stroke order does not exhibit conspicuous influence on the correct writing. So, these three specific standards of stroke should be considered hierarchically teaching Chinese character to foreign students [8].

Most of the current studies are purely theoretical analysis how to develop Chinese character teaching, or simple analysis of Chinese character acquisition error from a certain perspective. According to the homework of 25 students of Bates College for one year, this paper mainly summarizes the Chinese character acquisition error in the study of Chinese characters based on the basic characteristics of Chinese characters.

III. TYPE OF CHINESE CHARACTER ACQUISITION ERRORS OF FOREIGN STUDENTS

The structural units of Chinese characters are stroke and component. Stroke is the smallest unit that constitutes components and Chinese characters. Component, consisting of strokes, is higher level structural unit than stroke, and it is the prefabricated components of combined characters (Huang Borong & Liao Xudong, 2007, p145) [9]. Therefore, if we want to

analyze Chinese character error from the aspects of constituent units, we should start with the stroke level and the component level. Then there is another angle from overall configuration to analyze Chinese character acquisition error. The detailed analysis will be given below.

A. Stroke Level

There are five basic strokes of Chinese characters: 一 (horizontal), | (vertical), 丿 (apostrophe), 丶 (point), ㇇ (fold) (Huang Borong & Liao Xudong, 2007, p145) [9]. Basic strokes can have corresponding but limited deformation based on their different positions¹. That is, a large number of Chinese characters are composed of repeat using of limited simple strokes. The errors at the stroke level can be divided into two types: substitution errors and addition or omission errors.

1) Substitution errors at the stroke level

Substitution errors caused by the stroke substitution means that A stroke is substituted as B stroke or Latin alphabet. It can be specifically divided into two cases shown in the Table I:

TABLE I: SUBSTITUTION ERRORS AT THE STROKE LEVEL

Characters Cases	Right Characters	Erroneous Characters ²
A Stroke → B Stroke	热、馆	热、馆
	见、地	贝、土
Stroke → Latin alphabet	笑	笑
	句、回	句、回

The first case is the internal substitution of Chinese strokes. The shapes of some strokes are similar, and the students can't distinguish or do not pay attention to the differences between the similar strokes, then they write the character with unqualified stroke, which leads the wrong character or wrongly-written character to happen. For example, when “土” is used as a component of “地”, the third stroke is “丿”, not “一”. While the learners may substitute the stroke “一” as the stroke “丿” influenced by the original character “土”, which leads the unstandardized character “土” to happen. The second case is that the strokes of Chinese characters are written as Latin alphabet. Even the shapes of strokes and alphabets are different, they still have similar parts, and it leads the unstandardized character to happen. For example, the components “々”, composed of Chinese

¹ The basic strokes of the Chinese character are divided into the main pen shape and the attached pen shape. The main pen shape is the basic writing method of the stroke. The attached pen shape is a variety of the basic stroke that appear in different positions or component. For example, “|” (vertical) is the main pen shape, and “丿”(vertical hook) is the attached pen shape. (Huang Borong & Liao Xudong, 2007, p145)

² Erroneous characters have two cases. First is wrongly-written character that does exist in Chinese character system. Second is wrong character, including unstandardized character, that does not exist in Chinese character system. To distinguish the two kinds, we use underline for marking wrongly-written character, and the wrong character is shown normally.

strokes, is written as the component “kk” composed of Latin alphabet “k”.

2) Omission or addition errors at the stroke level

The basic structural unit of Chinese characters is stroke that is related to the writing details. However, Chinese characters are usually memorized as a whole, and the writing details, sometimes are easily neglected, which can lead omission or addition errors at the stroke level to happen. The use cases are shown in the Table II:

TABLE II: ADDITION AND OMISSION ERRORS AT THE STROKE LEVEL

Characters Cases	Right Characters	Erroneous Characters
Omission errors	气、广	乞、厂
	真、样	真、样
	借、把	借、把
Addition errors	今、大	令、夫
	买、甲	买、甲

The omission errors mean omitting a stroke in places where there is a certain stroke, and the addition errors refer to adding a stroke to areas where there is no stroke. Most of the omission and addition errors are caused by not paying attention to the function of stroke. For example, “今” and “令” have similar shapes, and the function of the stroke “丶” is meaning distinction. The omission error happens without attention to the detail. The omission or addition errors, sometimes, can lead to the substitution of components (which will be analyzed below). Components are composed of strokes, and there are many similar components that differ only in strokes, as in the above, the component “日” of “借” is omitted one stroke and is written as the component “口”, and the component “巴” of “把” is omitted one stroke to be another component “巳”, which are omission errors of Chinese characters in stroke, also belong to substitution errors of the components.

B. Component Level

Components, composed of strokes that have the function of constituting Chinese characters. (Huang Borong & Liao Xudong, 2017, p147) [9], usually are the units of the combined character. Therefore, the errors at the component level usually happen on the combined characters, and it can be divided into the following categories.

1) Substitution errors at the component level

a. Mutual substitution of components with similar shapes

The number of basic strokes that constitute components and Chinese characters is 5, and along with the variations of the basic strokes, there are 35 Chinese strokes (Huang Borong & Liao Xudong, 2007, p146) [9]. Therefore, the different components are composed of limited strokes, then the similarity of the components on the physical body is caused. When the learners use the components to compose Chinese characters, they may form a mixed phenomenon among similar components.

The mutual substitution errors of components with similar shapes are shown in the Table III:

TABLE III: MUTUAL SUBSTITUTION OF COMPONENTS WITH SIMILAR SHAPES

Characters Components with similar shape	Right Characters	Erroneous Characters
大↔木 日↔目	因/困 晴/睛	困/因 睛/晴
己→己/巳 毋→由 衤→衤	记 惯 衬	记/记 惯 衬

Some Chinese characters not only have similar components but also have same parts. For example, “困” and “因” have same component “口”, and the similar parts are “木” and “大”, then substituting the similar parts leads to mutual using between the characters “困” and “因”. Some components have similar components in shape, but their similar parts and the fixed parts can't compose right characters. For example, the components “己” and “己/巳” are similar in shape. Substituting the component “己” of “记” as “己/巳”, leads the wrong characters “记/记” to happen.

b. Mutual substitution of components with similar meaning

Near-meaning components record two or more morphemes³ that belong to the same or similar genera. That is, Chinese characters belong to the ideographic system, but there is no specific ideographic symbol to record same meaning. Then, multiple components of the similar semantics may cause errors if the learners can't distinguish different components with similar meaning. The use cases are shown in the Table IV:

TABLE IV: MUTUAL SUBSTITUTION OF COMPONENTS WITH SIMILAR MEANING

Characters Components with near meaning	Right Characters	Erroneous Characters
爪→足	爬	跏
木→禾	桔	稭
饣↔米	粮 饭	粮 饭

The components “足/爪” refer to foot meaning, the components “禾/木” refer to plant meaning, and the components “饣/米” refer to food meaning. The correct character “爬”, after being substituted the component

“爪” as “足”, becomes the wrong character “跏”. After being substituted the component “木” as “禾”, the character “桔” is written as the wrongly-written character “稭”.

c. Confusing the different components of similar characters in shape

Some Chinese characters are similar in general shape, that is, they usually have the same components, and also have different components. Neither in meaning nor in shape different components are similar. The correct Chinese characters, after being substituted the different components as other components, become erroneous characters —— wrongly-written characters and wrong characters. The use cases are shown in the Table V:

TABLE V: CONFUSING THE COMPONENTS OF SIMILAR CHINESE CHARACTERS IN SHAPE

Similar Characters in shape Cases	Right Characters	Erroneous Characters
Influenced by context	扳机 批评	板机 批评
one Characters	孩/该、很/跟 想、填	该/孩、跟/很 想、填

According to the different reasons, the errors can be divided into two cases. The first case is caused by context⁴. The words in Chinese are mostly two-syllable, which are generally recorded by two Chinese characters. The component of one character may be substituted as another one influenced by the other character next to it, leading an erroneous character to happen. For example, in “据说”, “说” is more commonly used than “据”, so the component “扌” of “据” may be substituted as “讠” affected by the component of “说”, which leads the wrong character “讠” to happen. The second case is caused by confusing of the different components of similar Chinese characters in shape, or just remembering the general character but forgetting the detail component of the character. “孩” and “该” are similar in shape, and the learner may substitute the component “子” as “讠” without distinction the ideographic role, then it will cause wrongly-written character “该” to happen.

2) Omission or addition errors at the component level

The omission or addition errors mainly refer to omitting or adding a component during the writing process. Omission errors of component means that the component of character is lost, and addition component errors means adding a component to the character. For example. The use cases are shown in Table VI:

³ Morpheme is the smallest combination of sound and meaning, and is the preferred unit of the recording object. The feature of Chinese morphemes is the monosyllable morpheme, which determines that Chinese characters can only select the meaning of morphemes as the object of recording rather than the sound of morphemes. (Junhua Gan, 2016)

⁴ The context means the erroneous character is caused by the other characters next to it. Xiao Xiqiang (2002) points out the category conversion and the substitution at the component level mostly are influenced by the context.

TABLE VI: OMISSION AND ADDITION ERRORS OF COMPONENTS

Cases		Characters	Right Characters	Erroneous Characters
Omission	one Character		球、远、 吗、块	求、元、 马、夬
			到、跟	至、跏
	Influenced by context		机会 粮食	几会 良食
Addition	one Character		系 头	累 实
			喜悦 掌握	懂悦 撑握

More than 90% of Chinese characters are pictophonetic characters composed of meaning symbols and sound symbols, which indicate the meaning and pronunciation of Chinese characters. Learners commonly remember their sounds, that is to say, they usually remember the sound symbols, but forget the meaning symbols. Therefore, omission errors at the component level mostly are caused by omitting meaning symbols, and less are caused by omitting sound symbols. For example, the erroneous characters “求、元、马、夬” are caused by omitting the meaning symbols of “球、远、吗、块”, and the characters “至” and “跏” are lost the sound symbol “卩” and “艮”.

Influenced by the concept of recognizing the half of Chinese character, or the principle of simple and labor-saving, there are more omission errors than addition errors. While, if the learners study the complex Chinese character, which is used to record low-level vocabulary, earlier than the easy Chinese character which is used to record to high-level vocabulary, or if the learners use the complex Chinese character more than the simple Chinese character, addition errors may happen. “累” with “tired” meaning is always used by the learners, but “系” with “department” meaning isn’t often used, so, addition error will happen by adding the component “田” to “系”.

Whether it is omission error or addition error, some are caused by context. It means that the character is omitted or added the component influenced by the character next to it. For example, “机” is lost “木”, because “会” next to “机” doesn’t have the component “木”, and “喜” is added “卜”, because “悦” next to it has the component “卜”.

3) Misplacement errors of component

Misplacement errors refer to the change of the components position. Usually, the left-right structure and the upper-lower structure Chinese characters produce a mirror shift, or different structure characters have a mutual shift. For example:

TABLE VII: MISPLACEMENT ERRORS OF COMPONENT

Cases		Characters	Right Characters	Erroneous Characters
Mirror Shift	Left-Right Mirror Shift		秋、部 邮、欧	焮 ⁵ 、随 陆、炬
		Upper-Lower Mirror shift	杏、呆	呆、杏
Other Shifts	Left-Right → Upper-Lower		群、峰	羣、峯
		Half Encirclement → Left-Right	或、式	或、式
		Shift among Part of Components	或	或

In Chinese characters, some components are on the left in parts of Chinese characters, and they can also be on the right in some characters. At the same time, the learners may be affected by the concept of “the left indicates the meaning, and the right indicates the sound”, which can lead left-right mirror shift to happen. For example, the component “卩” is on the right in “邮”, while it is on the left in “队”, so it is possible that misplacing the components of “邮”, which leads the wrong character “陆” to happen. Same with the left-right structure character, the misplacement errors also happen to the upper-lower structure Chinese character. The component “木” is on the upper in “杏”, while it is on the lower in “呆”. So, misplacement errors will lead to wrongly-written character between “杏” and “呆”.

Excluding mirror shift, there are also some kinds of shifts. For example, the left-right structure character may be written as the upper-lower structure. Like “群” and “峰”, they are left-right structure, but the learners sometimes write them as the upper-lower structure characters, then it leads variant characters “羣” and “峯” to happen. The characters “或” and “式”, that are half encirclement structure, are written as the left-right structure Chinese characters “或” and “式”.

C. Overall Configuration Level

Different from the rules of phonetic system, like English character, which is composed of Latins alphabets and arranged according to the pronunciation of words, Chinese character is constructive, and has its own rules in writing and composition. If the learners don’t pay attention to the writing and composition rules of Chinese characters, it will cause error at overall configuration level. However, the errors at overall configuration level, usually, will not cause reading difficulties. It may be caused by the misplacement at the component level. For example, the half encirclement structure character “或” is written as left-right structure character “或” that is an unstandardized character. It also can be caused by unreasonable structural organization for the overall configuration. For example, the Chinese characters “取”, “那”, and “春”, whose strokes connections should be crossed, not simple connected, are written as “取/取”,

⁵ Variant Character is a kind of wrongly-written character. Most variant Chinese characters are abolished in order to simplify Chinese characters.

“耶”, and “春”, whose strokes are just connected. The character “让”, whose strokes are just connected, is written as “让”, whose strokes are crossed.

IV. CONCLUSION

Chinese characters, as the ideographic system, are essentially different with the phonetic system, which determines the importance of Chinese character teaching for the learners of non-Chinese character culture circle. If we want to achieve the best effect in Chinese character teaching, firstly, we should conduct a comprehensive and meticulous classification to the errors according to the characteristics of Chinese character, and work out more reasonable teaching advice based on the first step. Then we can achieve a higher teaching efficiency. This paper mainly analyses Chinese characters' acquisition errors of foreign students from stroke level, component level and overall configuration level according to the composition and the organization rules of Chinese character. Next, we will further propose teaching suggestions according to characteristics of Chinese character and the Chinese character acquisition errors of foreign students.

ACKNOWLEDGMENT

Thank my supervisor Professor Yehui Duan and Professor Guangwu Yu for their careful guidance, thank the review experts for their valuable comments and revision suggestions, and thank my classmate Hong Wenting for her patience in reading the full paper and proposing amendments. This paper cannot be completed without the efforts of everyone. I would also like to thank the project “the study on database construction of language capability description language and standard development of Chinese language capability” (13AZD098) given the support.

CONFLICT OF INTEREST

The author declares no conflict of interest.

AUTHOR CONTRIBUTIONS

The paper was completed by Junhua Gan, including data collection and analysis, research conducting and paper writing. The author had approved the final version.

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September 1st, 2018.

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