

CONTRASTING APPROACHES TO CHINESE CHARACTER REFORM:  
A COMPARATIVE ANALYSIS OF THE SIMPLIFICATION OF CHINESE CHARACTERS  
IN JAPAN AND CHINA

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## ABSTRACT

Due to the complexity and number of Chinese characters used in Chinese and Japanese, some characters were the target of simplification reforms. However, Japanese and Chinese simplifications frequently differed, resulting in the existence of multiple forms of the same character being used in different places. This study investigates the differences between the Japanese and Chinese simplifications and the effects of the simplification techniques implemented by each side. The more conservative Japanese simplifications were achieved by instating simpler historical character variants while the more radical Chinese simplifications were achieved primarily through the use of whole cursive script forms and phonetic simplification techniques. These techniques, however, have been criticized for their detrimental effects on character recognition, semantic and phonetic clarity, and consistency – issues less present with the Japanese approach. By comparing the Japanese and Chinese simplification techniques, this study seeks to determine the characteristics of more effective, less controversial Chinese character simplifications.

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## CHAPTER 1: INTRODUCTION

### *The Changing Character of Chinese Characters*

Since their development over 4000 years ago in China, Chinese characters, or *hanzi* 漢字 in modern Mandarin Chinese, have been the primary means of written communication in East Asia. Chinese characters were not only used to transcribe the Sinitic languages, but also the languages of neighboring civilizations. At one time the Vietnamese, Koreans, Japanese, Mongols, Jurchens, Khitans, Tanguts, Bai, Zhuang, Miao, and Dong all utilized Chinese characters in some capacity in writing. The five modern countries that comprise the Chinese character cultural sphere, China, Vietnam, North Korea, South Korea, and Japan, have each undergone writing reforms that affect the usage of Chinese characters in their respective languages.

In Vietnam, Chinese characters, called *Hán tự* in Vietnamese, were used to write classical Chinese and Sino-Vietnamese vocabulary. In order to represent the native Vietnamese language with Chinese characters, *Chữ Nôm*, a script using Chinese characters and Vietnamese-made Chinese characters created by analogy, was later developed. Under Portuguese and French influence, however, a new Latin-based Vietnamese alphabet called *Quốc Ngữ* was developed and has been the primary means of writing in Vietnam since the late twentieth century.

While the Korean language was previously written completely using Chinese characters, a Korean alphabet was promulgated by King Seycong in 1446, and today is referred to as *hangul* 한글 in South Korea, and *chosongul* 조선글 in North Korea.

*Hangul* is unique in that it is what Sampson (1985: 120) refers to as a featural alphabet, or one in which the shape of individual letters represent different phonological features. *Hangul* was not officially adopted for general writings in Korea, however, until 1894 when the government was modernized and adopted a policy of primarily using *hangul* for all administrative purposes. Subsequently, *hangul* gained more widespread use and was often used alongside *hanchcha* 한자, or Chinese characters in Korean. *Hangul* would be used to write the native Korean portions of text while *hanchcha* were used to write Sino-Korean vocabulary. After 1894, the mixed use of the two scripts became a common practice among the general public (Sohn 2001:145). Over time, however, there has been a sharp decline in the use of *hanchcha* in Korean writing. For various reasons, including the difficulty of Chinese characters as well as Korean nationalism, continuous efforts have been made toward the abolishment of Chinese characters in Korean writing completely.

In Japan, a syllabary called *hiragana* 平仮名 was developed in the Nara period. Individual *hiragana* were derived from the cursive forms of a subset of *Man'yōgana* 万葉仮名, Chinese characters used for their phonetic values to write early Japanese texts such as the *Man'yōshū* 万葉集. In the 9<sup>th</sup> century, the similar *katakana* 片仮名 syllabary was developed by Buddhist monks based on the old Korean script *kwukyel* 구결. Both *kwukyel* and *katakana* used select portions of Chinese characters as abbreviations for the syllabic sound of the character itself (Vovin 2010: 380). Modern Japanese uses a mixed text writing format known as *kanji-kana majiribun* 漢字仮名交じり文 that utilizes these

two *kana* 仮名 syllabaries as well as Chinese characters, *kanji* 漢字 in Japanese, making Japanese and Chinese the only two modern world languages that regularly utilize Chinese characters in writing.

Besides the differences in literary use of Chinese characters in the Chinese and Japanese languages, for most of their history, Chinese characters have generally retained their traditional shapes and have been mutually intelligible by both literate Chinese and Japanese. However, modern language reforms have led to the same characters often taking on different forms in each country. In 1946, Japan passed official language reforms that affected areas such as pronunciation, orthographic rules, and simplification of the forms of certain Chinese characters. In 1956, the People's Republic of China also passed similar language reforms that also included their own character simplification measures. Since then, in Singapore, where Mandarin Chinese is one of the four official languages, and in Malaysia, where Chinese is not official, but taught because of the large Chinese population, the PRC simplified characters have become the norm.

Hong Kong and Macau, which were not under PRC political control in 1956, were exempt from the mainland Chinese writing reforms. Even today after official political control of these two regions has reverted to mainland China, they are under special permission to continue using traditional characters. Taiwan and many overseas Chinese communities, which were never under PRC control, also never underwent the mainland Chinese character simplifications and continue using the traditional Chinese characters. While Chinese characters are only sparingly used in South Korean literature and rarely used in North Korea, they are still taught in schools in both countries. The

characters taught in both North and South Korea are also primarily of the traditional form (see fig. 1).

Because of the non-parallel language reforms between mainland China, other Chinese-speaking areas, and Japan, several Chinese characters have now become unintelligible across these groups. The different processes of character simplification in China and Japan have led to some Chinese characters having three legitimate forms all in concurrent use: the traditional form, the Chinese-simplified form, and the Japanese-simplified form.

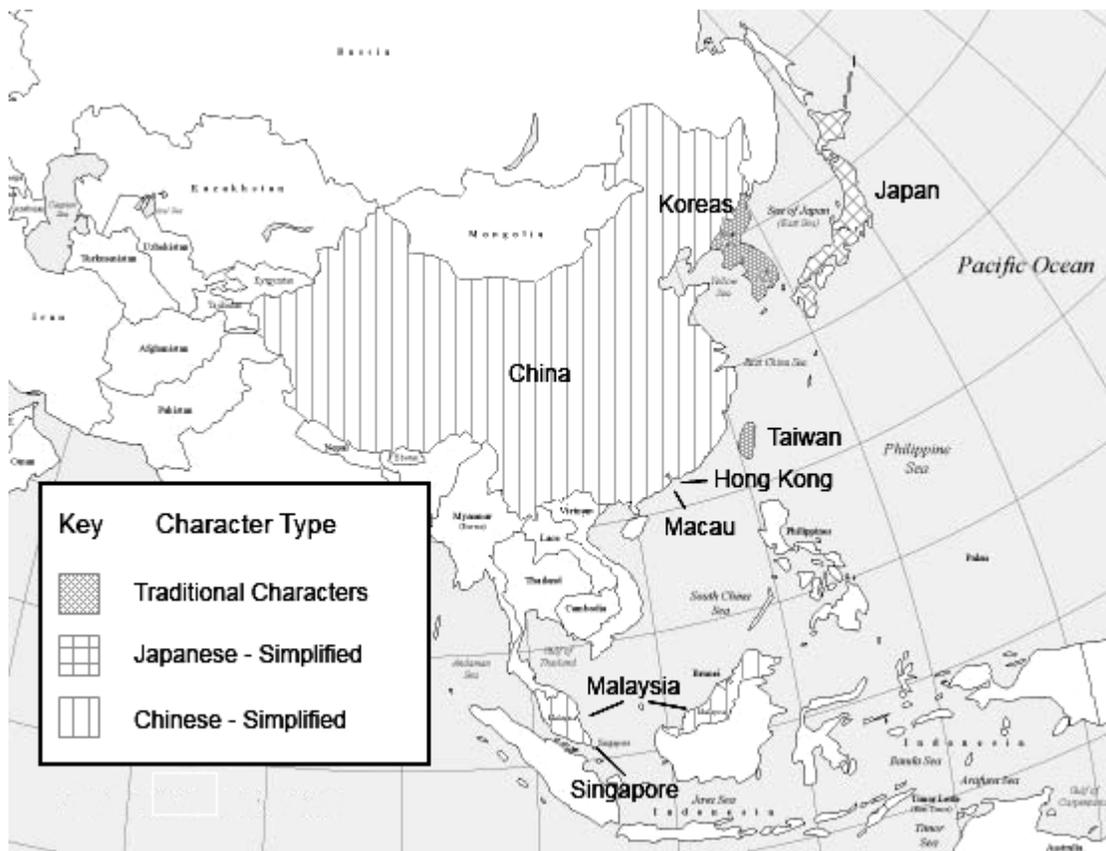


Fig. 1. Chinese character type usage by area

Source: royalty-free map from Mapresources 2012

This situation causes difficulties not only in communication between Chinese-speaking peoples living in different places, but also creates an even greater obstacle for Japanese or Chinese people learning the others' character versions, not to mention second language learners of either language that lack pre-existing knowledge of a character set to begin with. Learning any single given character may not be too difficult in and of itself, but given the large number and complexity of characters, what about having to deal with the existence of three versions of the same character? In today's globalized world with high levels of communication between different regions and peoples, this is becoming an increasingly common phenomenon. Furthermore, from the standpoint of modern technology, the existence of different character versions also leads to issues with computing standards as well as problems converting characters from one form to another.

While Japanese and Chinese character simplification schemes have resulted in varying degrees of divergent character forms, there are similarities in the impetuses leading to character simplification in both places. However, despite these similarities, the resulting simplified characters have taken on sometimes drastically different forms, with very real linguistic consequences. The more conservative Japanese simplifications retained a higher degree of similarity with traditional characters while the more radical Chinese simplifications made use of a wider variety of techniques to arrive at comparatively more divergent simplified forms.

This investigation will examine the similarities and differences in how Japanese and Chinese character simplifications developed. Since their promulgation, Chinese-simplified Chinese characters have faced controversial linguistic, political, cultural, and

aesthetic criticisms from scholars, government officials, and the public, from both the Chinese mainland and overseas, while Japanese-simplified characters have been comparatively more accepted in Japan. This paper will seek to uncover the differences in simplification methods each side employed and the effects of these different techniques in order to determine the characteristics of more effective, less controversial character simplifications.

### *Literature Review*

The magnitude of changes involved with character simplification have ensured no shortage of literature concerning Chinese characters and language policy. Most of the literature addresses the history and evolution of simplified characters in both Japan and China, but there is also a growing collection of sources that analyze the methodological and linguistic issues of simplified characters themselves. All of these sources acknowledge the issues present with character simplification, but differ in their recommendations for how to address them.

Ping Chen (1999) in *Modern Chinese: History and Sociolinguistics*, describes in detail modern spoken and written Chinese, offering an analysis of the simplification of the traditional writing system as well. Chen traces the history of character simplification from its roots in the oracle bone script to modern twentieth century reforms, before and after the founding of the PRC. After discussing the principles and techniques used to

simplify characters in China, he tackles the issue of the problems and gains of simplified characters.

One of the stated aims of script reform is to make the script easier to learn, read, and write. However, with the case of the simplification of Chinese characters, these goals may come into conflict with one another. The goal of an ideal writing reform would be to strike a balance between legibility and distinctiveness between characters. Chen states that as some simplified characters became easier to learn and write, they became more difficult to recognize. As the graphic structure of individual characters is simplified, they become less differentiated from each other. Additionally, with the simplified Characters in China, some of the simplified forms offer less accurate or even fewer phonetic clues as to their readings. These examples illustrate how in China, a reduction in strokes was achieved, but at the expense of the graphic structure of the characters.

Despite these problems, Chen states that the majority of simplified characters in China were already familiar to general users before their promulgation in 1956. Furthermore, for most literate Chinese, a reading knowledge of the other script they are not familiar with, either traditional or simplified, is very easy to acquire. He cites evidence that people in Hong Kong and other Chinese communities read materials published in simplified characters in mainland China without many problems in comprehension.

Chen defends the stance that Chinese simplified characters have comprehensively helped to alleviate some of the burden of characters on their learners and users. He

mentions comparative studies that argue that not only it is easier for school children to learn to read and write simplified characters, but it is also easier for adults to acquire literacy with the simplified characters rather than the traditional, more complex characters. Chen concludes that generally speaking, simplified Chinese characters have made characters easier to read, write, and recognize on paper and the computer screen.

William C. Hannas (1997) presents a comprehensive view of the place of Chinese characters in East Asia in his book, *Asia's Orthographic Dilemma*. Hannas covers the history and structure of writing in China, Japan, Korea, and Vietnam, and then moves into a critique of Chinese character-based writing. Here he focuses on the ability of Chinese characters to represent meaning and sound, how they are read, how they are learned, and their appropriateness to different East Asian languages.

The most critical part of Hannas' book is the last section that offers a critique of Chinese character reform, particularly character limitation and simplification. Hannas lists five paradoxes of character limitation that result because characters, lacking well-motivated connections with sound, must depend on their own intrinsic structure to differentiate meaning, which cannot be appreciably reduced if enough redundancy is to remain in the system for it to work.

Hannas cites similar reasons for the futility of character simplification. Character reformers believed that by reducing the number of strokes in certain complex characters, users would be able to more easily learn, write, and remember them. Hannas, however, claims that the reduction in strokes was not worth the other troubles these reforms caused. He states that just as with reducing the total inventory of characters, altering the forms of

characters only succeeded in shifting the difficulties of the character system from one part to another. After surveying linguistic studies concerning common simplification methods, Hannas concludes that character simplification has not benefited the reader or learner to any appreciable degree and with the case of certain damaging simplification techniques, may have even caused a loss of character utility. For Hannas, the only effective way to completely do away with the difficulties of Chinese characters is for the languages that use them to eventually move toward a completely phonetic writing system.

Shouhui Zhao and Richard B. Baldauf, Jr. (2008) offer a more balanced approach toward character simplification in East Asia in their book, *Planning Chinese Characters: Reaction, Evolution or Revolution?* They begin with a detailed outline of modern character simplification history in a political and sociolinguistic context as well as a discussion of language planning policies and activities in China.

Departing from the historical debates over simplification, Zhao and Baldauf, Jr. then analyze what they deem to be the core problem with character reform – the conflict between Chinese characters as a visual communication system and the needs of modern information technology in a digital society. They then discuss four Chinese character standardizations, those of their number, ordering, shape, and pronunciation, as a means to overcome the technological limitations of characters.

Rather than simply accepting government-prescribed language reforms, Zhao and Baldauf, Jr. prefer to incorporate socio-linguistic factors as well as the effects of technology and economics on the direction of character policies. Considering the use of technology in particular both affects the way individual character simplifications are

handled as well as provokes more discussion about potential Chinese character unification across languages and computer standards. Zhao and Baldauf, Jr. conclude that the best course of action for the time being is to establish reliable and trustworthy language policy and planning mechanisms that guarantee democracy and transparency for future character reforms.

As can be seen from this brief overview of the discussion of Chinese character reform, the dialogue of character simplification includes aspects of history and policy-making, but is also turning to modern linguistic understandings of character use and technological considerations. However, most authors present their information and case studies using either the Chinese or Japanese reforms as examples, while failing to attempt to make any meaningful comparisons between the two. Despite their differences, there remain obvious parallels between the Japanese and Chinese experiences with character reform. Comparing the Japanese and Chinese approaches to character simplification may offer a new angle on understanding different simplification techniques and their resultant effects.

### *Methodology*

In order to compare the Japanese and Chinese simplifications, the simplified characters from each official government list were compiled and categorized by type. The Chinese simplifications were taken from the official Complete List of Simplified Characters, or *Jianhuazi zong biao* 简化字总表, published by the Chinese State

Language Affairs Commission, or *Guojia yuyuan wenzhi gongzuoweiyuanhui* 国家语言文字工作委员会, in 1986. The Japanese simplifications were taken from the official recently revised List of Kanji for Common Use, or *Jōyō kanji hyō* 常用漢字表, published by the Japanese Council for Cultural Affairs, or *Bunka shingikai* 文化審議会, in 2010. The characters in the Japanese List of Kanji for Personal Names, or *Jinmei yō kanji* 人名用漢字, are not included because the list pertains only to characters specially tolerated for use in names and not general writings.

Both Chinese and Japanese government lists designate which characters have been simplified and list their traditional and simplified forms. For the purposes of this study<sup>1</sup>, traditional characters will include the forms of Chinese characters used in Japan before 1946 (referred to as old character forms, *kyūjitai* 旧字体 in Japanese) and in China before 1956 (referred to as complex form characters, *fantizi* 繁體字 in Chinese). Simplified characters include the Japanese-simplified forms promulgated in 1946 (referred to as new character forms, *shinjitai* 新字体 in Japanese) and the Chinese-simplified forms first promulgated in 1956 (referred to as simple form characters, *jiantizi* 簡體字 in Chinese).

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<sup>1</sup> Throughout this paper different instances of text in Chinese characters will appear in different formats depending on the nature of the item. For general terms that apply to both Chinese and Japanese or for examples of traditional characters, the traditional character format has been used, appearing in the PMingLiU font. For characters specifically referring to either the Japanese-simplified or Chinese-simplified forms, the appropriate respective format has been used, with Japanese-simplified characters appearing in the MS Mincho font and Chinese-simplified characters appearing in the SimSun font. For the names of organizations or officially released documents issued by either Japan or China, the original respective character format has been maintained.

The simplified characters from both the respective Japanese and Chinese character lists were compiled into two lists. Sections 1 and 2 of the official Chinese list of simplifications contain 480<sup>2</sup> simplified characters plus 14 simplified radical components. The official Japanese list of characters contains 324<sup>3</sup> simplified characters.

The simplified characters on both these Chinese and Japanese lists can be divided into either relatively new creations (mainly developed from the time of modern language reforms in the 1940s and 50s onward) or pre-existing historical characters, or character variants 異體字, that are attested to in historic documents before modern language reforms. To determine which characters can be considered new creations or historical characters, each simplified character was looked up in the Dictionary of Chinese Character Variants, published online in 2000 by the National Languages Committee, Ministry of Education, R.O.C., to see the earliest attestation of that character.

The method used to arrive at each of the simplified characters was also determined. For the Chinese list, the Explanation of Simplified Character Fonts, or *Jianhua hanzi ziti shuoming* 簡化漢字字体說明, by Chen Guangyao 陈光尧, published

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<sup>2</sup> The official number of simplifications from lists 1 and 2 was given as 482 but because the characters 藉 and 鏹 were not simplified according to the methods outlined, they were removed from this count.

<sup>3</sup> The Japanese *Jōyō kanji hyō* lists 355 simplified characters, plus an additional 11 after the addition of 196 characters in 2010, giving 366 simplified forms. However, some of the characters that are identified as being simplified can still be considered traditional characters. For example, the Japanese list marks 禰 as the simplified form of 禰. This second character contains an older form of the radical 示, but the slightly more stylized form of 禰 has become so standard that it is not considered to be simplified by most, but just a matter of font. After adjustments such as these were made, the number of simplifications came to 324.

in 1956, served as the primary reference. For the Japanese list, the Exposition on the *Tōyō Kanji Simplified Forms*, or *Tōyō kanji shinjitai no kaisetsu* 当用漢字新字体の解説, by Hasegawa Motoi 長谷川 基, published in 1955, served as the primary reference. These data were then used to compare the relative frequencies of different simplification methods employed by the Chinese and Japanese sides. The linguistic effects of these different methods were then analyzed.

## CHAPTER 2: BACKGROUND

### *Character Types*

To better understand the structure of Chinese characters it is useful to understand the traditional six principles or *liushu* 六書 method of character classification. In the preface of the *shuowen jiezi* 說文解字 published in 100 AD, the first formal dictionary of Chinese characters, Xu Shen 許慎 defines the six principles and gives examples of each. The first principle listed is *zhishi* 指事 meaning “indicate things.” Characters of this type are graphs which tend to contain dots or strokes that serve to graphically highlight certain salient points of the overall graph that indicate the desired meaning. Examples include the characters for above 上, below 下, and root 本.

The second principle is *xiangxing* 象形 meaning “resemble form.” Characters of this type are graphic representations of actual things and include characters such as those for sun 日, moon 月, person 人, and tree 木. The third principle is *xingsheng* 形聲 meaning “form and sound” and describes characters that are comprised of a semantic radical and a phonetic component. An example is the character for “river” 河 that is made up of the radical for “water” 水 and the phonetic 可 “able” that points to the pronunciation of the overall character.

The fourth principle is *huiyi* 會意 or “associative meanings” type characters. These characters are made by combining different semantic components to indicate a new

overall meaning such as “person” 人 and “tree” 木 combining to form “rest” 休. The fifth principle of *zhuanzhu* 專注 “evolving and deriving” refers to characters that are similar in shape due to shared meanings such as “deceased father” 考 and “aged” 老. The sixth and final principle is *jiajie* 假借 or “loan borrowing” which points to characters that originally depicted one concept with a certain sound, but then that character was borrowed to represent an unrelated but homophonous word. The character 北 is an example. It originally depicted two people back to back, and thus meant “back” but was homophonous with the word for “north” and soon came to only carry this meaning (the character 背 which adds the flesh radical to the bottom of 北, later entered the inventory as a character specifically referring to “back” (Qiu 2000: 152).

It is important to note that while Chinese characters have been long categorized according to the six principles, these categories are not necessarily absolute. There is occasional overlap between some categories and different scholars have placed the same character in different categories. Characters such as 大 “big” that are based on graphic representation (in this case of a man with outstretched limbs) that seemingly fit into the *xiangxing* category, can also fall into the *zhishi* category because they represent words for concepts and not the actual objects they are depicting (Qiu 2000: 154).

## *History of Character Development*

As far back as 4000 BC, symbols referred to as early proto-characters have been found on Neolithic pottery vessels in China. These are believed to be closely related to the earliest precursors to what can be considered Chinese characters proper, the oracle bone inscriptions, *jiaguwen* (甲骨文) that came into being by the Shang dynasty (1600-1100 BC) (Zhao and Baldauf Jr. 2008: 1). These were carved by knife onto turtle shells and animal bones for divinatory purposes rather than serving as a tool for everyday communication.

The first type of symbol to appear was the *xiangxing* type of character, or what Qiu refers to in English as semantographs, because the symbols pictographically represent things. These semantographs include words for everyday aspects of nature such as animals, plants, and the weather. Besides semantographs, simple arbitrary signs were also used to indicate somewhat more abstract ideas such as numbers, which would often be represented by a corresponding number of dots or lines. Qiu says, however, that because the graphic forms of signs have no inherent connection with the words which they represent, they are more difficult to recognize and thus are fewer in number, making them much more limited than semantographs. Despite the usefulness of semantographs and signs however, there were many concepts that could not easily be rendered into such simple depiction.

Qiu cites phonetic representation as the only way to overcome the limitations created by semantographs and signs. In order to communicate concepts that have no

graphs, the graph for a concept with a similar sound to the desired concept was used as a substitute, resulting in characters of the *jiājie* principle. For example, it was difficult to graphically represent the idea for “come” which is pronounced *lai* in modern Mandarin, so the semantograph for the homophonous term “wheat” 來 was used to represent “come” as well. Qiu refers to these graphs that were borrowed for their sound alone as loangraphs. The practice of using loangraphs greatly increased the ability of early Chinese to graphically represent more abstract ideas.

As the inventory of various graphs grew over time, confusion arose over the specific usage of a given symbol. A single semantograph would be used to convey the meaning of several related concepts with completely different sounds such as the early graph for moon representing both “moon” and “evening.” Ambiguity also arose from loangraphs when the reader was unable to determine if a symbol was meant to be used for its semantic or phonetic value. To overcome these two problems, semantic and phonetic indicators were sometimes added to characters, leading to the *xingsheng* class of characters, or what Qiu refers to as phonograms (or phono-semantic characters), characters that combine a phonetic and semantic component.

Radicals, or what Qiu terms semantic significs, were added to some characters to distinguish their different specific usages. For example, the character 云 which originally meant “cloud” was often borrowed as a phonetic loan to represent the meaning “to say.” Over time, it became common practice to add 雨 “rain” to the top of 云 to disambiguate the meaning and show that the character 雲 always referred to “cloud.” With other characters, phonetic elements were occasionally added to make the relationships between

the spoken word and the visual symbol clearer. For example, the character for phoenix, 鳳, was originally only written as  (National University of Tainan 2012) which is a graphic representation of an elegant bird with plumage. To bring this character visually more in line with its pronunciation, the phonetic character “fan” 凡 meaning “ordinary” was added. Eventually the phonetic component was moved to the top and the phoenix portion became simplified and was written the same as a common bird 鳥, resulting in the more familiar phonogram 鳳 “feng” (Qiu 2000: 8). The development of phonograms enabled even higher levels of written expression and marked the start of the development of true formal writing with characters.

The proportion of Chinese characters that belong to each of the six *liushu* categories has changed significantly over time. Semantographs made up 23% of the character types during the Shang dynasty, while phono-semantic characters made up 34% of the characters at that time. As the number of overall characters in use increased over time, so did the proportion of phono-semantic characters. By the 18<sup>th</sup> century, semantographs made up 3% of all characters while phono-semantic characters made up 97% of the inventory (DeFrancis 1984: 84). Thus, there was a clear direction toward favoring the phono-semantic approach of character development which increasingly became the most productive means of creating new characters.

## *Character Simplification*

Over the course of the development of Chinese characters it is important to note that characters as a whole have gone through significant changes in shape, with simplification of characters occurring since the beginning. There have been about five major stages in Chinese character appearance from the time of the oracle bone inscriptions to present day characters.

The earliest form of characters was the previously mentioned oracle bone inscriptions, *jiaguwen* 甲骨文 dating from the Shang dynasty (1711-1066 BC) China. The oracle bone inscriptions were named as such because they consisted of heavily pictographic characters inscribed onto tortoise shells and animal bones for divinatory purposes. As oracle bone inscriptions were a very early stage in the development of Chinese characters, the size, positioning, complexity, and textual format of the characters were inconsistent (Yin 2006: 3).

In the Zhou dynasty (1066 – 256 BC) the bronze inscription, *jinwen* 金文 style of characters began to emerge from the previous oracle bone inscriptions. These characters were found on bronze bells and other ceremonial items. Compared to the oracle bone script, the lines of the bronze inscriptions were rounder, thicker, and smoother. The characters overall were also more symmetrical and had simpler strokes (Yin 2006: 3).

During the Warring States period (475-221 BC) it was common for a single character to have many variant forms in use in different rival states. The Qin state, emerging toward the end of the Zhou dynasty, began to develop a form of characters

known as the seal script *zhuan* *shu* 篆書. This style of script was not only used for inscribing names on seals and precious stones, but also for writing on bamboo strips and pieces of silk. The positioning of characters and their complexity of forms became consistent with the seal script characters, which also tended to be squarer in shape with lengthened and curved strokes. After the Qin state unified China and established the Qin dynasty (221 – 206 BC), the seal script was decreed as the new standard for characters throughout China (Yin 2006: 3).

By the start of the Han dynasty (206 BC – 220 AD) a new form of script had been developed called the clerical script, or *lishu* 隸書. The clerical script originated out of a need for Chinese officials to write the increasing number of administrative documents easier and faster. The major changes in the clerical script were that the previous curved strokes of characters became straighter, the overall number of strokes was reduced, some different components were merged into similar ones, and some components were modified and simplified. This change from the seal script to the clerical script also meant the pictographic appearance of Chinese characters was largely abandoned, and marked the biggest change in the structure of Chinese characters (Yin 2006: 3).

Toward the end of the Han dynasty, the thicker and curvier lines with undulate ends of the clerical script became relatively smoother and straighter. This new character form was even easier to read and write than the clerical script and became widespread with the advent of printing processes. This new regularized form of characters was referred to as the regular script, or *kaishu* 楷書 (Yin 2006: 3). The regular style of character script was favored as the model script for over a thousand years and its

widespread popularity has led to its continued use today as the standard form for characters (Zhao and Baldauf Jr. 2008: 3).

As the regular script was developing during the Han dynasty, cursive forms of character writing also emerged. The semi-cursive form where some strokes joined together was referred to as running script, or *xingshu* 行書, and the even more abstract shorthand cursive forms were referred to as grass script, or *caoshu* 草書 (see fig. 2).

These cursive scripts were an abbreviated auxiliary writing style to the regular forms of characters, mainly used in informal correspondence and as a form of art. Cursive script writing entailed its own unique methods of shorthand techniques. Some of the methods used included omitting parts of a character, merging character strokes while retaining the outline of a character, using dots and short strokes to represent portions of a character, and changing the methods of writing certain character strokes. Cursive script never really replaced the standard script, however, because it was too heavily simplified and the characters were easily misunderstood (Qiu 2000: 130).

	horse	vehicle	fish	deer	see
Oracle bone script					
Bronze script					
Small seal script					
Clearical script					
Regular script					
Running script					
Grass script					

Fig. 2. The evolution of Chinese characters

Source: modified from Ager 2005

Even after the Qin dynasty character unification and throughout the subsequent periods of changes and regularization of character form, the existence of multiple forms of individual characters persisted. From the Han dynasty onward, scholars viewed certain forms of characters as variants or deviations from a standard form, or *zhengzi* 正字. However, a standard only emerges as the result of the prescriptive efforts of an authority. The characters that were selected as the correct forms by the government of a given period were defined as standard forms and all other forms of that character were

regarded as *suzi* 俗字, or popular forms (Galambos 2006: 89-90). However, the preferences for different character forms were not constant, and different characters have been considered standard by different governments in different times and places. Despite these official declarations concerning the correct forms of characters, many people tended to use variant or shorthand versions of the standard characters in their own unofficial writings.

By the Song and Yuan dynasties, merchants, shopkeepers, folk artists, and popular writers were using informally simplified forms of characters which appeared in engraved prints of plays, novels and other popular literature. These forms were so pervasive by the Qing dynasty that scholars taking the civil service examination were warned not imitate these vulgar characters (Seybolt and Chiang 1979: 8-9). Surveys by Chinese scholars before 1956 showed between 1,000 and 1,600 simplified or “vulgar” characters in use, about one-third or more of the character inventory used at that time (Hannas 1997: 20). While such simplified forms enjoyed use among the common people, they were looked down upon by scholars and forbidden by the government. It would not be until modern times that simplified characters would move into official mainstream writing.

The first scholar to systematically attempt to organize existing methods of simplification was Qian Xuantong, who in 1922 organized them into the following eight methods (Zhao and Baldauf, Jr. 2008: 363):

1. Only an outline of the original character remains, with deletion of the extra components: 壽 → 寿
2. Adoption of the existing cursive handwritten characters to replace those that are not only the most used, but also the most complex ones: 書 → 书
3. To represent the whole character by one part of its components. This is to use a portion of the original character to represent the original form: 號 → 号
4. To replace complex parts with simple parts: 觀 → 观
5. To adopt its ancient form, which is simpler: 禮 → 礼
6. To use the phonetic principle by regulating the phonetic compound: 鄉 → 乡
7. To create a new one as a substitution based on the established principles. Established principles refer to the well-accepted methodologies in public to simplify characters throughout history, such as to substitute the complex part of characters by a simpler phonetic compound: 竈 → 灶
8. Replacement of the character with a homophonous one: 幾 → 几

In 1930, Liu Fu and Li Jiarui published a glossary of popular Chinese characters since the Song and Yuan dynasties, or the *Song Yuan Yilai Suzipu* 宋元以來俗字譜, a collection of 6,240 simplified characters used in a dozen publications from the Song, Yuan, Ming, and Qing dynasties. The glossary would serve as an important database from which officially recognized simplified characters would later be selected. In 1935, under the leadership of Qian Xuantong, a glossary of approximately 2,400 simplified characters was compiled that would serve as a reference for the First List of Simplified Characters of 1935 (Chen 1999: 153).

### *Development of Writing Reform*

The nineteenth century was a time of major changes for China and Japan as both nations were exposed to increasing pressure from the West. Contact with Western

nations brought new and revolutionary ideas and technologies to the formerly closed countries. In this time of upheaval, both Japanese and Chinese leaders attempted to cope with the onslaught of new information and possible threats through the reform of education. For hundreds of years, Chinese and Japanese education was based on learning the intricacies of Chinese characters and memorizing the Chinese classics. However, modern problems demanded changes to this system that would provide mass literacy to meet the growing needs of both nations.

In Japan, one of the most critical problems was the urgency of disseminating the new knowledge from abroad through education. Traditional Confucian education was unable to meet the demands of modern times and Japan quickly set to work establishing a national education system which was inaugurated in 1872. Despite the progress made in this modern education system, the complexities of the Japanese language still proved a great hindrance to the educational process, taking up years that could be spent on other subjects. It soon became apparent that “reform of the written language would simplify and shorten the learning process, freeing up valuable time which could be better applied to study” (Twine 1991: 22). Furthermore, with the development of rail, telephone, and postal systems as well as mass communication through newspapers, easily understandable written communication rather than the previous “elite-monopolized, tradition-bound archaic styles with their rigid conventions and limited lexicon” (Twine 1991: 23) would be necessary.

From the Meiji Restoration onward, Japan was clamoring to deal not only with the problems of writing Japanese effectively, but also with the task of putting into writing

new foreign ideas. Seeley writes that “a multitude of new Japanese words needed to be coined for the flood of hitherto unfamiliar concepts, objects and so on from the West, and at the level of the script there was a concomitant need to determine the way of writing such new words” (Seeley 1991: 136). Because of the limited nature of Chinese characters versus purely phonetic writing systems, both Japanese and Chinese had difficulty rendering new foreign concepts and technologies into the languages effectively. Before reforms in areas such as economics or technology could gain significant momentum, the language had to be reformed to adequately meet the basic challenges of literacy.

In Japan, the Meiji period policy toward language included reforms addressing the adoption of the word-writing agreement, *genbun itchi* 言文一致 style, the selection of a standard variety of Japanese, the standardization of the spelling system of *kana*, and the stipulation of the number of kanji (Ho 2004: 139). *Genbun itchi* refers to writing Japanese in roughly the same manner that Japanese is spoken, rather than writing it in the classical historical style that one must be specifically trained in. In Japanese, many regional dialects exist with varying degrees of mutual intelligibility. A modern standard form of Japanese was eventually developed and promoted across the nation. Japanese *kana* spelling was also previously very cumbersome and was based on historical rules that did not reflect modern pronunciation. In 1946 modern kana usage, *gendai kanazukai* 現代仮名遣い, was promulgated, which established new rules for spelling based on the modern standard language (Seeley 1991: 153). Kanji, one of the most complicated parts

of Japanese orthography, were also targeted for reform, mainly through limiting their numbers, standardizing their readings, and simplifying their forms.

Meanwhile, in the early 1900s in China, language reforms were piggybacking on the numerous social movements of the time. Many reformers began promoting vernacular literature, or *baihua* 白話, rather than the classical literary style *wenyan* 文言, that had been in use for centuries, but which the common people could not understand. This *baihua* movement sought to use the vernacular language as a means for addressing the many ills of China at the time, including high rates of illiteracy.

In 1949, the People's Republic of China became a unified state under the CCP, the Chinese Communist Party, and the government enacted its own language reforms seeking to address many of the same problems as Japanese reforms. In 1954, a government language planning committee set out to promote a national standard language, *putonghua* 普通話, introduce a Chinese phonetic alphabet, *hanyu pinyin* 漢語拼音, and simplify the Chinese orthography (Ho 2004: 83). In the territory that comprises the PRC there are 56 officially-recognized ethnic groups speaking a variety of Sinitic and other languages. Because of this high level of mutual unintelligibility, spoken communication in China was problematic. The PRC instituted Mandarin Chinese, already spoken by roughly 70% of the ethnic Chinese population, as the national language to be used in government and taught in schools (Ho 2004: 83). In China, traditionally only Chinese characters were used when writing Chinese. However, the phonetic system of *pinyin* was developed for three main reasons: to help promote the use of *putonghua*, to help eradicate illiteracy, and to standardize Chinese information

processing (Ho 2004: 84). Because Chinese characters are substantially more laborious than phonetic systems due to their number and complexity, as in Japan, they too were targeted for reform in China, mainly by limiting their numbers and simplifying their forms.

Because the use of Chinese characters constitutes a substantial part of the challenges of writing in both Japan and China, many alternatives to characters have arisen as part of language reforms. During the Meiji Restoration there were three main approaches to script reform that inspired large public debate. The first was the exclusive use of *kana*, or *kanagaki* 仮名書き. *Kana*, used in Japan since the 9th century, was an obvious candidate for replacing Chinese characters in modern mixed Japanese script. The idea of officially writing Japanese in all *kana* had been around from the 17th century, but the first official program for exclusive *kana* writing was proposed in 1866 by Maejima Hisoka, who later became the founder of Japan's postal system (Unger 1996: 50).

The second approach toward script reform was romanization. The first person to call for a romanized script was Nambu Yoshikazu who presented two petitions to the Minister of Education in 1871 and 1872. Nishi Amane, who supported the romanization movement as well, asserted that the adoption of the western alphabet would be the best plan “for a Japan which was feverishly adopting western customs and technology” (Twine 1991: 238).

In the early 1880s supporters of both *kana* and romanization movements banded together into societies to support their movements and work out problems of the script

changes. However, despite some progress that was made in gathering supporters and publishing works about their respective plans, both clubs fell apart by the 1890s – the Kana Club falling to internal schisms and the Romaji Club falling victim to the backlash against the over-enthusiastic adoption of western customs at the time (Twine 1991: 231-244).

The third approach to script reform was to limit the number of kanji in general use. The first person to seriously propose a character limitation plan was Fukuzawa Yukichi in 1873. Fukuzawa believed that it would be more effective to start by limiting the more difficult characters wherever possible rather than rushing into sweeping reforms and eliminating characters right away. Fukuzawa calculated that most business could be carried out with just under a thousand characters and he even developed a textbook series that only used 928 characters (Twine 1991: 226).

In China, missionaries had been attempting to transcribe the Chinese language in phonetic terms since the 15th century. The first fullest attempt at romanizing the Chinese language without characters was Aesop's Fables published during the Opium War of 1839-42 by the Rev. Samuel Dyer in collaboration with the Rev. John Stronach (De Francis 1950: 20). There were many problems with the romanization of Chinese, however, including dealing with the issues of homophony, dialects, and tones. In 1892, Lu Zhuanzhang published China's first modern attempt at an alphabetic system. This system used 55 letters based on Western and Chinese symbols, with diacritics for tones covering the sounds of many different Sinitic languages. In 1913, China's "national phonetic alphabet" *zhuyin fuhao* 注音符號 was created and used symbols based on

individual portions of certain Chinese characters to represent twenty-one initials, three medials, thirteen finals, and tone indicators. Phonetic systems such as these, however, were not meant to replace Chinese characters, but rather to aid in their learning.

By far the most successful alternative to Chinese characters has been the *pinyin* system that uses the Roman alphabet with tones indicated by diacritics or numbers. Developed by the PRC and adopted in 1958, *pinyin* is officially used in mainland China for romanizing Chinese, computer input, various educational needs, writing minority languages, international communication, and more. Despite the success of *pinyin* however, it has not supplanted Chinese characters for use in writing Chinese.

Despite the various attempts at replacing Chinese characters in Chinese and Japanese, the characters have persisted to this day. Various arguments abound both for and against their continued use in writing, yet despite movements toward their abolishment, the only real steps taken toward reforming characters in Chinese and Japanese has been in limiting their numbers and simplifying their forms.

Historically, the inventory of Chinese characters has been a dynamic open set. New characters were gradually developed and many variants of characters existed in different locations and in different times. Having no concrete upper limit or restriction on new forms, various dictionaries list different numbers and forms of characters. The first formal dictionary of Chinese characters, the *shuowen jiezi* 說文解字 published in 100 AD listed 9,353 characters, but as time went on, more and more characters were developed, recognized, and added to dictionaries. By 1716 AD the *kangxi zidan* 康熙字典 listed 47,035 characters (Yu and Rohsenow 1994: 47) and served as the basis of most

later traditional character forms. Currently, one of the most comprehensive character dictionaries is the *hanyu da zidian* 漢語大字典 published in 1990, and lists 54,678 characters (Yin 2006: 17). Many of the characters listed in these comprehensive dictionaries, however, are obscure and include characters for words “in dialects, colloquialisms, proper names of people and places, as well as special words for scientific and technological terminology” (Yu and Rohsenow 1994: 52).

For written text to be effective for modern educational and communication needs, literate citizens have to be familiar with the same set of characters. Furthermore, the printing and publishing industries require uniformity and standardization of characters. Variant forms of characters led to printing inefficiencies and because Chinese characters are looked up in dictionaries by stroke count, character variants with differing numbers of strokes led to further confusion.

One of the most prominent ways to standardize Chinese characters was to curtail the number in official use. This was accomplished by promoting a single form of a given character while abolishing its variant forms and merging characters with similar shapes, pronunciations, and meanings into single characters (Yu and Rohsenow 1994: 54). More difficult characters were occasionally replaced with more commonly used homophonous characters such as in Japan where the “*geki*” in the word for stimulus “*shigeki*” originally written 刺戟, was replaced with a different “*geki*” resulting in 刺激 (Seely 1991: 155).

However, despite the reduction in the number of characters these limitations brought about, the problem of intricate and complicated characters remained. These complicated characters were seen as impeding education because of the extraordinary

amount of time they took to memorize and write. To alleviate this problem, government language councils in both Japan and China set out to devise a plan to simplify these problematic characters.

### *Reforms in Japan*

In Japan, by 1900, there was enough significant momentum toward language reform that the Education Ministry set up the National Language Research Council, *Kokugo Chōsa Iinkai* 国語調査委員会. This council was designed to conduct research and surveys and investigate the possibilities of a phonetic script, promotion of the colloquial Japanese writing style, standardization of the Japanese phonetic system, and establishment of a national standard speech (Gottlieb 1995: 12). In 1919 the council announced a plan to consolidate variant character forms and limit the number of characters in use to 2,616. The council director Hoshina Koichi also pushed for the implementation of techniques to remove dependence on Sinitic vocabulary and the homophony it caused. These steps were all taken on the premise that eventually an all-phonetic script would replace characters completely (Hannas 1997: 43).

In 1921 the Interim National Language Research Council, *Rinji Kokugo Chōsakai* 臨時国語調査会 took over the previous council's activities and included not only scholars but enthusiastic members from major publishing bodies that also eagerly sought to reduce the number of characters in regular use (Hannas 1997: 43). In 1923 the council drew up a List of Commonly Used Chinese Characters, *Jōyō kanjihyō* 常用漢字表 that

included 1,960 characters including 154 characters which were simplified. This list was revised in 1925 to include 2,108 characters (Hannas 1997: 43). These attempts at reform however met with many difficulties including the Great Kanto earthquake in 1923 and the Manchurian Incident of 1931, the reporting of which required the use of more Chinese characters to describe names and places for events happening in China (Gottlieb 1995: 13). In 1934, the Interim Council was replaced by the more permanent National Language Council, *Kokugo Shingikai* 国語審議会 that in 1942, produced an informal guideline called the List of Standard Chinese Characters, *Hyōjun kanjihyō* 標準漢字表 that consisted of 2,669 characters (Hannas 1997: 43).

Despite the significant progress made toward establishing standard lists of characters since 1900, none of these lists became official policy until after the war. With Japan's defeat, the biggest obstacle to reform, the "ultranationalists and their unswerving support for the literary norms of the past" (Gottlieb 1995: 14) were now gone and the intellectual and political climate favored instituting these policies that had been long in the making. The desire to break with the conservative ways of thinking that led to war combined with the concept of democracy imposed by the American occupation provided a powerful argument in favor of script reform. A cycle of renewed reforms targeting the difficulties of the existing script system was thus begun in 1946 (Gottlieb 1995: 15).

In 1946, the National Language Council promulgated the List of Chinese Characters for the Time Being, *Tōyō kanjihyō* 当用漢字表 (see table 2.1) that contained 1,850 characters, of which 131 were simplified forms (raised to 313 in 1949) (Hannas 1997: 227). The new simplified forms were referred to as new character forms, or

*shinjitai* 新字体 while the traditional forms of the characters were referred to as old character forms, *kyūjitai* 旧字体 or correct character forms, or *seijitai* 正字体.

Table 2.1 Japanese simplification schemes

	<i>Tōyō</i> Kanji list	<i>Jōyō</i> Kanji list	<i>Updated Jōyō</i> list
Year Published	1946	1981	2010
Characters Simplified	131 characters, later raised to 313 by a 1949 change	Raised to 355 characters	12 additional, 367 in total (324 adjusted)
Organizations	National Language Council	National Language Council	National Language Council
Final Result	Became standard list until <i>Jōyō</i> Kanji List	Served as modern standard	Updated modern standard

The *Tōyō* Kanji list was intended as a transitional step toward complete romanization, but it and other subsequent directives also served to ameliorate several of the orthographic problems with Japanese at the time. In 1972, the council clarified that the *Tōyō* Kanji list would not be restrictive, define usage for science, arts, or individual persons, or apply to pre-modern Japanese (Hannas 1997: 47). After further deliberations over the years, the *Jōyō kanji* 常用漢字 list was issued in 1981. The *Jōyō* Kanji list made some revisions to the *Tōyō* Kanji list (including a few additions, removals, and combining of some characters) and until 2010, consisted of 1,945 characters, 355 of which were simplified. In 2010, 5 characters were removed from the list while an

additional 196 were added, bringing the new *Jōyō* Kanji list total to 2,136. The *Jōyō* Kanji list remains the standard list of official characters and character forms today.

### *Reforms in China*

The first modern movements toward official character simplification in China began in the early 1900s. In 1909, Lu Feikui garnered attention for his plans to limit the number of characters in use to 2,000 and simplify some of their forms. In 1922, Qian Xuantong presented plans for simplification as well, eventually calling for outright phoneticization (Seybolt and Chiang 1979: 9). Around this time, the traditional form of characters had their name changed from standard or correct, characters, *zhengzi* 正字 to complex form characters, *fantizi* 繁體字. The characters that were officially simplified were referred to as simple form characters, *jiantizi* 簡體字 rather than the previous vulgar characters, *suzi* 俗字, to try and boost their validity (Wilkinson 2000: 420).

The many movements for script reform around this period forced the Nationalist or *Guomindang* 國民黨 government, to issue the official First List of Simplified Characters, *Diyipi Jiantizi Biao* 第一批簡體字表 in 1935. This table contained 324 relatively conservative simplified forms drawing from Qian Xuantong's 1935 list of simplifications. According to official statement, three principles were followed by the Nationalist Government when it promulgated the First List of Simplified Characters in 1935. "First, all the simplified characters granted the status of standard had to be already

in widespread use among the masses. There would be no recognition of newly simplified characters. Second, only those in most popular use were selected. Third, characters that were already quite simple in graphic shape would not be further simplified” (Chen 1999: 156). On the basis of these principles, the government’s role in simplifying characters was only to collect and implement already existing characters from historical texts or public writings, rather than creating new forms (Zhao and Baldauf Jr. 2008: 40).

The First List of Simplified Characters, however, never came into common use due to the increasing conservatism of the Nationalist government that “took measures to deter all aspects of language reform other than promoting a unified national spoken language” (Seybolt and Chiang 1979: 9). Although the list was quickly withdrawn and never came into general public use, it was effective enough that over 80% of the 324 characters were also adopted in the eventual 1956 First Simplification Scheme (Zhao and Baldauf Jr. 2008: 40).

After coming to power in 1949, the Chinese Communist Party supported language reform which it saw as a method to achieve literacy and a unified standard national language. In 1951, Chairman Mao Zedong gave a clear directive: “The written language must be reformed; we must proceed in the direction of phoneticization being taken by all the languages of the world” (Seybolt and Chiang 1979: 47). While this goal was more long-term, the CCP also worked to address the more immediate goal of simplifying characters to achieve greater literacy. In 1954, the Committee for the Reform of the Chinese Written Language was created and in 1955, along with the Ministry of Education, they held the National Conference on Script Reform, *Quanguo Wenzhi Gaige Huiyi* 全國

文字改革會議 and the Symposium on the Standardization of Modern Chinese, *Xiandai Hanyu Guifanhua Xueshu Huiyi* 現代漢語規範化學術會議 (Zhou 2004: 23). The first conference resulted in the Revised Draft of the Scheme for the Simplification of Chinese Characters *Hanzi Jianhua Fang'an Xiuzheng Cao'an* 漢字簡化方案修正草案 as well as the Draft of the List of the First Set of Variant Characters to be Standardized *Di Yi Pi Yitizi Zhengli Biao Cao'an* 第一批異體字整理表草案.

According to Wu Yuchang, the Director of the Committee, the Draft Scheme was published “for the purpose of soliciting opinions on an extensive scale. More than two hundred thousand people in various walks of life throughout the country took part in the discussions” (Reform of the Chinese Written Language 1958: 32). In 1956, after considering the responses and making necessary revisions, the First Chinese Character Simplification Scheme, *Hanzi Jianhua Fang'an* 漢字簡化方案 (see table 2.2) was approved (Zhou 2004: 23). This Scheme listed 544 characters, 29 of which were abolished, and 515 simplified (Seybolt and Chiang 1979: 10).

In further simplifying characters, the 1956 simplification scheme generally followed the same simplification methods as the First List of Simplified Characters from 1935, but introduced newly simplified forms and “to conform with Mao’s directives, the simplified shapes made extensive use of the popular running and grass script cursive writing styles as well as substituting characters by others with the same pronunciation” (Zhao and Baldauf Jr. 2008: 45).

The great number of radical language reforms around 1956 may be correlated with the period of relative intellectual freedom in the mid-1950s, when intellectuals were

encouraged to participate in the building of the new China, including the Hundred Flowers Movement. However, as criticisms of the CCP began to emerge from this discussion, the CCP cracked down on intellectuals with the Anti-Rightist Campaign in 1957. This, combined with the devastating effects of Mao's Great Leap Forward (1958-1961) resulted in dissatisfaction with Mao's policies and a severely repressive political climate that limited further discussion and evolution of previous language policies until the mid-1960s when he came back to power (Zhou 2004: 25).

Thus, it was not until 1964 that the General Table of Simplified Characters, *Jianhuazi Zongbiao* 簡化字總表 was finally published. This table was a complete list of 2,236 characters simplified according to the principles and examples put forward in the 1956 scheme. The list was divided into three sections. Part 1 lists 230 simplified characters that were already being used in Communist Chinese publications and these were ordered to be used immediately in all publications across China. Part 2 lists 285 additional simplified characters that would be phased into use. Part 3 lists 54 simplified character-components, *pian pang* 偏旁 that indirectly simplify a large number of other characters (Hsia 1956: 2).

Table 2.2 Chinese simplification schemes

	First Simplification Scheme	General Table of Simplified Characters	Second Simplification Scheme (Failed)	Current Updated Scheme
Year Published	1956	1964	1977	1986
Characters Simplified	544, 29 to be abolished, and 515 simplified	230 characters for immediate use (list 1) 285 characters for trial use (list 2) 54 components (list 3)	248 characters for immediate use 605 characters for trial use	List 1: 350 characters List 2: 132 + 14 characters used alone/component List 3: 1,753 characters using components from list 2 (2,234 total)
Organizations Responsible	PRC Ministry of Education, Commission for Chinese Script Reform	PRC Ministry of Education, Commission for Chinese Script Reform	Some appointed members in the Commission for Script Reform	Chinese State Language Affairs Commission
Final Results	Simplifications served as guide for 1964 Table	Combined lists yielded 2,236 simplified characters. Updated in 1986.	Stopped and officially repealed in 1986	Current standard

Source: modified from Zhao and Baldauf Jr. 2008: 29

After the 1964 list of characters was published, China was already moving toward the Cultural Revolution (1966-1976). During this time, educational institutions were severely disrupted and intellectuals were criticized and limited in their scholarly activities.

Between 1966 and 1976, the National Committee on Script Reform mostly did not meet, and virtually no substantive works were released. During this time, some working staff members of the offices of the Committee in Beijing worked without consultation from senior members of the Committee or from the general public to produce the Second Plan for Simplifying Chinese Characters, *Dierci Hanzi Jianhua Fang'an* 第二次漢字簡化方案 (Zhou 2004: 27-29).

The 1977 scheme (see table 2.3 for examples) listed 853 newly simplified characters and 61 simplified character components. The scheme was divided into two lists. The first list included 248 characters that were supposedly already widely used in writing. The second list with 605 characters was to be promulgated after gauging the response of the people to these new characters (Zhou 2004: 28).

Table 2.3 Failed 1977 simplifications

Traditional Form	1977 Simplified Form
酒	𠂇九
私	厶
儒	亻入
戴	代

Source: data compiled from Zhao and Baldauf Jr. 2008: 337

The major differences between the 1977 list and the 1964 list was that the 1977 plan proposed many new forms of characters, made heavy use of homophone substitution and dual readings for characters, and modified commonly mispronounced characters by using more easily identifiable phonetic elements (Hannas 1997: 22). The public found many of these new simplified characters too great in number, unfamiliar in form, and too radical a change after the chaos of the Cultural Revolution had just concluded (Zhou 2004: 29). Opponents to the 1977 plan were also concerned that this wave of reforms was preparatory to replacement by an alphabet because of the similarity of the new changes in principle to phonetic writing (Hannas 1997: 24). The 1977 scheme was thus withdrawn within six months of its approval because of widespread criticism and opposition.

The Committee reconvened in 1980 and set out to revise the ill-received 1977 simplified characters but they were eventually just abolished in 1986 (Zhou 2004: 29). The original 1956 list that had been republished in 1964 was again republished with minor corrections (including a few characters that reverted to their traditional forms) in 1986. The final 1986 round of simplifications was made up of three individual lists. List 1 contains 350 simplified characters to be used alone. List 2 contains 132 simplified characters that can be used alone or as components of other characters to simplify them by analogy. List 2 also contains 14 simplified character radicals that are not to be simplified on their own (if they are useable alone), but are to be simplified when they occur in other characters. List 3 contains 1,753 other characters that were simplified by analogy using the simplified characters and radicals from List 2. The simplified

characters in List 3, however, are just examples and not an exhaustive list of List 2 derivations. If any character can be simplified according to the rules in List 2, and it doesn't already appear on List 1, then it should be simplified as such.

The 1986 simplification is now “the standard for all newspapers, periodicals and modern language books written in modern Chinese throughout mainland China” (Zhou 2004: 22). From that point in 1986 onward, the Committee decided that “a much more ‘cautious attitude’ to character simplification would be taken in the future and – while some individual characters might be simplified on a case by case basis – no more large scale simplification schemes on the order of the first and second schemes would be attempted” (Zhou 2004: 29).

## CHAPTER 3. ANALYSIS

### *General Comparisons*

Taking the complete 2,136 characters from the *Jōyō* Kanji list, 324 are simplified forms meaning that around 15.1% of the commonly used characters in Japan are simplified. In China, the number of commonly used characters is much harder to estimate because there are no government-sanctioned upper limits as in Japan. The number of characters one uses on a daily basis is highly dependent upon ones educational level and area of work. However, around 3,500 characters cover around 99% of most texts (Kao, et al 2002: 195). Determining the percentage of simplified forms among these commonly used characters is difficult however, because the *Jianhuazi zong biao* contains around 500 simplified forms plus simplified radicals that are to be applied through analogy to other characters containing those radicals. Only taking the explicitly listed 2,234 simplified forms from the 3,500 needed to read 99% of any material gives approximately 63.8% of common use characters simplified (see table 3.1).

Table 3.1 Number of characters simplified

	Total Characters for 99% Coverage	Number Simplified	Percent of Total
Japanese	2,136	324	15.1%
Chinese	3500	2234	63.8%

It is difficult to directly compare the Japanese and Chinese lists of simplified characters because Japanese and Chinese do not commonly utilize the same characters. A study of the 1,850 most common Japanese characters and 2,000 most common Chinese characters found that while 1,425 characters were common to both lists, the Japanese list contained 425 characters not on the Chinese list, or 23% of the characters on the Japanese list were not on the Chinese list. About half of these characters are ones used in classical Chinese but have since been replaced by vernacular characters in modern China while modern Japanese still retains their use. The other half of the 23% on the Japanese list aren't on the Chinese list because their level of frequency in Chinese simply doesn't put them in the 2,000 most commonly used characters (Chu 1969: 17).

Looking at the majority of characters that are commonly used in both Japan and China however, it is worthy to note that the same characters were not necessarily selected for simplification on both sides. Some traditional characters were simplified on one side but not the other, some characters were simplified in both places in the same manner, and other characters were simplified in both places but in different ways (see tables 3.2 to 3.5 for example characters).

Table 3.2 Characters simplified in China only

Traditional	Japanese Unchanged	Chinese Simplified	Gloss
電	電	电	electricity
書	書	书	writing
療	療	疗	heal
護	護	护	protect
義	義	义	righteousness

Table 3.3 Characters simplified in Japan only

Traditional	Japanese Simplified	Chinese Unchanged	Gloss
壹	壹	壹	one
假	仮	假	false
乘	乗	乘	ride
佛	仏	佛	Buddha
黑	黒	黑	black

Table 3.4 Characters simplified in both Japan and China in the same way

Traditional	Japanese Simplified	Chinese Simplified	Gloss
點	点	点	point
國	国	国	country
學	学	学	study
醫	医	医	doctor
體	体	体	body

Table 3.5 Characters simplified in both Japan and China in different ways

Traditional	Japanese Simplified	Chinese Simplified	Gloss
藥	薬	药	medicine
劍	劍	剑	sword
讀	読	读	read
亞	亜	亚	Asia/secondary
價	価	价	value

While coincidence may have played a role in some of the characters that were simplified in the same fashion in Japan and China, Zhou Enlai, Chairman of the National Committee of the Chinese People’s Political Consultative Conference, in his speech delivered in 1958 is quoted stating “we have also adopted a number of Chinese characters

which have been simplified by the Japanese” (Reform of the Chinese Written Language 1958: 13). One example of this borrowing is with the character for country 國. This character was originally comprised of a border 口 with the phonetic 或 inside. The 1935 Table of Simplified Characters proposed a simplified form consisting of “king” 王 inside the square rather than the previous 或, and this form was considered for use in the 1956 reforms. However, some people objected to this form because they felt it was unsuitable to use the graphic for a king in a socialist country. Eventually, the Japanese simplification of this character, which used jade, 玉 rather than king 王, was selected and officially adopted (Zhao and Baldauf Jr. 2008: 83).

In terms of the different number of characters simplified by each side, it logically follows that the Japanese side did not require as many simplifications overall. While both sides eliminated redundant characters and replaced infrequent characters with more common characters, Japanese still uses fewer characters overall than Chinese due to the existence of the Japanese *kana* syllabaries as an alternative to characters, something that Chinese lacks.

### *Similarities*

Despite the differences mentioned above in the Chinese and Japanese character simplification schemes, they share certain points of similarity. Both movements toward simplification had similar impetuses – contact with the West, modernization, and social

liberalization. Both reforms were also only implemented after large-scale shifts in power structure – new post-war leadership in Japan and the rise to power of the Communist party in China.

Intellectuals in both governments saw character simplification as a step on the path toward eventual complete phoneticization, but both movements ended up reducing the number of overall characters in use and simplifying characters rather than pursuing other kinds of scripts. Both movements were also top-down promotions of simpler forms of characters whereas historically the common people wrote in simpler forms while the government and intellectuals protected the traditional and more complex orthodox forms.

### *Differences*

One critical difference between the Japanese and Chinese simplification schemes was the historical background that each scheme developed under. When Japan introduced its simplified characters in 1946, the country was operating under a completely different set of circumstances than China was in 1956, when it introduced its simplified characters. In 1956, China was still trying to work out several fundamental issues that Japan had already moved past, including establishing a national standard language and eradicating illiteracy.

Japan had the benefit of already high levels of literacy in the middle of the 19<sup>th</sup> century. With the establishment of a modern education system from 1872, virtually all

Japanese children were in school, which was compulsory and free, by around 1907, leading Japan to achieve universal literacy by the early 20<sup>th</sup> century (Hayhoe 1992: 23). Conversely, the modern school system was only officially established in China in 1904, when it was completely modeled after the Japanese system of that time (Hayhoe and Bastid 1987: 57-62). The mass literacy rates in China were also severely behind those in Japan. The third national census of the PRC taken in 1982 suggested that up to 31.8% of the adult population of China (twelve years of age and over) was illiterate or only semi-literate (Hayhoe 1992: 23).

Therefore, one major difference between Japan and China's simplification schemes was that Japan's was released when the majority of the population was already literate. This could mean that there was a propensity to keep the new forms somewhat similar in appearance to the old forms, but it also meant that one of the aims of the simplifications was not to achieve literacy, but rather to standardize and simplify the script for the user's sake. In China, however, there may have been fewer drawbacks to radical character changes because such a great proportion of the population was still illiterate. Furthermore, one of the goals of the simplifications appears to have been to help the public more easily achieve literacy in Chinese characters. While supporters of simplification point to the increased literacy rates in China after the introduction of simplified characters, it is difficult to directly assess the effects of character simplification on literacy in China because the reforms coincided with massive modernization schemes and improvements in education. Opponents of simplification

also point out that Hong Kong and Taiwan were able to achieve mass literacy with improvements in education as well, but while still using traditional characters.

Another difference between the Japanese and Chinese governments' approach to character simplification was that the main thrust of the Japanese efforts was directed at limiting the number of characters in use while the developers of the Chinese system created a specific list of simplifications (list 2) to apply to all characters. The Japanese government was not concerned with creating components to simplify other characters by analogy because they did not even technically recognize the characters not on their official list (Hannas 1997: 228).

Hannas cites two reasons why the Japanese were able to devise a restrictive list of characters while the Chinese were not. The first reason is because the Japanese language has *kun* readings and multiple-word representation where characters that represent *kango*, or Sinitic compounds, are also used to represent native words. In other words, in Japanese, more words are covered by fewer characters. The second reason is because in Japanese, users have the second option of writing words in an established phonetic script, and not just in Chinese characters (1997: 216).

Because of this difference in approach – Japanese toward limitation and Chinese toward standardization, the two simplifications apply to different ranges of characters. The Japanese simplifications were only limited to the characters selected for simplification from the *Jōyō kanji* list. Extra-list characters, known as *hyōgaiji* 表外字 were unaffected, even if they contain portions that tend to be simplified. For example, the character 區 is simplified to 区 in the Japanese *Jōyō* list, as are the following three

characters that contain this component and are also on the list: 歐 毆 驅, which are simplified to 欧 殴 驱. However, the character 嫗 which contains the element 區, is not on the *Jōyō* list, and so remains as 嫗.

Extended simplifications of *shinjitai*, known as *kakuchō shinjitai* 拡張新字体 exist, but are not officially endorsed by the Japanese government, nor universally supported by Japanese computer character sets. These are occasionally used by some organizations such as Asahi Shimbun, which might choose to simplify the character 檜 to 桧 based on the character 會 being simplified to 会 on the *Jōyō* list.

The Chinese lists of simplifications, however, are divided into sections that dictate the usage of specific characters. The characters on list 1 are given specific simplifications to only be used in that specific context. For example, the character 習 on list 1 is simplified to 习, but that does not mean that through analogy the right-hand portion of 褶 can be simplified in the same manner.

The characters on list 2, however, are simplified in the given manner themselves, as well as when they appear in other characters. For example, the character 愛 on list 2 is simplified as 爱 and all characters that contain this character must be simplified accordingly, such as 曖 simplifying to 暖. The only exemption from this rule is if a given character was already simplified according to a different method and was specifically listed in list 1. For example, 單 is a list 2 character simplified to 单. The character 戰 however, is not simplified using this component because it was already simplified to 战

in list 1. List 2 also contains 14 simplified radicals such as 金 or 𠂔 which are to be simplified when they appear in other characters as well. Because of this system, there is no upper limit to the Chinese simplifications. The characters given in list 3 that make use of these analogies are just example derivations. Any character with a component or radical in list 2 should therefore be simplified in that manner. This is in contrast with the Japanese rules that confine the simplifications to a specific list that is only to be adhered to in certain situations.

Another difference between the Japanese and Chinese simplifications is the relative acceptance of each scheme. After the *Tōyō* kanji list was promulgated in Japan in 1946, there were some conservative opponents who were staunchly against any changes, as well as reformers who wished to see even more drastic reforms. However, most intellectuals, general citizens, and especially industries such as printing, readily took up the new forms and there were only minor modifications to the list over time.

In the first decade after its introduction, the council that promulgated the *Tōyō* kanji list considered modifying some of the entries based on the experiences and feedback from scholars and the public who had begun using the new system. Most of the debates surrounding the list were about the inclusion or exclusion of specific characters and the total number of characters to be used overall, and not any specific methods of simplification used to arrive at simplified character forms (Gottlieb 1995: 155). One of the other criticisms the *Tōyō* kanji list faced was that it did not allow enough freedom of choice for the characters used in personal and place names. In 1951 a subcommittee set up by the Council established a list of 92 additional characters commonly used in names,

called the *Jinmeiyo kanji*. Characters for names could then be selected from either the *Tōyō* or *Jinmeiyo* kanji lists (Gottlieb 1995: 151).

From 1951 to 2010, several characters were periodically added to the *Jinmeiyo* kanji list, and others were moved from the list to the official *Jōyō* kanji list. As of 2010, there are 631 official *Jinmeiyo* kanji, 230 of which are the traditional or alternate versions of simplified characters on the *Jōyō* and *Jinmeiyo* lists, such as 鳴 also being listed as a viable alternate form for 島.

Perhaps because the Japanese language was not split across political boundaries where one side was using traditional characters and the other was using simplified, the new simplified forms were taken up relatively easily. Furthermore, the Japanese simplified forms were not too drastic or dissimilar from the traditional forms, and were primarily derived from historical variants already commonly in use and known by the broad populace. Additionally, traditional characters were not banned outright and many were still available for use in names, the one area the public appeared to be the most concerned about traditional character forms. Because of these reasons, the adoption of Japanese simplified characters was only met with limited opposition.

In contrast, the Chinese simplifications resulted in thousands of characters, even relatively simple ones, being simplified into forms that did not always resemble historical characters. While some simplified characters were already in common use and did not present any problems, other characters were seen by the public, and scholars in particular, as less familiar, confusing, aesthetically unappealing, and culturally damaging, as they created a rift with the past. While issues of communication with those using traditional

characters understandably were not considered during the socio-political times of the 1950s, after China's opening during the Deng Xiaoping era after 1978, the problems of communication between the mainland and external areas became readily apparent. The Chinese simplified characters have created a cultural barrier "both within China and in other character using regions, and has led to international communication barriers in the East Asian region" (Zhao and Baldauf Jr. 2008: 49). Because of these reasons, Chinese simplified characters still face criticisms today and have been the target of continued calls for reform by mainland Chinese government groups as well as Chinese and international scholars.

In recent years at the annual meetings of the Chinese National People's Congress and Chinese People's Political Consultative Conference, various movements have been brought forward to reform the simplified characters or move back toward traditional characters. During the 2008 meeting, 21 members of the CPPCC National Committee jointly submitted a report proposing the re-introduction of education of traditional characters in primary schools. The basis of the report was that knowing the traditional characters improved understanding of Chinese culture and helped bridge the gap caused by the simplified-traditional character divide. The Minister of Education, Zhou Ji rejected the report, however, stating that the national policy of promoting simplified characters and Putonghua must be followed (Cui 2008).

Scholars and representatives from mainland China, Taiwan, Japan, and Korea attended the Eighth Annual International Conference of Chinese Language Study in Beijing in 2007. The topics of discussion at the meeting included reaching agreements

on a common dictionary and standardizing a set of 5000-6000 characters across all countries. While there were no official decisions made at this conference, it was still a step forward because the mainland Chinese opinion appeared to be changing from outright denying traditional characters to trying to best accommodate the existence of both traditional and simplified forms (Luo 2007).

While the Chinese government is not taking steps toward re-introducing traditional characters, citing among other reasons the immense educational and financial costs involved, it does recognize the difficulties caused by the problematic simplifications of certain characters. In 2009, the Chinese government sought to adjust the list of simplified characters, proposing to add back three traditional forms. Moves like these aim to remedy certain problems with the simplified forms. Ning Wang, the vice director of the Institute of Linguistics under the Chinese Academy of Social Science stated that "one of the problems we are trying to address here is over-simplification of some characters. They actually made themselves even harder to be understood in some cases." However, she also stated that there was no need to switch back to traditional characters or simplify any characters further, but that the top priority is to improve and standardize the current simplified characters, such as by modifying or eliminating the particularly problematic ones (Wu et al. 2009).

### *Methodological Differences*

One of the biggest differences between the Japanese and Chinese simplifications was in the methods used by each side to achieve the various simplified forms. Using the two character lists and calculating the percentages of each type of method employed resulted in the following statistics:

#### Historic vs. New

Out of the 324 Japanese simplified forms, 10 characters, or 3.1% overall (see table 3.6) were found to be relatively recent creations, not being attested to in the database used in this investigation. These new forms include characters such as 続 (續), 転 (轉), and 獵 (獵). However, by far, most of the Japanese simplified forms came from pre-existing historical character variants.

Out of the 480 Chinese explicitly simplified forms from lists 1 and 2 of the 1986 character list, 91 characters, or 18.9% were found to be relatively recent creations using the same database. These new forms include characters such as 毙 (斃), 飞 (飛), and 粪 (糞). Wilkinson (2000: 421) found roughly similar results when analyzing the 1956 simplified forms, identifying 20% of the characters as being devised after 1949 (and roughly 30% from pre-Qin and Han times, 40% from between Han times and 1911, and 12% from the Republic times).

Table 3.6 Percentage of new characters

	Japanese List	Chinese List
Percent of New Characters	3.1%	18.9%

### Consistency

Both the Japanese and Chinese simplification lists contain internal inconsistencies – times when parts of certain characters are simplified one way, but then simplified different ways in other characters. Adding on the 4 inconsistencies from the 2010 *Jōyō* kanji additions to the 14 inconsistencies from the Japanese simplified characters identified by Pye (1971: 223), there are around 18 instances of inconsistent simplifications in the Japanese list (see table 3.7). Most of them are of the type where a component of one character is simplified one way, but not in all characters that contain that component. Examples include the right portion of 假 being simplified to 仮, while the similar right portion of 暇, remained unchanged. The characters added to the *Jōyō* kanji list in 2010 brought about more instances of these inconsistencies because some of them retain their traditional shapes. For example, on the previous *Jōyō* kanji list, all occurrences of the character component 𠂔 (but not the character itself, which is not on the list) were simplified in this manner in the following characters: 錢 (錢), 淺 (淺), 殘 (殘), and 踐 (踐). However, when 箋 was added to the *Jōyō* list in 2010, it was not simplified according to this principle and retained its traditional form.

On the Chinese list, there were many more cases of inconsistencies. Peng (1987: 69-93) lists approximately 93 instances. The character 車 which is normally simplified to 车 alone and in the cases of 软 (軟) and 载 (載), disappears completely in the examples of 范 (範) and 运 (運) which were simplified based on phonetic principles. Furthermore, the character 盧, pronounced *lu*, is replaced by 卢 in all characters of which it is a part, including 垆 (壚), 泸 (瀘), 栌 (櫨), 舻 (艫), yet in these 4 characters, 盧 is instead replaced with 户: 芦 (蘆), 炉 (爐), 庐 (廬), 驴 (驢), despite all characters having the identical pronunciation of *lu*. These 93 inconsistencies also do not account for the systematic (yet still resulting in inconsistent) simplifications that result from simplifying some character components according to one principle on list 1 and others according to a different principle on list 2. For example, because 過 was simplified to 过 on list 1, it cannot follow the pattern of other characters with 𠂔 as a component where the 𠂔 becomes 𠂔. Even though this process follows the outlined rules, it results in inconsistencies in the set of characters as a whole.

Table 3.7 Cases of inconsistencies

	Japanese List	Chinese List
Cases of Inconsistencies	18	93

Another aspect of inconsistent character simplification in the Chinese scheme was the use of the sign replacement technique. With this technique, not included in the above counts of inconsistencies, a given component arbitrarily stands in for entire sections of

completely unrelated characters. A good example is in the Chinese simplified character list where the more complex left-hand side of the character 觀 was replaced with the two-stroke character 又, resulting in 观. In fact, many instances of the character component 勸 (but not when standing alone) were simplified by replacing them with 又, including 勸 (劝), 權 (权), and 歡 (欢). However, 又 was also used to replace the complex portions of the following unrelated characters: 對 (对), 觀 (观), 僅 (仅), 鄧 (邓), 雞 (鸡), 樹 (树), 戲 (戏), 聖 (圣), and 鳳 (凤).

### Stroke Reduction

One of the key components of character simplification is the reduction in strokes required to write them. Of the 2,236 simplified characters from the 1986 General List of Simplified Characters, the average number of strokes was reduced from 15.6 to 10.3. However, when taking the 2,000 most commonly used characters overall, including traditional and simplified forms, the average stroke count fell from on average 11.2 to 9.8 strokes (Chen 1999: 157). While the original average number of strokes per character was not given for the Japanese side, Gottlieb (1995: 146) gives the average number of strokes per character after simplification in Japan as being 10.2.

The methods used to achieve stroke reduction are numerous, as discussed earlier, but one of the most commonly used methods by both sides was implementing cursive script forms of characters. The cursive script forms of characters tend to merge complex

or difficult strokes into fewer strokes that can be written faster. From the Japanese list, about 116 simplified characters are cursive script forms, or around 35.8% of the total simplified forms. From the Chinese list, approximately 117 characters come from cursive script forms, or around 24.4% of the total characters (see table 3.8).

Even when basing simplifications on cursive script forms, because there are multiple cursive forms that have been in use for centuries, there are a multitude of different cursive script options. For example, the character 樂 has many cursive script variations. The form adopted in Japan was 楽 while the form adopted in China was 乐, resulting in two different characters even though both are cursive script variations. As seen in this example, one could classify cursive script forms into those that affect a relatively limited portion of the character, as with the example of 樂, or those that affect the general outline or entire character, as with 乐. From the Japanese 116 cursive script simplifications, 99 characters, or 85.3% are of the portion type and 17, or 14.6% are of the whole type. From the Chinese 117 cursive script simplifications, 57, or 48.7% are of the portion type and 59, or 50.4% are of the whole type.

Table 3.8 Percentages of types of cursive script forms

	Japanese List	Chinese List
Total Cursive Script Simplifications	35.8%	24.4%
Character Portions	85.3%	48.7%
Whole Character	14.6%	50.4%

With the cursive script technique, many different character components become simplified and can actually end up looking similar or the same. The running script form adopted in Japan for the characters 學 and 覺 reduces the top portion to three dots, resulting in 学 and 覚. However, the running script form of the unrelated character 榮 is 荣, where the top portion becomes the same three dots as the first two characters. This can lead to several different characters appearing to share similar components when their traditional forms were different.

### Phonetic Simplifications

The last technique to be discussed here is phonetic simplifications, where the sound values of the phonetic portions of characters are utilized to achieve simplification. Looking at both the Japanese and Chinese lists, each instance of phonetic simplifications was calculated. For this study, the definition of a character simplified through phonetic means included four types of characters: homophonous characters that were merged into a single character, such as 發 and 髮 both becoming 发; characters that had a radical and phonetic and are homophonous with their phonetic components, and lose their radicals and become the same character as their phonetic, such as 麵 *mian* losing its wheat radical 麥 and becoming part of the character 面 *mian*; characters with a complex phonetic that was replaced with a homophonous or nearly homophonous component that is easier to write, such as the 登 portion of 證 being replaced with a similar sounding 正, resulting in

証; and characters that never contained a phonetic element, but were given one in their simplified forms in place of a semantic component, such as the right side of 徹 *che* being replaced with 切 *qie* resulting in the simplified form 彻.

From the Japanese list, 31 out of the 324 characters, or 9.6% were simplified using phonetic techniques (see table 3.9). Out of these 31, 4, or 13%, were new phonetic substitutions with no historical attestation. From the Chinese list, 203 out of the 480 characters, or 42.3% were phonetically simplified. Out of these 203, 47 were new, meaning 23.1% of the phonetically simplified characters were new creations. Given that there were 91 new characters overall, 51.2% of the new characters were phonetically simplified. From the 10 new characters on the Japanese list, 4 were phonetic, meaning 40% of the new Japanese simplifications were phonetic.

Table 3.9 Percentage of phonetic simplifications

	Japanese List	Chinese List
Phonetically Simplified	9.6%	42.3%
Percent New	13%	23.1%

DeFrancis (1984: 88) classifies Chinese characters as a morphosyllabic system of writing, where each character typically represents one morpheme and one syllable. Because Chinese readers tend to associate single pronunciations with single characters it seems intuitive that characters may be switched or altered based on graphically different

but similar-sounding characters. While this phenomenon exists with Japanese readers as well through the Chinese-style *onyomi* readings of kanji, there is often more than one *onyomi* for a given kanji as well as a handful of *kunyomi* native Japanese readings as well. It is possible that because of the way Japanese uses Chinese characters in this fashion that phonetic substitution of characters is comparatively less common in Japanese character simplification.

### *Linguistic Effects*

#### Historic vs. New

The simplifications on the Japanese list were overwhelmingly from historical pre-existing characters, with only a few newly devised characters. The Chinese list on the other hand, was made up of 18.4% newly created characters. Using historical variants of characters is useful in that the changes in form have already taken place and the only remaining issue is official recognition. Most of the simplifications that involved historical variants were in actuality simply moving recognition from one set of character forms to another. The difference between the Japanese and Chinese reforms was that besides the simplification of forms, many from historical variants, the Chinese reforms also sought to simplify character components by analogy throughout the whole system. This practice caused many issues by forcing the Chinese reformers to create new forms with no popular precedent.

Characters with popular historical precedents are more familiar to the public, more likely to have been used in different regions and across borders, and more likely to be accepted readily than newly created characters. The simplified version of 體 on both the Japanese and Chinese lists, 体, is a widely known historical variant of the traditional character and was not only easily taken up in usage, but was commonly used before the simplification schemes were promulgated anyway.

### Consistency

The Japanese simplifications overall were comparatively more internally consistent than the Chinese simplifications. One of the primary issues with having many inconsistently simplified characters is that this practice can alter pre-existing character patterns and thus jeopardize the internal system of characters itself. For example, the practice of sign replacement, especially with the characters that had their complex portions all replaced with 又, can lead to confusion between simplified and traditional forms. Having so many new characters with 又 can make it difficult to determine the function of 又 in a given simplified character – if it is representing a meaning, a pronunciation, or just standing in for a more complex part of the traditional character. With traditional characters, where the phonetic element often has many more strokes than the radical, making these distinctions can be easier. Furthermore, the complex

components replaced by 又 were frequently phonetic elements, meaning that all of those characters lost their visible clues as to their pronunciation.

On the Japanese list, where some forms have been simplified through either running or grass forms of cursive script and now look the same, the majority of these changes affect small, redundant parts of characters and usually not the entire phonetic portion. For example, there are few issues concerning the top of 巢 (巢) and 腦 (腦) both becoming three dots and appearing the same as the top of 學 (学).

Serruys (1962: 92) states that because of the several structural inconsistencies resulting from the 1956 to 1964 Chinese reforms, it appears that the reformers sought out one form of simplicity but sacrificed another. Altering the form of the characters resulted in shifting the difficulties from one part of the system to another.

### Stroke Reduction

Stroke reduction was one of the primary goals of both the Japanese and Chinese simplification schemes, but the resultant levels of stroke reduction varied. The Chinese simplified forms ended up having fewer strokes overall than the Japanese simplified forms. Most of these stroke reductions were accomplished through the use of cursive script simplifications – primarily of whole form types on the Chinese side, and partial form types on the Japanese side. While cursive script forms did help reduce the number of strokes of certain characters, implementing grass script style characters in particular has its own repercussions. One of the biggest problems with whole form grass script

simplifications is that some of the resultant forms are not intuitive or recognizable as their traditional forms. Grass script is a specific writing style different from standard character writing and one needs to be trained in its reading and writing. Zhao and Baldauf Jr. (2008: 80) cite examples from calligraphers, psychologists, and their own experience, coming from a traditional character background, that the simplified 长 (長) (to be written with four strokes), is actually very hard to write in only four strokes, with most writers of traditional characters feeling the need to write it with five or six strokes.

Because one of Mao's directives for simplification was to reduce the number of strokes as much as possible, the Chinese simplification schemes all had stroke reduction as one of their most important tenets while the Japanese side did not pursue stroke reduction as vigorously. While the Chinese side seems to have been guided by the belief that fewer strokes per character would facilitate learning and use of characters, the Japanese government, in the 1930s, conducted several careful surveys of students' ability to write characters as part of a study to find ways of justifying character simplifications before publishing the *Tōyō* kanji list. The results of the studies may have helped inform the Japanese government's eventual decisions on how to simplify specific characters and made them wary of over-simplifying characters based on excessive stroke reduction.

The students' performance on the character exams was found to depend on how recently the character was learned and the frequency of the character. When these two factors were controlled, "stroke count was found to have no discernable effect on the ability of students to remember" (Okazaki 1938: 39). Character form was also found to apply only to the ability of students to analogize character structures, and when analogy

was impossible for a given character, like with 乏 *bō* (meager, destitute), performance was still poor despite the low stroke count.

Hannas (1997: 229) cites recent studies that have made similar observations indicating that “the number of strokes per se may not be a sufficient or even acceptable measure of complexity, in that groups of strokes may form familiar subpatterns.” He gives the example of the character 鑫 used in names in Chinese to indicate prosperity, that would be deemed “complex” because it has 24 strokes, but in actuality because it is simply a repetition of the very common character 金, it is easy to recognize and remember. Although not simplified in the current list of characters, the 1956 Chinese simplifications sought to simplify 鑫 (*xin*) to 欣, which has the same pronunciation, but the components of 欣 by contrast, are “less common both absolutely and in this configuration, and probably pose a greater psychological burden on the user than the original version” (Hannas 1997: 226).

Gaoyin Qian (1994) studied the effects of character complexity on recognizing Chinese characters. The study found that the difference in reaction times between mainland Chinese reading simplified characters and Taiwan Chinese reading complex characters was not statistically significant. The study also found that as the number of strokes in a character increased, the strokes themselves had less influence on processing the entire character. Qian suggests that this may be due to the fact that the increased number of radicals in complex characters facilitated visual recognition of the characters with more strokes. The study concludes that at least for mature readers, there is no apparent advantage in terms of processing speed or efficiency for simplified characters.

Chen (1999: 157) however, argues that simplified characters help to comprehensively alleviate the burden of characters on their learners and users. He mentions comparative studies that claim that it is easier for adults to acquire literacy in the simplified script than in the complicated script. He also states that it is much easier for school children to learn to read and write simplified characters.

While the one undeniable benefit of fewer strokes per character is that they are faster to write than characters with more strokes, there is also a lack of distinctions to identify discreet symbols. As the number of strokes is reduced, individual characters tend to resemble each other. This tends to affect memory as well, as according to Fu Yonghe, forms containing half the number of strokes are written incorrectly more often than the original complex character, owing to greater similarity between the simpler form and other members of the set (1981: 24). Thus, Hannas concludes that it is meaningless to lower the stroke count for its own sake and that the complex characters with their greater redundancy and internal consistency may have been the better bargain (1997: 229).

Excessive stroke reduction actually goes against certain principles of historical character formation as well. In the early stages of Chinese characters some actually became more complex “from a preference for symmetry and balance of graphic form to make it easy for recognition and writing” (Woon 1987: 2). From this point of view, occasionally greater complexity can actually serve as a form of simplification through improving character usage.

## Phonetic Simplifications

The last of the major simplification methods and arguably the most controversial is phonetic simplification. Despite the benefits of fewer characters in use overall, the phonetic substitution technique also creates several problems. It is one issue to combine phonetically and semantically similar characters into one single form, but forcing together disparate characters into new combinations can create many problems. One problem is that the semantic load, (and occasionally phonetic load as well, if an additional reading is involved as in the Chinese 1977 simplifications) of these characters is increased. For example, in Chinese, the simplification of 麵 *mian*, noodles by the removal of the wheat radical 麥 to 面 *mian*, which already covers many meanings including face, side, surface, aspect, and top, means that 面 must now represent all of these meanings as well as noodles. In Japanese, the previously distinct characters 弁 (a kind of hat), 辨 (distinguish), 瓣 (section, petal), and 辯 (dialect), all read as *ben*, were all collapsed into the single character 弁 that now carries all of these meanings. In Japanese, single characters often take on multiple pronunciations, but the use of *okurigana* in word inflections helps to disambiguate between the intended *kun* and *on* pronunciations. In Chinese, which lacks this kind of convention, single characters with multiple pronunciations can cause reading difficulties. There is such a strong tendency for single character-single pronunciation representation in Chinese that characters with more than one reading, referred to as multiple sound characters, or 多音字, are also referred to as broken sound characters, or 破音字. Instances of ambiguity are also increased with

phonetic simplifications because more characters are now forced to carry more meanings and more readings. Chen (1994) gives the example of how 遊 (*you*, to travel) was merged with 游 (*you*, to swim) and how this situation can create ambiguity between traveling or swimming when used before bodies of water.

These types of characters are also a bane to modern technology. Going from traditional characters to simplified characters, with a character that is of the many-to-one type, conversion is easy. However, going from simplified to traditional with a character that is one-to-many, identifying the correct traditional form is much harder. The Chinese, Japanese and Korean (CJK) Dictionary Institute, showed that in the first 2,000 most-used characters in Chinese, which cover 97 percent of modern texts, 238 simplified characters (about 12 percent) were of the one-to-many type (Zhao and Baldauf Jr. 2008: 309).

While computer software can predict some instances of ambiguity based on context, out of 97,000 common words, not characters, in Chinese, around 20% of them cannot be accurately converted into traditional forms, requiring a human reader to fix these issues (Halpern and Kerman 2004).

The selection of specific phonetic elements also poses a distinct problem. With homophone substitutions, many of the simpler phonetic elements selected are only homophonous in modern Mandarin. The traditional phonetic elements of characters were based on ancient sound categories in Chinese meaning that readers of any Chinese language were able to derive useful clues from characters that applied to their own variety of spoken Chinese. Because the phonetic substitutions implemented in modern Chinese reforms were primarily based on modern Mandarin, the new phonetics do not

necessarily correlate to homophones in other Chinese languages, leading to a loss in utility for 30 percent of the Han population (Hannas 1997: 224).

The character 達 pronounced *da2*, was simplified phonetically by replacing the original phonetic component with 大, representing the sound *da4*. In Mandarin this is just a difference of tone, but this substitution makes less sense to a Cantonese speaker who is now replacing the phonetic from the character 達 (pronounced *daat6* in Cantonese) with a character that sounds like *daai6*. The substitution makes even less sense to a Japanese speaker (if they were learning the simplified Chinese form) who is replacing the original Japanese pronunciation of the character *tatsu/da* with a phonetic with the pronunciation of *tai/dai*.

Shi Youwei (1991: 177) also showed how homophone substitution can compromise sound accuracy in phono-semantic characters. When looking at the first 508 traditional characters from the 1956 list, according to his statistical measure, the reliability of their sound signifiers was .598, but was reduced to 0.324 after the characters were simplified by phonetic means. This drop in reliability was due to the fact that the newly selected simplified phonetic elements with fewer strokes less accurately represented the original pronunciation of the entire character. An example is the character 壩 meaning dam or dike, pronounced *ba4* in Mandarin Chinese. The traditional character 壩 has the phonetic element 霸 *ba4*, tyrant, but the simplified form replaces this component with the character 贝 *bei4*, shell, resulting in 坝. This new phonetic element

has visibly fewer strokes but fails to represent the sound of the character as faithfully as the original phonetic with more strokes.

One problem with phonetic simplifications, particularly homophone substitution, is that the characters begin to stop functioning as individual characters and instead act more like phonetic units. Karlgren (1949: 12) described the phenomenon of increased homophone substitution as permissible in small numbers, but if they reached the hundreds “the practice might lead to a completely intolerable uncertainty as to what the graphs in the sentence really meant; whether they had their original, concrete meaning, or whether they stood as phonetic loans for something else.” If the technique of homophone substitution were to be pursued exhaustively, it “would result in an inventory of only about four hundred characters, the approximate number of syllables (minus tone) in Beijing Mandarin” (Hannas 1997: 212). Such a procedure would already be on the road to just instating a fully phonetic system. The failed 1977 simplification reforms in China likely went too far in this phonetic aspect while the original 1956 reform made enough use of this technique without undermining the system completely.

Wu Yuchang, Director of the Committee for Reforming the Chinese Written Language, admitted to some of the shortcomings of their simplifications of these types. He stated that “facts have shown that it is true we have not given sufficient consideration to a few of the simplified characters... especially the substitution of some characters by the simpler form of their homophones. They are either rather inappropriate in use or likely to cause ambiguity” (Reform of the Chinese Written Language 1958: 34).

Simplifying characters through phonetic techniques can help reduce the number of characters in use overall, but these same techniques also push individual characters away from the realm of logographs and further into the realm of a phonetic script. With fewer strokes per character and increased reliance on sound, there is less reliance on the character itself for meaning and the characters begin to function less like distinct morphemic logographs and more like a phonetic script. From the beginning of reforms, Communist Chinese reformers explicitly stated that they wished phoneticization to be their ultimate goal. Considering this goal, there is a possibility that the Chinese reformers intended their form of character simplifications to be a step on the road toward eventual phoneticization. One of the aims of the failed 1977 reforms that made heavy use of homophone substitution seems to be that its sponsors were “trying to reduce users’ dependency on symbols keyed more on morphemes than on sound alone” (Hannas 1997: 24).

Based on the above evidence it seems likely that the Chinese simplified characters were created with phoneticization in mind, but were made primarily to meet short-term goals of facilitating the learning and writing of characters. However, when the type of simplifications based on stroke reduction and homophone substitution became too great with the 1977 reforms and met with too much opposition, the reformers resigned themselves to remaining with their original simplified forms and no longer decided to pursue any further widespread simplifications. While the Chinese methods may have been beneficial as a transitional step for moving further toward a phonetic system

altogether (where Chinese characters would no longer even be an issue) as a system for simplifying the forms of characters, it was far too problematic.

## CHAPTER 4: CONCLUSION

### *Summary*

Both Japanese and Chinese language reforms grew out of similar impetuses and attempted to address several of the same linguistic issues. The different simplification policies taken up by each country, however, depending on different linguistic backgrounds and political motives, has led to the current version of divergent simplified characters.

The major differences between the Japanese and Chinese simplifications were the extent and nature of the simplification policies and the primary methods used to achieve simplification. The Japanese simplifications were confined to a specific list of characters meant to serve as a guide for common usage while the Chinese simplifications were designed in such a way that they would affect many characters through analogous simplifications while attempting to ban the older versions. The Japanese simplifications were also developed primarily out of instating historical partial cursive script forms of characters while the Chinese simplifications primarily used whole grass script forms and new phonetic simplification methods.

The above difference in policy meant that the Japanese simplified forms in general tended to more closely resemble traditional characters, reduced some graphic complexity, reduced stroke counts slightly, and were generally well-received by the public. The Chinese simplified forms in general did not resemble the traditional characters as much as the Japanese forms, heavily reduced graphic complexity, reduced

stroke counts by more strokes, and are still debated and face linguistic, cultural, and aesthetic criticisms from scholars, government officials, and the general public across many different countries.

Examining the results of the various simplification techniques implemented by each side, a set of criteria seems to emerge as for what makes a more effective simplified character. The less controversial simplifications appear to be ones that come from historical character variants, are simplified more by form than sound, simplify form while preserving the original character shape, do not reduce the total character stroke count too severely, and tend to remain consistent with other members of the character set. These criteria are especially important for achieving simplifications that enable readers of the simplified forms to still identify the corresponding traditional forms.

### *Limitations*

The limitations for this investigation deal primarily with the sources used and the way the data were calculated. The simplified characters from both the official Japanese and Chinese character lists were analyzed using the Dictionary of Chinese Character Variants and the reference works *Jianhua hanzi ziti shuoming* and *Tōyō kanji shinjitai no kaisetsu* to determine if they were historical and their simplification type.

Categorizing the cursive script characters as either a partial cursive script form or whole cursive script form was dependent on personal judgment. To the author's knowledge there are no particular standard criteria for this evaluation. As such, certain

characters may be categorized as either partial or whole cursive script forms depending on the judgment of the person conducting the analysis.

### *Implications*

Despite the overwhelming number of people using the Chinese simplified characters today, the traditional characters still have a strong presence. Even in mainland China, anyone who has contact with Taiwan, Macau, or Hong Kong, or anyone who studies subjects in college including history, literature, or calligraphy, invariably must also learn traditional characters, thus keeping their use alive. Because of this dual usage of both simplified and traditional characters, simplifications that better resemble the traditional forms may help alleviate a common concern, as voiced by Wang Li (1938) that legalizing the simplified characters, instead of releasing students from the cumbersome burden of memorization, now forces them to spend twice the time and energy to learn two systems.

Besides mainland China, Japan is the only other country to undergo systematic modern Chinese character simplification. Compared to the Chinese reforms, the Japanese simplifications utilized less controversial simplification methods, resulting in more accepted character forms. The Chinese side, however, did contain many simplifications that appear to be sound and do not suffer from linguistic criticisms, such as how 醬 was simplified to 酱, but many other characters remain contentious.

As the Chinese government faces continued pressures from various groups advocating adjustments to particularly troublesome simplified characters, the Japanese system may prove a good case study for alternative, less controversial simplification methods. For example, the characters 叢 and 鑰 (simplified phonetically to 丛 and 钥, respectively on the Chinese list), which were not simplified in Japan, could theoretically be simplified according to the methods used for other Japanese simplifications, resulting in the potential forms 叢 and 鑰 respectively, both from historical variants of the traditional characters (Dictionary of Chinese Character Variants 2000).

After decades of experience using the respective simplified forms in Japan and China, both governments have made occasional additions and removals to their simplified character lists. These changes were made to keep pace with linguistic, social, and technological changes that affect modern character use. As language reforms continue into the future, there is likely to be increased attention paid to the politics, technology, and psychology of Chinese characters. The complex political ties between Chinese speaking areas as well as increasing international communication between areas using Chinese and Japanese will affect attitudes toward character policies. As the medium for written communication around the world has increasingly become digital, the main selling point for simplified forms, the fact that they are easier to write, has quickly diminished. Ultimately, as further research in cognitive psychology reveals more information about how Chinese characters are processed, attitudes toward different types of characters and their simplifications are likely to change as well, hopefully leading to less controversial and more unified character forms across East Asia.

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