

## Semiotic Analysis of *Kokuji* Formation

### Analisis Pembentukan *Kokuji* dalam Bahasa Jepang: Kajian Semiotik

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#### ABSTRACT

*Han characters (kanji) used in written Japanese come from China, but there are characters created separately in Japan called kokuji. This research aims to investigate the formation of kokuji according to Peirce's semiotics and rikusho (traditional classification of Chinese characters) by Xu Shen, and one additional proposed Chinese character category—namely, the kiai-keisei class. The method used in this study is library research. Of the 87 data samples taken from Reiman (1983), shoukei characters made 0% of the total amount, shiji 2.3%, kiai 71.3%, kiai-keisei 4.6%, keisei 19.5%, kasha 2.3%, and tenchuu characters 1%. Analysis results show that the formation of kokuji follows the principles of rikusho. From a semiotic point of view, objects represented by kokuji determine their sign-vehicles. Sign-vehicles are kanji or its components with perceived relations to the object. Sign-vehicles are chosen to form a kokuji based on their ability to represent the object.*

**Keywords:** *kanji, kokuji, semiotics, Peirce, rikusho*

#### INTISARI

Huruf Han (kanji) yang digunakan untuk menulis bahasa Jepang berasal dari Tiongkok, tetapi ada karakter yang diciptakan secara terpisah di Jepang, disebut *kokuji*. Penelitian ini bertujuan untuk menyelidiki pembentukan *kokuji* berdasarkan teori semiotika Peirce dan teori *rikusho* (penggolongan tradisional karakter Han) oleh Xu Shen, dan satu kategori karakter Han tambahan yang diusulkan, yakni golongan *kiai-keisei*. Metode yang digunakan adalah kajian pustaka. Dari 87 buah sampel data yang dianalisis dari Reiman (1983), karakter *shoukei* berjumlah 0%, *shiji* 2,3%, *kiai* 71,3%, *kiai-keisei* 4,6%, *keisei* 19,5%, *kasha* 2,3%, dan *tenchuu* sebanyak 1%. Hasil kajian data menunjukkan bahwa pembentukan *kokuji* mengikuti prinsip pembentukan *rikusho*. Dari sudut pandang semiotik, objek yang diwakili oleh *kokuji* menentukan pelambang-pelambangannya. Pelambang adalah kanji atau komponennya yang memiliki hubungan dengan objek. Pelambang dipilih untuk membentuk *kokuji* karena dapat menggambarkan objek.

**Kata kunci:** *kanji, kokuji, semiotik, Peirce, rikusho*

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## INTRODUCTION

Japanese is written with a system consisting of three types of symbols: 漢字 *kanji*, 平仮名 *hiragana*, and 片仮名 *katakana* (Sugimoto & Iwabuchi, 1998). Although Iwabuchi (1989) stated that *kanji* originated in China (hence its literal meaning, ‘Han characters’), there are also some *kanji* created separately in Japan (Sugimoto & Iwabuchi, 1998) that are not used by the Chinese (Reiman, 1983). These *kanji* are called 国字 *kokuji* (literally ‘national letters’) (Reiman, 1983; Sugimoto & Iwabuchi, 1998).

Despite the fact that *kokuji* can be loosely defined as “*kanji* which were produced in Japan,” there is no established list of standards that a character must fulfil in order to be classified as a *kokuji* (Buck, 1969). For the sake of clarity, this paper shall cite Seeley (1991), Sugimoto & Iwabuchi (1998), and Nomura & Koike (1992) and use the common criteria that a *kokuji* must be created in Japan, not China, and that a *kokuji* must adhere to the principles of Han character formation.

To properly specify the principles of Han character formation, this research refers to 六書 *rikusho*, a categorisation of Chinese characters into six classes that explains their creation (Matsumura, 2006). The theory is often attributed to Xu Shen (c. 58—148 CE), a scholar from the Eastern Han Dynasty (Brown, 2014; Lewis, 1999). *Rikusho* is commonly used as a guide for analyses of Han character structure (Qiu, 2000) and as such was adopted by Japanese scholars such as Tsutomu Sugimoto and Tadasu Iwabuchi to analyse Japanese *kanji*. Sugimoto and Iwabuchi’s *Nihongogaku Jiten* (1998) lists the six principles as 象形 *shoukei* (pictographs), 指事 *shiji*<sup>1</sup> (symbols), 会意 *kaii* (ideographs), 形声 *keisei* (semasio-phonetic compounds), 假借 *kasha* (phonetic loans), dan 轉注 *tenchuu* (semantic and phonetic loans). Sugimoto and Iwabuchi further defined each of the classes as such: *shoukei* characters are *kanji* that imitate the physical form of objects they describe; *shiji* is *kanji* that illustrate abstract concepts visually; *kaii* are formed by combining two or more *kanji* to represent a new concept; *keisei* consist of two elements: one phonetic and one semantic element; *kasha* characters borrow the phonetic value of a *kanji* to represent a new abstract idea; *tenchuu* characters change the meaning of a *kanji* through association and other factors, then utilise it with the new meaning. In addition to the six classes found in the traditional version of *rikusho*, we also proposed a new category by combining two of the classes: the *kaii-keisei* class. Examples of the classes are listed in table 1.

To understand the reasoning behind our proposition of a new class, we should first acknowledge that characters in the *keisei* category are composed of two elements: one phonetic and one semantic (Sugimoto & Iwabuchi, 1998; hence the translation “semasio-phonetic compound” (Henshall, 1998)). In regards to the phonetic element, Henshall (1998) wrote that “[t]he element used as a phonetic was usually chosen from a range of similarly pronounced characters on the basis of its also lending relevant semantic connotations of its own.” This means that the phonetic element is not only used for its sound, but also for its meaning, to some extent. Henshall further noted that “[t]hus it is also possible to consider such semasio-phonetics as ideographs” and that the classification of characters into one category or the other fully depends on “whether the semantic role is felt to outweigh the phonetic or vice-versa,” making such classifications stand on a rather subjective ground. The fine distinction between *kaii* and

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<sup>1</sup> Sugimoto and Iwabuchi (1998) mistakenly typed the term for “ideogram” as 「指示」, which is also read as *shiji*, but has a different meaning of ‘indication; instructions; directions’ (Electronic Dictionary Research and Development Group, 2003; Matsumura, 2006; Yamaguchi et al., 2013). The correct *kanji* for ‘ideogram’ in *rikusho* is 「指事」 (Electronic Dictionary Research and Development Group, 2003; Matsumura, 2006; Qiu, 2000; Yamaguchi et al., 2013).

*keisei* classes can further increase in complexity when a *kanji* thought to be a *kaii* character contains an element that is also used for their phonetic value: an element which “could therefore be said to be a phonetic element expressing its own meaning through its own sound” (Henshall, 1998).

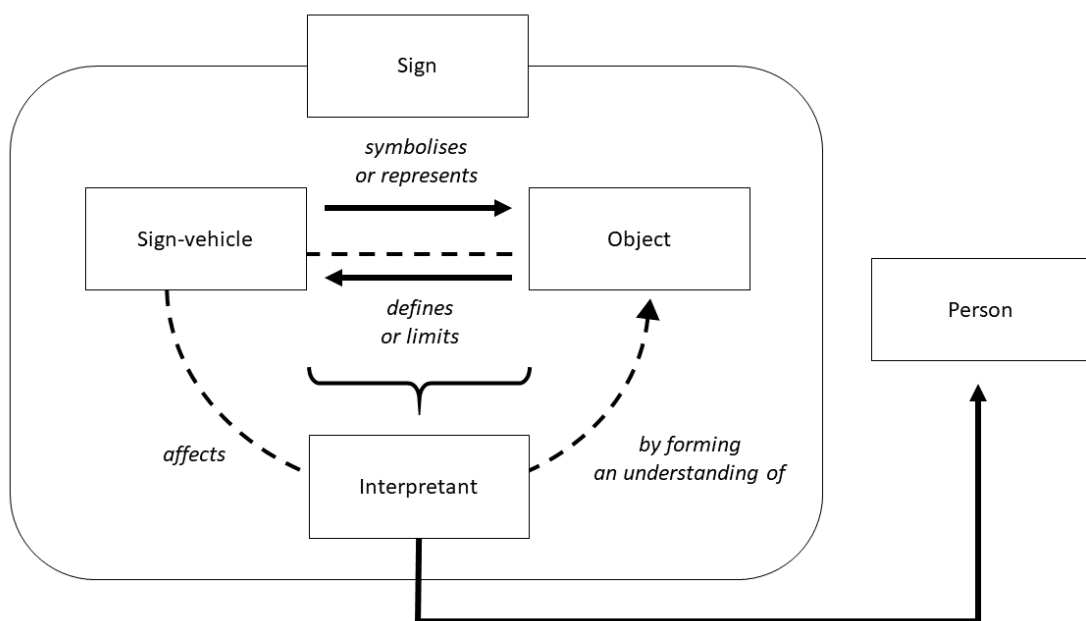
**Table 1 Kanji categories and their examples**

Class	Example of Kanji	Meaning/reading	Notes
象形 <i>shoukei</i> (pictographs)	日	‘sun’	Imitation of the physical appearance of the sun (Sugimoto & Iwabuchi, 1998).
	木	‘tree’	A picture of a tree (Henshall, 1998).
	目	‘eye’	A picture of an eye (Henshall, 1998).
指事 <i>shiji</i> (symbols)	上	‘above’	A symbol representing one object above another (Henshall, 1998; Sugimoto & Iwabuchi, 1998).
	回	‘round; revolve’	A symbol representing rotational motion (Henshall, 1998).
会意 <i>kaii</i> (ideographs)	炎	‘flame, blaze’	Two 火 ‘fire’ arranged vertically.
	森	‘forest, woods’	Three 木 ‘tree’ arranged in a triangle.
形声 <i>keisei</i> (semasio- phonetic compounds)	問	モン, ‘ask’	門 represents their sound, while the 口・耳 elements represent their meanings (Sugimoto & Iwabuchi, 1998).
	聞	ブン, ‘hear’	
会意・形声 <i>kaii-keisei</i> (proposed)	盲	モウ, ‘blind’	As an ideograph: combination of 亡 ‘die’ and 目 ‘eye’, meaning ‘dead eyes’ (Henshall, 1998). As a semasio-phonetic compound: combination of phonetic element 亡 and semantic element 目 (Henshall, 1998).
仮借 <i>kasha</i> (phonetic loans)	我	‘I; our; oneself’	Used to mean ‘ax’ or ‘saw’ in ancient Chinese society. It had a similar pronunciation to the word meaning ‘I’, leading to the adoption of this character to represent ‘I’. Over time, the original word for ‘ax’ and the actual character for ‘I’ fell into disuse, resulting in the usage of 我 only to mean ‘I’ (Qiu, 2000).
転注 <i>tenchuu</i> (semantic and phonetic loans)	楽	ガク、ラク、ゴ ウ, ‘music; comfort; ease’	Read as <i>gaku</i> to represent ‘music’, as in 音楽. Listening to music is a comfortable or fun experience, so the character’s reading became <i>raku</i> to mean ‘comfort’. Because humans seek comfort, 楽 further changed its reading to <i>gyou</i> and took another meaning: ‘to wish; to want’ (Sugimoto & Iwabuchi, 1998).

This problem of classification, even for Henshall, is thought to be superfluous since it often does not go beyond mere speculation (Henshall, 1998). In this paper, we strove to avoid categorising such *kokuji* subjectively (and potentially erroneously) into one category or the other by conducting biased or uninformed evaluation of the characters’ phonetic elements. To resolve this issue, we then proposed a new category, the *kaii-keisei* class, for characters whose elements share both *kaii* and *keisei* principles, namely having one or more elements that contributed both phonetic and semantic values simultaneously to the whole character.

From a semiotic standpoint, this research applies the theory of basic sign structure to the formation of signs, (in this case, *kokuji*). The theory was proposed by C. S. Peirce (1839—1914), an American philosopher and logician (Merriam-Webster, 1960). Peirce defined a sign to be composed of three related parts: an “object”, a “sign-vehicle”, and an “interpretant” (Atkin, 2013; Peirce, 1998). The semiotic object is an object or idea that the sign is meant to

symbolise. The “sign-vehicle” differs from the “sign” as a whole in that it’s a primary element of the latter that must be present to correctly describe the object (Atkin, 2013). Additionally, it can also contain secondary elements to further describe the object in detail (Atkin, 2013). The sign-vehicle functions by describing the sign’s object. Conversely, the object limits the sign-vehicle by giving it a set of rules on how it should describe the object. The rules are then reflected in the sign-vehicles form. The interpretant, which can be understood as humans’ understanding of the sign, is formed by a person’s observation of the relation between the two parts mentioned above. It is also affected through the sign-vehicle to form a person’s understanding of the object (Atkin, 2013). The relation between the three parts is described in figure 1.



**Figure 1.** Basic sign structure according to Peirce’s semiotic theory.  
(Source: *own work*)

This research aims to investigate how and in accordance with what principles are *kokuji* formed. While numerous studies have been conducted to analyse the formation of Han characters created in China, the amount of research dedicated to *kokuji* falls significantly behind it. As an illustration, a Google Scholar search of the keyword “kanji” yielded about 217,000 results in the time span of 1 January 2012 and 11 May 2022. Meanwhile, a search of the term “kokuji” from the same time frame returned only about 1220 results, a mere 0.5 percent of the number of articles discussing the former topic. Aside from the potential of giving *kokuji* more scholarly exposure, this research will also answer whether Han characters created outside of China follow similar creationary fundamentals or deviate from them, given the difference in the creators’ linguistic and cultural backgrounds. Semiotic analyses of *kokuji* can uncover these tendencies and provide an insight into both the Japanese culture and the workings of the Japanese language, as well as testing the validity of character formation theories which are usually only applied to Han characters of Chinese origin.

Past literature pertaining to *kokuji* within the past ten years include “Kokuji (国字): The Japanese ‘National Characters’. A Case Study: The Japanese Aquatic [*sic*] Fauna” (2015), an article written by Giovanni Borriello, Ph.D., the Professor of History and Institutions of Asia at Roma Tre University, Italy. The article compiled a list of *kokuji* for names of aquatic animals and divides them based on the zoological categories of the animals they describe. Borriello also noted which of the characters were still in use in modern Japan, their equivalents in Chinese, and if the characters entered the Chinese language, or conversely, if characters of the same meaning coined in China replaced the *kokuji* in Japan, leading to their obsolescence in modern Japanese. This paper differs from previous research in that it analyses a number of *kokuji* not limited to a specific category, doing so from a semiotic standpoint, and not comparing the *kokuji* to Han characters made outside of Japan.

This research aims to do as follows: (1) to describe the methods used by Japanese people to form *kokuji*; (2) to describe the role of a word’s meaning in *kokuji* formation; (3) to describe what elements can be a *kokuji*’s sign-vehicle; and (4) to describe the reasoning behind the selection of certain elements to be the sign-vehicle. As hypotheses, we believe that (1) with *kokuji* being a subset of Han characters (Matsumura, 2006; Yamaguchi et al., 2013), *kokuji* follow the formation principles of Chinese-made Han characters, albeit, with some expected deviations or differences in use owing to linguistic and cultural differences between the language and people of the two nations; (2) referring to Peirce’s theory, the meaning of a *kokuji* has a role in its formation by mediately affecting its sign-vehicle(s) and interpretant; (3) sign-vehicles of *kokuji* are components of pre-existing Han characters, in accordance with the fact that they follow Han character formation principles; (4) aforementioned components are chosen due to having sufficient descriptive capabilities and thus passing the limitations imposed by the semiotic object.

## RESEARCH METHODS

Library research was used to gather information and data samples regarding *kokuji*. Samples were taken from the list of *kokuji* presented in Reiman (1983), itself a compilation of *kokuji* from Morohashi’s *Dai Kan-Wa Jiten* (1960), Toudou’s *Kan-Wa Jiten* (1982), names of places in Japan, and other sources. Character definitions, translations, and readings were obtained from JMdict/EDICT Japanese-English Electronic Dictionary database (Electronic Dictionary Research and Development Group, 2003), *Daijirin*, 3<sup>rd</sup> edition (Matsumura, 2006), and *Oubunsha Kokugo Jiten* (Yamaguchi et al., 2013). *Kokuji* samples, readings, definitions, and their respective *rikusho* classes are presented in the appendix of this paper.

Data samples were then analysed using two theories: 六書 *rikusho*, the traditional categorization of Han characters into six categories, and Peirce’s semiotic theory of basic sign structure. Characters were first classified into the six categories of *rikusho* based on the relations between their meanings and components. The *kokuji* were then examined as semiotic signs to determine the role of their meanings in their formation. Components were also studied to ascertain the nature and the reasoning behind their assignment as the *kokuji*’s sign-vehicles.

## RESULTS AND DISCUSSION

There were 87 *kokuji* data samples taken from Reiman (1983). The 87 samples were distributed in 5 out of 6 *rikusho* categories: *kaii* characters made up most of the data and there was no sample that belonged to *shoukei* class.

Analysis results are presented by *rikusho* categories, including one additional proposed category not mentioned in *Nihongogaku Jiten*, with each category represented by one *kokuji*



sample. Samples were analysed based on their formation principles, the role of their meaning in said formation, the components that function as their sign-vehicles, and the reasoning behind their selection as sign-vehicles.

### 1) *Kokuji* belonging to *shoukei* category

Of the 87 data samples, none belonged to *shoukei*. We believe that the Japanese people did not have any necessity to create *kokuji* of this type since the need to represent simple objects had already been fulfilled by the use of pre-existing *kanji*.

### 2) *Kokuji* belonging to *shiji* category

- (69) 井  
どんぶり  
トン、タン、ショウ、セイ  
*donburi* (“splash!” sound; rice bowl topped with meat, fish, etc.)

〈井〉 was formed by combining two elements, 〈井〉 ‘well’ and 〈丶〉, to symbolize an abstract concept: the sound of a solid object falling into water (“splash!”). This makes 〈井〉 a *shiji* character. The meaning ‘splash!’ plays a role in forming the sign by defining its sign-vehicles. 〈井〉 is a *kanji* of an object with a connection to the sound “splash!” and 〈丶〉 is a *kanji* stroke used as a visual element. 〈井〉 was chosen to be the sign-vehicle due to three factors, (1) wells are common objects; (2) wells can contain enough water to produce a sound when their contents are disturbed; (3) wells are symbolized with a visually simple *kanji*, making it more easily combined with other *kanji* components (as opposed to *kanji* of other water-filled objects such as 〈桶〉 *oke* ‘bucket’, 〈湖〉 *mizuumi* ‘lake’, or 〈池〉 *ike* ‘pool’). 〈丶〉 was chosen to represent a solid object falling into the well due to having only a single stroke, in accordance with *shiji* principle of adding minimal visual elements to a *kanji*. Moreover, 〈丶〉 can represent the concept of an ‘object’ without imposing overly strict limitations.

### 3) *Kokuji* belonging to *kaii* category

- (1) 鱈  
はたはた  
-  
*Arctoscopus japonicus* (sailfin sandfish, Japanese sandfish)

〈鱈〉, meaning *hatahata* or ‘Japanese sandfish’, is composed of 〈魚〉 *sakana* ‘fish’ and 〈雷〉 *kaminari* ‘lightning’. The Japanese sandfish commonly spawn and are caught in the months with frequent thunderstorms (Nihon Doubutsu Gakkai, 1897). The *kokuji* for the fish was made through an association between the meanings of two existing *kanji*, making it belong to the *kaii* category. As a semiotic object, the fish determines the sign-vehicles for its sign, namely the *kanji* for ‘fish’ and ‘lightning’. 〈魚〉 is the *kanji* for a group of animals the Japanese sandfish belong to and 〈雷〉 is a *kanji* for a natural phenomenon with a connection to their life cycle. The two sign-vehicles were chosen for their ability to describe the object’s traits: their biological category, life cycle, and relationship with Japan’s climate.

#### 4) *Kokuji* belonging to *keisei* category

- (20) 鋳  
-  
ブ  
tin plate

〈鋳〉 is a *kokuji* used to spell the word 鋳力 *buriki* ‘tin plate’. The semantic element of this *kokuji* is 〈金〉 ‘metal’ and the phonetic element is 〈武〉, read as *bu*. 〈鋳〉 was classified as a *keisei* character, not *kaii-keisei*, since the meaning contained in its phonetic element (‘weapon; military; soldier’) is not used. The word “*buriki*” is borrowed from Dutch *blik* (Matsumura, 2006). The sign’s object, ‘tin plate’, defines its sign-vehicles through its meaning and pronunciation. 〈金〉 as a sign-vehicle is a *kanji* element explaining the chemical property of the object. 〈武〉 is a *kanji* with a suitable pronunciation to spelling the word “*buriki*”. The sign-vehicles are used to represent the object’s meaning and pronunciation, respectively.

#### 5) *Kokuji* belonging to *kaii-keisei* category

Since the *kaii-keisei* class is a newly-proposed group in this research, the findings related to the *kokuji* of this class will be discussed in full in this section. To reiterate, the classification criterion is that a *kokuji* must have the features of both *kaii* and *keisei* categories, namely, having one or more elements that contribute both meaning (semantic value) and pronunciation (phonetic value) to the *kokuji*. There were four *kokuji* that met this condition.

- (42) 袴  
かみしも  
-  
old ceremonial garb; samurai garb

Following definitions given in Matsumura (2006) and Bryant & Badgley (2019), *kamishimo* is a two-piece traditional Japanese outfit, consisting of an upper part (a *hitatare* or a *kataginu*) and a lower part, a *hakama*. The word is written in Japanese with the *kokuji* 〈袴〉 (Matsumura, 2006). This *kokuji* follows the *kaii* principle in that it is formed through semantic association of its elements: 〈衤〉, a component which means ‘clothing’ (Matsumura, 2006; Yamaguchi et al., 2013); 〈上〉 ‘up’ and 〈下〉 ‘down’. The *kokuji* can also be considered to follow the *keisei* principle since the elements 〈上〉 *kami* and 〈下〉 *shimo* are used for their phonetic values as well. The clothing as the semiotic object has a role of limiting the sign-vehicles. The sign-vehicles of this *kokuji* consist of a character component, 〈衤〉, and two *kanji*; 〈上〉 and 〈下〉. 〈衤〉 was chosen as a sign-vehicle for its meaning, which appropriately describes what item a *kamishimo* is. 〈上〉 and 〈下〉 became the sign-vehicles due to their ability to illustrate the form of a *kamishimo* and its pronunciation in Japanese.

- (51) 酏  
もと  
-  
the yeast used to make *sake*, *miso*, etc.

This *kokuji* follows the *kaii* principle since it describes a new concept using two existing *kanji*: 〈酉〉 (a Han character component meaning ‘sake’ or ‘alcohol’) and 〈元〉 *moto* ‘source; origin’; while also relying on the *keisei* principle by using the component 〈元〉 as a phonetic element for the character 〈醞〉. The object ‘yeast’ limits the sign-vehicles to be the *kanji* components for ‘sake’ and ‘source’. 〈酉〉 is a *kanji* component that tells the use of the object and 〈元〉 is a *kanji* that describes the object’s relation to the previous sign-vehicle. The sign-vehicle 〈酉〉 was chosen because yeast is an ingredient used to ferment Japanese rice wine, *miso* (Japanese fermented soybean paste), and *shouyu* (Japanese soy sauce) (Machida et al., 2008). 〈元〉 was chosen to describe the yeast’s purpose in relation to the other sign-vehicle.

- (57) 嵐  
おろし  
-  
wind blowing down from mountains

The 57<sup>th</sup> sample from the list was classified as a *kaii-keisei* character due to the element 〈下〉 *oroshi* ‘to lower’ that aided the *kokuji*’s formation through both its meaning and pronunciation. The object, a type of wind, limits the form of sign-vehicles present the *kokuji*’s visual appearance. 〈風〉 ‘wind’ and 〈下〉 ‘to lower’ are both pre-existing *kanji*, with the first being chosen for its meaning and the latter for both its semantic and phonetic values: implication of a downward movement and the reading “*oroshi*”.

- (76) 腺  
-  
セン  
gland

The *kokuji* for ‘gland’ was categorized into the *kaii-keisei* owing to 1) its accordance to the *kaii* principle: being formed through association of the meanings of two elements, 〈月〉 ‘meat’ and 〈泉〉 ‘spring; fountain’; and 2) its conformity to the *keisei* principle: using 〈泉〉 for its pronunciation in addition to its meaning. A gland, the object which is symbolized by the *kokuji*, serves to define the sign-vehicles. The sign-vehicles of this *kokuji* are composed of a radical and a *kanji*. The radical 〈月〉 was chosen because glands can be described as carnal, visceral organs. Meanwhile, there are two reasons behind 〈泉〉’s selection as the sign-vehicle. Firstly, a gland has a semantic similarity with a spring or fountain in that they both let out fluid, be it bodily or geologically. Secondly, it was also selected for the similarity of its *on* reading with the *kokuji*’s reading: *sen*.

## 6) *Kokuji* belonging to *kasha* category

- (68) 磨  
まろ  
-  
(archaic) I; me



The *kokuji* 〈磨〉 *maro*, an archaic term for ‘I; me’, is a combination of two *kanji*, 〈麻〉 and 〈呂〉. Both of these *kanji*, 〈麻〉 (*kun’yomi: asa; on’yomi: ma*) & 〈呂〉 (*kun’yomi: sebone; on’yomi: ro, ryo*), were borrowed for their pronunciations to make a new character. This method of character formation conforms to the *kasha* principle. The object—the concept of one’s own self with an archaic tone—defines the sign-vehicle through its pronunciation, “*maro*”. 〈麻〉 and 〈呂〉 are *kanji* with *on* readings “*ma*” and “*ro*” respectively. The two *kanji* were chosen to be sign-vehicles owing to their suitable readings, enabling them to signify the object’s pronunciation in Japanese.

### 7) *Kokuji* belonging to *tenchuu* category

- (69) 井  
どんぶり  
トン、タン、ショウ、セイ  
donburi (“splash!” sound; rice bowl topped with meat, fish, etc.)

〈井〉 *donburi* was originally a *shiji* character signifying the sound “splash!”, but the *kokuji* underwent a shift in meaning to represent ‘rice bowl topped with meat’ (as in 井もの *donburi-mono*). The old meaning, ‘splash!’, was associated with the sound of rice placed into a bowl (“plop!”), creating a new meaning in the process. This change of meaning complied with the *tenchuu* principle. *Donburi(-mono)* as the semiotic object serves to determine the sign-vehicle through an associated concept (the sound “plop!”). As a sign-vehicle, the character 〈井〉 represents the aforementioned sound by way of visualization: an object falling into a well, making a sound. 〈井〉 was chosen for having a semantic and phonetic association with *donburi-mono*, the sign’s object.

## CONCLUSIONS

Results of this study have shown that the Japanese people created *kokuji* in accordance with the six principles of *rikusho*. Out of the 87 *kokuji* samples, no *kokuji* belongs to *shoukei* (0%), 2 belong to *shiji* (2.3%), 62 to *kaii* (71.3%), 17 to *keisei* (19.5%), 4 to the newly-proposed *kaii-keisei* class (4.6%), 2 to *kasha* (2.3%), and 1 to *tenchuu* (1%). Regarding the number of *kokuji* in *kaii* class, we surmise that the principle of *kaii* is most easily followed in Japanese. On the other hand, we suppose that none of the *kokuji* pertain to *shoukei* owing to the following reasons: (1) *shoukei* Han characters are essentially pictures resembling the physical form of an object (Sugimoto & Iwabuchi, 1998); (2) the number of objects which can be represented by pictures are limited; (3) *kanji* originating from China (as opposed to *kokuji*) have already symbolized many of said objects; (4) *shoukei kanji* originating from China are readily available and widely used in Japan.

From a semiotic point of view as proposed by Peirce, the meanings of words serve to define and limit the sign-vehicles which shape the form of *kokuji*. Elements that can function as sign-vehicles are existing *kanji* or their components. These sign-vehicles represent various things with connections to the object, such as its type, physical form, a visual element, etc. Moreover, sign-vehicles can also describe an object’s pronunciation in Japanese, as is evident in *kokuji* of *keisei*, *kaii-keisei*, and *kasha* types. The *kanji* or its components are chosen to be the sign-vehicles due to their ability to describe an object. This ability to describe varies in terms of accuracy, ranging from a simple, seemingly arbitrary association of meanings to precise representation of a word’s pronunciation.

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