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I know the name well, but cannot read it correctly: difficulties in reading recent Japanese names

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Previous literature has mentioned the difficulty in reading recent Japanese names correctly. However, this difficulty has not been empirically demonstrated. Thus, it is unclear to what extent and how it is difficult. Therefore, this paper provides empirical evidence of the difficulty in reading Japanese names correctly. Data including names of babies born between 2004 and 2018 were analyzed. The results showed that common writings have many variations in reading, which makes it difficult (or almost impossible) to choose the correct reading among many options. For example, one of the common writings for boys, 大翔 had 18 variations in reading, and for girls, 結愛 had 14 variations in reading. These variations differed remarkably in pronunciation, length, and meaning. Empirically reporting this difficulty in reading Japanese names correctly contributes to a better understanding of naming practices not only in Japan but also in vast regions where Chinese characters are/were used.

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Introduction

Recent Japanese names are difficult to read correctly.^{1,2} Here, “correctly” means “as determined by parents or guardians”. Even native Japanese speakers cannot read parts of names correctly at first glance without explicit references to their readings. In some cases, people may be able to assume some possible readings, but their speculations are not always correct because there are many options and it is difficult to choose the correct one. In other cases, people have no idea how to read Japanese names. Importantly, this difficulty is not limited to unique names. Although unique names are indeed difficult to read correctly (Ogihara, 2015, 2021), even common names are difficult to read. Indeed, the fact that it is common to write “*furigana*” (how to pronounce/read Chinese characters (*kanji*) of names; “*furi*” means giving and “*gana*” comes from “(*hira*)*gana*” or “(*kata*)*kana*”) in Japan which is one form of explicit references reflects this difficulty. Without this kind of explicit references, it is difficult or impossible to read Japanese names without mistakes. This difficulty of reading recent Japanese names correctly has been mentioned via examples and explanations of them (e.g., Kobayashi, 2009; Ohto, 2012; Sakata, 2006; Sato, 2007; Unser-Schutz, 2016).

However, the difficulty in reading Japanese names correctly has not been empirically demonstrated by investigating actual data. Thus, it is unclear to what extent it is difficult and how it is difficult. This difficulty is intuitively shared among people in Japan because in daily life they experience situations where they misread a name and/or have no idea of the reading of a name. Yet, it must be difficult for people outside Japan to understand the difficulty solely by providing examples without showing empirical evidence.

It is important to empirically report this difficulty in reading Japanese names correctly, which contributes to a better understanding of naming practices in Japan. This would impact research not only in Japan but also in vast regions where Chinese characters are/were used (e.g., East Asia, Southeast Asia). Therefore, in this paper, I empirically show the difficulty in reading Japanese names correctly by analyzing actual name data in Japan.

Reasons why recent Japanese names are difficult to read.

Names significantly differ across cultures. Japanese names are complex and complicated. In fact, even native Japanese speakers cannot read parts of names correctly at first glance without clear references to their readings.

In Japan, three types of characters can be used for baby names: hiragana, katakana, and Chinese characters. Hiragana and katakana are phonograms (a symbol representing a speech sound without reference to meaning), just like the alphabet. Thus, writing and reading are interdependent and fixed with each other. For instance, hiragana “さ” (and katakana “サ”) is always pronounced as “sa”. Thus, one of the common writings for girls “さくら” (meaning a cherry blossom/tree) is always pronounced as “Sakura”.

In contrast, a Chinese character is an ideogram (a symbol representing a concept without reference to sound). Thus, writing and reading are independent of each other, which is different from alphabet-based languages (e.g., English, Spanish, German, French). This is the main reason why Japanese names are difficult or impossible to read correctly (as determined by parents or guardians) at first sight. Below, I summarize the reasons in detail. There are at least three reasons.

First, most Chinese characters used in Japan have multiple formal readings. This is different from China where most Chinese characters are read in one way (Ogihara, 2020b). Japanese native

speakers learn these formal readings of Chinese characters at schools. Yet, even if Japanese native speakers know possible multiple readings of a name, it is difficult to select the correct one among multiple options.

Second, in addition to the formal readings explained above, parts of Chinese characters have special pronunciations for human names (“*nanori*” in Japanese). This conventional practice is applied only to human names. Even native Japanese speakers do not know some of these special pronunciations because they are not taught in schools. This feature further increases the difficulty in reading Japanese names correctly.

Third, not only formal and special readings but also whatever readings can be given to Chinese characters used in names. In other words, readings do not necessarily need to be related to Chinese characters. I have explained two forms of reading Chinese characters, but actually, parents/guardians can give whatever readings to Chinese characters used in their baby names. Thus, for others who do not know the correct reading of a name, there are infinite numbers of options. Japanese native speakers can assume possible readings (formal and special readings), but there are other infinite options. Thus, it is difficult or almost impossible to read names correctly at first glance.

Related to the third point, the fact that unique names have increased in Japan (Ogihara et al., 2015; for underlying changes, see Ogihara, 2017, 2018a, 2018b)³ makes Japanese names more difficult to read. Parts of unique names are difficult (or almost impossible) to read. For example, there are names that appear as Chinese characters but are pronounced as foreign (e.g., English, Latin, and French) words that correspond to the semantic meaning. Furthermore, there are names that are pronounced based on the semantic meaning or image of Chinese characters, too (for a summary of the patterns and characteristics of unique names in Japan, see Ogihara, 2015, 2021). Indeed, previous research has demonstrated that variations in readings of common writings consisting of Chinese characters increased between 2004 and 2013 (Ogihara et al., 2015).

This situation is different from that in China (Ogihara, 2020b). In China, Chinese characters are also used for names as in Japan. However, most Chinese characters are read in one way. Thus, writings and readings are more interdependent and fixed in China than in Japan.

Present article. In this article, I empirically demonstrate the difficulty in reading recent Japanese names correctly by analyzing actual name data. Based on the analysis, I present some concrete examples and show that common writings have many variations in reading, which causes the difficulty.

Method

Data. I analyzed 7,779 (boys: 3,762, girls: 4,017) names of babies born between 2004 and 2018, which are publicly available (<https://doi.org/10.17605/OSF.IO/2WURJ>; for details, see Ogihara, 2020a). These names were collected in annual surveys on baby names conducted by one of the most popular insurance companies in Japan (the Meiji Yasuda Life Insurance Company, 2020) on their customers (for details, see Ogihara, 2020a). Meiji Yasuda has not published raw data on baby names, but it has published part of its survey results annually. I analyzed the names on the lists for the readings of the top 10 most common writings for the 15 years between 2004 and 2018. The sample sizes for each year are summarized in Table S1 (in the Supplementary File).

The names in this database exist in reality because they were used to make official contracts of insurance. It is important to analyze names that truly exist, not anecdotal or hypothetical

Table 1 Ranks among the top 100 most common writings of names in Japan, 2004–2018.

Writing	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Boy	大翔	5	1	2	1	1	1	1	3	4	2	1	1	18	3
	陽翔	45	77	19	62	32	85	-	4	31	2	19	6	4	5
	翔	7	1	31	10	7	2	3	12	31	8	13	13	29	28
	颯	6	20	15	31	55	31	9	26	23	-	39	6	19	12
Girl	結愛	82	55	15	15	19	5	2	1	4	5	5	7	9	2
	陽菜	4	1	1	4	1	1	2	1	2	4	1	2	3	10
	愛	19	12	5	-	57	64	-	-	65	88	23	-	-	21
	杏	33	-	10	42	-	16	64	4	35	27	10	19	23	4

Cells with a dark color indicate the top 10 most common writings of names. Cells with a light color indicate the top 100 most common writings of names. - indicates not included in the top 100 most common writings of names. The values are based on surveys conducted by Meiji Yasuda.

names, which could mislead the results of name research (Ogihara, 2015, 2021).

Analysis. First, four common target writings separately for boys and girls were chosen as examples to demonstrate that recent common writings have multiple readings. The four writings consisted of two two-letter writings and two one-letter writings (writings consist of more than two Chinese letters were not included in the dataset). For boys, 大翔, 陽翔, 翔, and 颯 were investigated. For girls, 結愛, 陽菜, 愛, and 杏 were examined (these writings are explained in detail below).

Then, I checked all variations of readings of the eight writings, counted them, and calculated the percentages of each name among each of the samples.

Examples of boys' names

1. 大翔. 大翔 is one of the most common writings of baby names for boys in recent years. It ranked within the top 10 most common writings of boys' names 14 times for the 15 years between 2004 and 2018 (Table 1).

大 means large/big and has many pronunciations, such as dai (だい), tai (たい), and okii (おおきい). This character has special pronunciations for human names (nanori), such as hiro (ひろ), haru (はる), and masa (まさ).

翔 means wing/fly and has pronunciations of to(bu) と(ぶ), sho (しょう), and kakeru (かける). It also has a special pronunciation for human names, ka (か) and ga (が).

2. 陽翔. 陽翔 is also one of the most common writings of boys' names in recent years (especially in the 2010s). It ranked within the top 10 most common writings of boys' names six times and within the top 100 most common writings eight times for the 15 years between 2004 and 2018 (Table 1).

陽 indicates sunny and shining and has many pronunciations, such as yo (よう), hi (ひ), and hinata (ひなた). This has special pronunciations for human names (nanori), such as haru (はる), aki (あき), and hikaru (ひかる). The meanings and pronunciations of 翔 are explained above (see section 1. 大翔).

3. 翔. In both 大翔 and 陽翔, the Chinese character 翔 is used. This Chinese character has also been used as a one-letter name.

翔 is another of the most common writings of boys' names in recent years (especially in the 2000s). It ranked within the top 10

most common writings of boys' names seven times and the top 100 most common writings eight times for the 15 years (Table 1). The meanings and pronunciations of 翔 are explained above (see section 1. 大翔).

4. 颯. 颯 is another example of a name consisting of one Chinese letter.

颯 is also a common writing for boys' names in recent years. It ranked within the top 10 most common writings three times and the top 100 most common writings 11 times for the 15 years between 2004 and 2018 (Table 1).

颯 means swift wind. It is pronounced as hayate (はやて), so (そう), and satsu (さつ).

Examples of girls' names

1. 結愛. 結愛 is one of the most common writings of baby names for girls, especially in the 2010s. It ranked within the top 10 most common writings of girls' names 10 times for the 15 years between 2004 and 2018 (Table 1).

結 indicates connection and is usually read as ketsu (けつ) or yu(u) ゆ(う). 愛 indicates love and has many readings, such as ai (あい), mana (まな), and me (め).

2. 陽菜. 陽菜 is also one of the most common writings of girls' names in recent years. It ranked within the top 10 most common writings of girls' names 14 times for the 15 years (Table 1; in one year, it ranked 12th).

The meanings and pronunciations of 陽 are explained above (see section 2. 陽翔). 菜 indicates leaf or vegetable and is usually read as na (な) or sai (さい).

3. 愛. So far, I have explained two examples of girls' names consisting of two Chinese characters. I raise 愛 as an example of a name consisting of one Chinese character. I raise 結愛 as an example, and the Chinese character 愛 has also been used as a one-letter name.

愛 is a common writing of girls' names in recent years. It ranked within the top 10 most common writings of girls' names in 2006 and the top 100 most common writings nine times for the 15 years between 2004 and 2018 (Table 1).

4. 杏. I take 杏 as another example of girls' names consisting of one Chinese character.

Fig. 1 Variations in readings of the name 大翔. Scores indicate relative frequencies of each reading among the sample ($n = 435$). Scores in parentheses indicate the absolute frequencies of each reading.

Fig. 2 Variations in readings of the name 陽翔. Scores indicate relative frequencies of each reading among the sample ($n = 184$). Scores in parentheses indicate the absolute frequencies of each reading.

杏 is another common writing for girls' names in recent years. It ranked within the top 10 most common writings five times and the top 100 most common writings eight times for the 15 years between 2004 and 2018 (Table 1).

杏 means apricot and is pronounced as an(zu) あん(ず) and kyo (きょう).

Results

Examples of boys' names

1. 大翔. Surprisingly, 大翔 had 18 variations in reading (Fig. 1; Table 2) in the sample ($n = 435$), considering that one writing is paired with one reading in ideogram-using cultures (e.g., English, Spanish, German, French). Hiroto (はると), which is based on the formal and nanori readings, was the most common reading, but there were many other variations. Their pronunciations differed substantially. They ranged from a two-letter name (そら: Sora) to five-letter names (たいしょう: Taisho, だいしょう: Daisho). People may be able to assume some of these

Table 2 Numbers of variations in the reading of common writings.

Writing	Number of variations	Sample size (n)
Boy		
大翔	18	435
陽翔	10	184
翔	4	145
颯	7	52
Girl		
結愛	14	259
陽菜	8	401
愛	4	18
杏	5	125

Fig. 3 Variations in readings of the name 翔. Scores indicate relative frequencies of each reading among the sample ($n = 145$). Scores in parentheses indicate the absolute frequencies of each reading.

Fig. 4 Variations in readings of the name 颯. Scores indicate relative frequencies of each reading among the sample ($n = 52$). Scores in parentheses indicate the absolute frequencies of each reading.

pronunciations, but their speculations are not always correct because there are many options.

Unique readings. 大翔 was read as Tsubasa (つばさ), meaning wing, although neither 大 nor 翔 had such a pronunciation. 翔 means fly/flap, thus parents chose the reading Tsubasa. This type of giving a pronunciation based on a Chinese character's meaning or image is one of the methods recently used to give unique names in Japan (Ogihara, 2015, 2021). Here, 大 was a silent Chinese character that does not affect the reading but contributes

Fig. 5 Variations in readings of the name 結愛. Scores indicate relative frequencies of each reading among the sample ($n = 259$). Scores in parentheses indicate the absolute frequencies of each reading.

Fig. 6 Variations in readings of the name 陽菜. Scores indicate relative frequencies of each reading among the sample ($n = 401$). Scores in parentheses indicate the absolute frequencies of each reading.

to adding meaning and image of large/big (i.e., a big wing; Ogihara, 2015, 2021).

Sora (そら), meaning sky in Japanese, was another example of this method. Although neither 大 nor 翔 has the pronunciation of sora, 翔 implies flying in the sky. Thus, 大翔 was read as Sora. Here, 大 is a silent Chinese character, adding meaning and image of large/big without affecting the reading (i.e., a big sky; Ogihara, 2015, 2021).

Another approach to giving unique names was found in Taishi (たいし). 大 has pronunciation of tai (たい), and 翔 has pronunciation of sho (しょう). Here, the reading of 翔 was shortened to the sound shi (し) and combined with tai (たい). This type of method has been frequently observed in recent baby names in Japan (Ogihara, 2015, 2021).

It is difficult or impossible to assume these unique readings. These types of unique readings make it more difficult to read recent Japanese names correctly at first glance.

2. 陽翔. 陽翔 had 10 variations in reading (Fig. 2; Table 2) in the sample ($n = 184$). Haruto (はると), which is based on the formal and nanori readings, was the most common reading, but there were many other variations. Their pronunciations differed

Fig. 7 Variations in readings of the name 愛. Scores indicate relative frequencies of each reading among the sample ($n = 18$). Scores in parentheses indicate the absolute frequencies of each reading.

Fig. 8 Variations in readings of the name 杏. Scores indicate relative frequencies of each reading among the sample ($n = 125$). Scores in parentheses indicate the absolute frequencies of each reading.

substantially. They were three-letter names (e.g., はると: Haruto) or four-letter names (ひゅうが: Hyuga).

Unique readings. 陽翔 was read as Hinata (ひなた). 陽 has the pronunciation of hinata (ひなた). 翔 worked as a silent Chinese character (not being read, but adding the meaning/image of flying; Ogihara, 2015, 2021).

Hikaru (ひかる) showed the same pattern of unique reading. 陽 has the special pronunciation (nanori) as hikaru (ひかる), and 翔 was a silent Chinese character (Ogihara, 2015, 2021).

3. 翔. Although this name consists of only one Chinese character, 翔 had four variations in reading (Fig. 3; Table 2) in the sample ($n = 145$). Their pronunciations differed remarkably. Sho (しょう), which is one of the formal readings, was the most common reading.

Unique readings. As explained above, 翔 was read as Tsubasa (つばさ) and Sora (そら), although 翔 does not have such pronunciations. The Chinese character 翔 has the meaning of fly/flap, thus parents gave the name Tsubasa which means wing in Japanese. Moreover, wing implies sky (i.e., flying in the sky), and the sky is pronounced as sora in Japanese. This type of giving a pronunciation related to a Chinese character's meaning or image is one of the methods recently used to give uncommon names in Japan (Ogihara, 2015, 2021).

Even though the writing of the name is simple, short, and popular, its possible readings varied. Half of the four types come from the Chinese character's image or meaning, not from formal readings. Thus, it is challenging even for native Japanese speakers to read 翔 correctly.

4. 颯. Surprisingly, 颯 had seven readings (Fig. 4; Table 2) in the sample ($n = 52$). Hayate (はやて), which is one of the formal readings, was most common, but six other variations existed.

Unique readings. 颯 was read as Ibuki (いぶき) meaning breath although the Chinese character does not have such a formal reading. Because 颯 means swift wind, parents gave the reading of ibuki which is related to wind. This is another example of assigning a pronunciation based on a Chinese character's meaning or image (Ogihara, 2015, 2021).

颯 was also read as Sora (そら) meaning sky in Japanese. 颯 does not have the reading of sora officially. 颯 is associated with wind and nature, thus it was read as sora. This is another example of giving a pronunciation based on a Chinese character's meaning or image (Ogihara, 2015, 2021).

Examples of girls' names

1. 結愛. It is surprising that 結愛 had 14 variations in reading (Fig. 5; Table 2) in the sample ($n = 259$). Yua (ゆあ), which is based on the formal readings, was the most popular reading, but there were many other variations in reading. Their pronunciations differed widely.

Unique readings. Yura (ゆら) can be interpreted as a combination of Yu and ra. 結 is read as Yu, but 愛 does not have the pronunciation of ra. This probably comes from the English word love, which is pronounced as rabu (らぶ) in Japanese and is abbreviated to ra (removing bu from rabu). This is one of the methods recently used to give unique names in Japan (Ogihara, 2015, 2021).

2. 陽菜. 陽菜 had eight variations in reading (Fig. 6; Table 2) in the sample ($n = 401$). Although Hina (ひな), which is based on the formal readings, was the most common reading, many other variations existed with substantially different pronunciations.

Unique readings. 陽菜 was read as Hana (はな). 陽 has the pronunciation of haru, but here the reading of 陽 was abbreviated to ha (removing ru). 菜 was read as na as usual. Then, these were combined into Hana. This type of abbreviation is a method recently used to give uncommon names in Japan (Ogihara, 2015, 2021).

陽菜 was also read as Hinata (ひなた). 陽 has the pronunciation of hinata. Here, 菜 is a silent Chinese character that is not pronounced but adds meaning/image of fresh and green (Ogihara, 2015, 2021).

3. 愛. Although this name consists of only one Chinese character, 愛 had four variations in reading (Fig. 7; Table 2) in the sample ($n = 18$). Their pronunciations differed remarkably. Ai (あい), which is one of the formal readings, was the most common reading.

4. 杏. 杏 had five readings (Fig. 8; Table 2) in the sample ($n = 125$). An (あん), which is one of the formal readings, was most common, but there are still four variations in reading.

Unique readings. 杏 was read as Momo (もも) although 杏 does not officially have the pronunciation of momo (もも). In this case, Anzu (apricot) is also called karamomo (からもも) in Japan, which is abbreviated to momo (removing kara).

Discussion

Previous literature has noted the difficulty in reading Japanese names correctly. Even native Japanese speakers cannot read parts

of Japanese names correctly at first glance. However, this difficulty had not been empirically demonstrated by investigating actual data. Thus, it was unclear to what extent it is difficult and how it is difficult. It is important to empirically show this difficulty in reading Japanese names correctly, which contributes to a better understanding of naming practices both in Japan and in vast regions where Chinese characters are/were used. Therefore, I empirically demonstrated how difficult it is to read recent Japanese names correctly by presenting eight examples of both boys' and girls' names based on actual name data.

The results demonstrated that common writings of baby names had many variations in reading. For example, 大翔 had 18 variations, and 結愛 had 14 variations (for a summary, see Table 2). Even names consisting of only one Chinese letter had multiple pronunciations. For example, 颯 had seven and 杏 had five variations in reading (for a summary, see Table 2). Thus, it is empirically confirmed that it is difficult or almost impossible to read names correctly at first glance, even for native Japanese speakers, without explicit references to their readings. People may be able to assume several possible pronunciations, but their speculations are not always correct.

This research also provided concrete examples of how unique names are given to babies. Empirical evidence has suggested that parents in Japan increasingly give unique names by using common Chinese characters and reading them in unique ways (Ogihara et al., 2015). Thus, even though certain writings (the combination of Chinese characters or one Chinese character) of baby names are common, it is difficult (or impossible) to read them correctly at first glance without explicit reference to their pronunciations. This is different from naming in China, where Chinese characters are also used for baby names but most Chinese characters are pronounced in one way (Ogihara, 2020b). This is also different from naming in cultures where alphabet-based languages (e.g., English, Spanish, German, French) are used.

Limitations and future directions. It is difficult to state that the data analyzed were highly representative of the population in interest (all names that were given to newborn babies in Japan). Thus, the distributions of readings that I showed might not be representative. For instance, the number of variations in reading a writing and the percentages of each reading might differ from those in the population. However, the purpose of the present research was to empirically demonstrate that recent Japanese names are difficult to read correctly, not to collect all the variations in readings of some writings. Thus, the purpose was fulfilled. One interested in these specific features of names would need to collect and analyze more representative data.

Data availability

The datasets analyzed during the current study are available in the Open Science Framework: <https://doi.org/10.17605/OSF.IO/2WURJ> (for details, see Ogihara, 2020a).

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Notes

1 The present article does not insist that the difficulty in reading names exists only in Japan. There are different types of difficulties in reading names in different cultures. For example, pronunciation difficulty in English names may be a vowel shift or accent/stress. The purpose of the present article is to empirically demonstrate the difficulty in reading recent Japanese names and not to exclude the difficulties in reading names in other cultures.

- 2 The current article does not claim that the names in the past were easy to read in Japan. It is necessary to empirically investigate whether names in the past were indeed easy to read. Yet, empirically investigating it is difficult because representative and comparable data in the past are unavailable at least in the present in Japan (Ogihara, 2020a; Ogihara et al., 2015).
- 3 The increase in unique names has been reported not only in Japan, but also in Germany (Gerhards and Hackenbroch, 2000), the U.S. (Twenge et al., 2010, 2016), and China (Cai et al., 2018; but also see Ogihara, 2020b).

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Competing interests

The author declares no competing interests.

Additional information

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