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A Japanese logographic character frequency list for cognitive science research

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This paper describes a Japanese logographic character (kanji) frequency list, which is based on an analysis of the largest recently available corpus of Japanese words and characters. This corpus comprised a full year of morning and evening editions of a major newspaper, containing more than 23 million kanji characters and more than 4,000 different kanji characters. This paper lists the 3,000 most frequent kanji characters, as well as an analysis of kanji usage and correlations between the present list and previous Japanese frequency lists. The authors believe that the present list will help researchers more accurately and efficiently control the selection of kanji characters in cognitive science research and interpret related psycholinguistic data.

In many empirical psycholinguistic studies, word frequency is used as an independent variable to select materials having desired frequency characteristics or as a control variable to match two or more sets of materials in order to minimize performance differences attributable to word frequency effects in word recognition, memory, or retrieval performance. It is sometimes important in psycholinguistic research to focus on the frequency effects of linguistic units smaller than words, such as letter clusters (e.g., bigrams or trigrams), syllabic-type units (syllable vs. nonsyllable), morpheme units, as well as position (i.e., word-initial, word-middle, or word-final positions; Appleman & Mayzner, 1981; Grainger & Jacobs, 1993; Srinivas, Roediger, & Rajaram, 1992). For example, logographic character frequency is a crucial factor to consider in word experiments using languages with logographic scripts, such as Chinese, Japanese, or Korean, where each logographic character may function as a word (Matsunaga, 1996). In short, it is important to carefully control the frequency of printed characters and/or words when empirical psycholinguistic studies are conducted.

In the past, compiling linguistic corpora was an extremely labor-intensive process, plagued by reliability concerns caused by human error. However, as computer technology continues to develop, researchers are obtaining more reliable linguistic corpora and compiling word or character frequency lists on the basis of these corpora for linguistic or cognitive science research. For American English, some widely used word frequency lists are the Brown corpus (Kučera & Francis, 1967), the American Heritage Word Frequency Book (Carroll, Davies, & Richman, 1971), and the Thorndike–Lorge count (Thorndike & Lorge, 1944; see the summary in Solso, Juel, & Rubin, 1982). Many of these corpora and lists are available in computer database form and/or through the Internet. Consequently, researchers may use these corpora and lists to control word frequency in empirical language research more easily, efficiently, and accurately than in the past. Corpora for non-English languages, including Japanese, remain limited in number or are still under development (Edwards, 1993; Leech & Fligelstone, 1992).

Word and Character Frequency Lists in Japanese

Over the last two decades, researchers in the area of experimental psychology, especially word recognition and memory, have increasingly focused on the Japanese language, owing to the uniqueness of its writing system (Kess

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& Miyamoto, 1994; Paradis, Hagiwara, & Hildebrandt, 1985; Yokoyama, 1997). In particular, kanji (characters in a logographic script that is one of three scripts used in writing Japanese) has been widely used in experimental materials in order to examine new aspects of cognitive processing, relative to alphabetic language systems, in word recognition and memory and hemispheric involvement in the acquisition and usage of language. However, although many studies have been conducted that use Japanese words, the development of Japanese word frequency lists or kanji character frequency lists has not kept up with the demand for such lists. As a result, for example, the kanji character or word frequency of selected kanji items has often not been controlled or mentioned in Japanese word recognition studies when frequency has not been used as a dependent variable (e.g., Eko & Nakamizo, 1989; Flores d'Arcais & Saito, 1993; Flores d'Arcais, Saito, Kawakami, & Masuda, 1994; Kikuchi, 1996; Morton, Sasanuma, Patterson, & Sakuma, 1992; Nagae, 1994; Naito & Komatsu, 1989; Osaka, 1992; Sekiguchi & Abe, 1992; Wang, 1988; Yokosawa & Shimomura, 1993). In many other studies, the frequency of kanji characters or words is controlled on the basis of (1) the researcher's subjective, intuitive judgment (e.g., Flores d'Arcais, Saito, & Kawakami, 1995; Hatta, Koike, & Langman, 1994; Shimomura & Yokosawa, 1991), (2) the examinee's judgment, such as subjects' rating on selected items (e.g., Yamada, Mitarai, & Yoshida, 1991), (3) the categorization of kanji characters standardized by the Japanese Ministry of Education (e.g., Kyoiku kanji or Gakushu kanji¹; see, e.g., Hayashi, 1988; Hirose, 1992; Nakagawa, 1994; Sakuma, Itoh, & Sasanuma, 1989), (4) lists compiled by examiners themselves (e.g., Wydell, Butterworth, & Patterson, 1995; Wydell, Patterson, & Humphreys, 1993), or (5) the National Language Research Institute's (NLRI's) 1962 or 1976 word/character frequency lists (Cabeza, 1995; Morikawa, 1985; Naito & Komatsu, 1988; Sasanuma, Sakuma, & Kitano, 1992; Tsuzuki, 1993).

One of the main impediments to the development of Japanese word frequency lists is that the electronic representation of Japanese characters is more complicated than that of alphabetical languages. At present, there are three primary electronic coding systems for Japanese characters (i.e., kana and kanji): Japanese Industrial Standards (JIS), Shift-JIS (SJIS), and Extended Unix Code (EUC). Generally, EUC is used in Unix workstations on the Internet, whereas JIS is used for Japanese electronic mail. However, SJIS has been adopted for use with personal computers. Consequently, if different coding systems are used across tasks or methods, one must transfer one character code to another, using a converter such as the network kanji code conversion filter (NKF).

Another factor impeding the development of Japanese frequency lists is the Japanese writing system itself, which comprises three types of orthographies—hiragana, katakana, and kanji. Hiragana and katakana are syllabic scripts in which each symbol represents a sound unit (a syllable). These scripts each contain 46 basic forms, with additional diacritic and historical forms giving a total

of 83 hiragana and 86 katakana forms encoded in JIS and EUC. Hiragana and katakana share the same syllabicsound representation and can be transcribed one by the other (e.g., a syllable / sa / is transcribed as $\stackrel{>}{\geq}$ in hiragana and \forall in katakana). The third Japanese orthography, kanji, is a logographic script adopted from the Chinese language, in which each symbol represents meaning and functions as a morpheme. A single kanji character may represent an independent word (e.g., \mathbf{A} / hon/, book) or part of a word (e.g.,本in日本 /nihon/, Japan). The meaning of each constituent (i.e., a single character) in a kanji word is sometimes less clear or transparent than that of an independent word. Owing to the manner in which kanji characters were transferred from the Chinese to the Japanese language over the centuries, a single kanji character may have obtained more than one reading and may be pronounced in several different ways. For instance, the character $\overline{\mathbf{g}}$, which means *head*, is read as /to/, /do/, /zu/, /ju/, /saki/, /atama/, /kashira/, /kobe/, /kaburi/, and /tsumuri/ (Coulmas, 1989). Furthermore, a great number of homophones (i.e., kanji characters that share a common pronunciation but represent different meanings) occur in Japanese kanji usage. For instance, 木 (tree), 気 (feeling), 機 (chance), 輝 (to glow), 期 (period), and many others are all pronounced /ki/. Thus, in contrast to both hiragana and katakana, kanji characters do not have a systematic sound representation or a one-toone relationship between sound and symbol. The number of kanji characters is quite large and practically uncountable (i.e., kanji dictionaries may contain between 12,000 and 50,000 entries; Kindaichi, 1991; Morohashi, 1989).

Among hiragana, katakana, and kanji, usually only one is conventionally chosen and used to write a given Japanese word. Hiragana is used primarily for words that have a grammatical function, such as particles or case-makers, and for some native Japanese content words. Katakana is used for loan words (i.e., words mainly borrowed from western languages, such as English, French, and Portuguese). Kanji is used for content words, such as nouns, verbs, and adjectives.² Thus, a single Japanese sentence is usually written with all three scripts combined.

However, choice of script is not always consistent and may vary, depending on a writer's intention or a publisher's guidelines for style. For instance, the Japanese word meaning egg, pronounced / tamago /, could be written as たまご in hiragana in one context, but as 卵 in kanji in another context. In their study of the subjective frequency of script type, Ukita, Sugishima, Minagawa, Inoue, and Kashu (1996) studied 750 Japanese words that can be written in more than one Japanese script. The study was conducted by asking 836 Japanese college students to judge whether a given word (written in a given script) is seen often, occasionally, or rarely. The results showed that more than half of the tested words were identified as words seen in more than one script. This inconsistency in orthographic representation makes word counting in Japanese extremely difficult and complicated. In addition, word segmentation in Japanese is more complex than that in English, since word boundaries are not separated with

spaces in written texts. A single kanji character could be a morpheme of a part of a word or a word by itself and may be pronounced differently, depending on the context. Without clear word boundaries, compound words are easily formed. Thus, complications in word counting and segmentation present nontrivial challenges for those compiling word frequency lists in Japanese.

Owing to these problems, few have attempted to make word and kanji character frequency lists in Japanese. The NLRI in Japan published a word frequency list in 1962, based on a corpus derived from 90 different journals and magazines with five different genres, all published in 1956. A total of 140 million tokens, consisting of 40,000 different words (i.e., types), were analyzed in order to develop a frequency list of words possessing a frequency of at least nine. In 1976, the NLRI also published a kanji (character) frequency list based on a corpus published in 1966 derived from three major newspapers, Asahi, Yomiuri, and Mainichi. This corpus provided a total of 991,375 kanji tokens and a frequency list of 3,213 different kanji characters. This was the first attempt to analyze a Japanese corpus with computers, and the results were used to standardize and regulate the use of kanji characters for mass media and education in Japan. For the past three decades, researchers have used these lists as an informative resource for many language-related research projects. In 1997, the NLRI published its 1962 list in floppy disk format (NLRI, 1997).

However, several problems are associated with the use of the NLRI lists for empirical studies. First, the lists are based on dated media samples. Almost three or four decades have passed since the corpora of the 1962 and 1976 lists were collected. Consequently, the reliability of these lists is open to question, since the use of words or kanji in mass media and education may have changed. Second, the 1976 list does not identify low-frequency kanji. The 1962 word list does not contain words possessing a frequency less than nine, and the 1976 kanji list does not provide characters possessing a frequency less than nine. Low-frequency words or characters with the frequency of one are required for many empirical language studies. Third, the lists are not easily accessed, since both were available only in hard copy form until recently. Although the NLRI 1962 list is now available in floppy disk format,³ it is not as accessible, especially to researchers outside Japan, as other language lists that are available over the Internet. It is crucial that these lists be accessible to researchers in computer database format to help make the control and selection of word and kanji frequency simpler, more effective, and more accurate.

In 1994, the situation for Japanese corpus linguistics changed for the better, when CD-ROM databases of newspaper articles became available at a relatively low cost. These computerized corpora of newspapers made it possible to develop an updated kanji frequency list accessible on computers and over the Internet.

The purpose of the present project is to develop a new kanji character frequency list to be made accessible

through the Internet. In consideration of the word segmentation and other problems mentioned above, the authors decided to start by developing frequency lists of kanji characters before attempting kanji word frequency lists. Furthermore, the current usage of kanji in printed mass media is analyzed on the basis of a comparison with 1966 frequencies from the NLRI 1976 list.

Source of Data, Method of Analysis, and Results

The present corpus is available on a CD-ROM entitled *CD-HIASK'93* (Nichigai Associates & *Asahi*, 1994), which contains the text of articles appearing in a major newspaper, covering 1 year of morning and evening editions published in 1993. The data analysis was conducted on Unix workstations, with the program written by the authors in Perl and awk. First, headlines were excluded⁴ from the approximately 110,000 articles⁵ in the data. Second, all the printable characters were counted and ranked by frequency from highest to lowest in each category (e.g., kanji, hiragana, or katakana). Frequency ratio (%) and cumulative frequency ratio (%) were also calculated.

The corpus provided a total of 56,563,595 printable characters,⁶ making it, at the time, the largest corpus used for the compilation of Japanese word/character frequency lists. Ideally, in addition to newspapers, corpora would be collected from other printed texts, such as magazines and novels of various genres. However, most of these printed materials are not yet available in computerreadable form. As a result, it is not currently feasible to gather sufficient amounts of data from these materials. Furthermore, copyright issues complicate the process of copying and studying printed mass media in Japan and may pose an obstacle to making lists based on such materials freely available to the public.

The 56,563,595 characters in the 1993 collection of the *Asahi* newspaper form the basis of the present character frequency list and break down into the general categories shown in Table 1. A total of 23,408,236 kanji tokens were found, making up 4,476 different types. Kanji covered 41% of all the printable characters in the newspapers. The central result of this survey is a list of the kanji characters found, sorted according to their frequencies. The first 3,000 characters are listed in Appendix A with their ranking, raw frequency, frequency ratio (%), and cumulative frequency ratio (%). In addition, frequency lists of hiragana and katakana characters are also included in Appendices B and C,⁷ respectively, with the same headings.

Cumulative percentage of kanji character use. The cumulative frequency ratio of kanji characters, ranked from high to low frequency, is shown in Table 2. Although it has been conventionally said among learners and teachers of Japanese that knowledge of 2,000–3,000 kanji characters is required for one to read Japanese newspapers, this conventional wisdom was not supported by the present data. According to the results of the present analysis, the top 500 most frequent kanji characters accounted for approximately 80% of total kanji use. Furthermore, the top 1,600 most frequent characters covered 99%

 Table 1

 Printable Character Type Totals

Characters	Types	Tokens	Frequency Ratio (%)
Kanji	4,476	23,408,236	41.38
Hiragana	83	20,711,361	36.62
Katakana	86	3,608,288	6.38
Punctuation and symbols	99	7,406,035	13.09
Arabic numerals	10	1,169,902	2.07
Latin alphabet	52	259,773	0.46

of total use and the rest—that is, the next 3,000 characters—made up only 1% of the total kanji use.

The cumulative frequency ratio obtained from the 1966 corpus (i.e., the NLRI 1976 list) is also indicated in Table 2. The results from the two corpora, which are 30 years apart, indicate almost identical ratios for each frequency level. Furthermore, according to the current frequency list, of the 500 most frequent characters ranked in 1966, 445 characters are also ranked among the 500 most frequent characters lower than the first 500 fall within the 1,000 most frequent characters in the 1993 corpus. Thus, the high-frequency kanji characters that account for over 80% of the total kanji use have not changed much in the last 30 years.

Correlation coefficient of chronological character use. To examine change in kanji usage over the past 30 years, a correlation analysis was conducted between the present 1993 list and the NLRI 1976 list based on the 1966 newspaper corpus. The raw frequencies of the 3,000 highest frequency characters in the present list⁸ and the equivalent characters in the NLRI 1976 list were converted to their base-10 logarithmic equivalents9 and submitted to a Pearson correlation coefficient analysis. The result indicates a high correlation (r = .95) and was significant [F(1,3029) = 28,037.67, p < .01]. In Figure 1, although low-frequency characters scatter more than highfrequency characters, the distribution is close to linear.¹⁰ Thus, on the basis of the analysis, it appears that the overall pattern of kanji usage has not significantly changed over the past 30 years.

Discussion

In the present project, the authors introduced the first computer-based kanji character frequency lists derived from the largest corpus of Japanese newspaper texts. It is important to control the frequency of kanji characters in psycholinguistic studies, although researchers have often neglected this variable, owing to the unavailability of reliable frequency lists. Using the present list, the authors have compared kanji usage observed in data from 1966 and 1993. Although changes in language usage are often discussed in Japanese linguistic studies in terms of syntax, phonology, lexicography, and pragmatics, the usage of kanji characters did not show any significant variation over the past 30 years.

However, there are several issues left to discuss in the present study. First, the corpus of the present word list was

developed from a single newspaper. Although the newspaper used in the present project is a major Japanese newspaper that currently publishes 10 million copies every day for 120 million people in Japan (one paper is usually read by more than one person), there may be some bias in terms of the selection of topics and style. Goto (1995) warned of this problem for researchers using a corpus derived from newspapers, arguing that newspapers usually focus heavily on politics, economics, and foreign policy. As a result, vocabulary related to those areas may appear in newspapers more often than in other types of published materials. In addition, each newspaper has its own regulations or standards for choosing words and expressions. Furthermore, the number of newspaper writers, compared with the number of readers, is limited, and consequently, the effects of idiosyncratic writing styles and word selection may be exaggerated, causing a bias in any analysis based exclusively on such data. Since the present character list was made from a corpus of newspapers, future research should be aimed at employing a variety of genres and types of publications to develop linguistic corpora.

To examine this issue of the bias in the present newspaper corpus, a correlation analysis of kanji frequency was conducted among the present list developed with 1993 newspapers, the NLRI 1962 list with 1956 magazines, and the NLRI 1976 list with 1966 newspapers. The results indicated a significant and high correlation between the 1956 magazine list and the 1966 newspaper list (r = .92, p < .01), and between the 1956 magazine list and the 1993 newspaper list, (r = .89, p < .01; see Table 3). The higher correlation between the 1956 and 1966 lists was probably due to the closer timing of data collection, compared with that between the 1956 and 1993 lists. However, these high correlation results may indicate that the data collected from a single newspaper in this present analysis may be a reliable resource for predicting kanji character frequency in printed mass media in general.

To examine the reliability of the present list, an additional correlation analysis was conducted with the kanji characters grouped according to frequency level. The 3,000 ranked characters were divided into three groups: (1) high-frequency characters ranked from 1 through 1,000, (2) mid-frequency characters ranked from 1,000

Cumulative Freque	Table 2 ncy Ratio of Kanji	Character Use
	Cumulative Freq	uency Ratio (%)
Frequency Rank	1993	1966
10	10.00	10.61
50	27.41	27.64
100	40.71	40.15
200	57.02	56.05
500	80.68	79.42
1,000	94.56	93.88
1,500	98.63	98.40
2,000	99.72	99.63
2,500	99.92	99.90
3,000	99.97	99.98

Note—Frequency rank = size of the group of highest frequency characters.

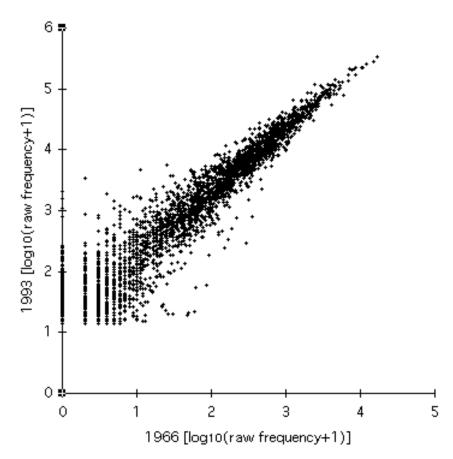


Figure 1. Kanji usage correlation distributions of top 3,000 characters between 1966 and 1993.

though 2,000, and (3) low-frequency characters ranked from 2,001 through 3,000. Although the correlations vary, depending on the levels and lists, all were significant at the p < .01 level (see Table 4).

The results indicate high correlations at the high-frequency levels between the present list and the other two lists. Notably, a high correlation of the 1993 news-paper list with the 1966 newspaper list at the high-frequency level (r = .92) indicates again that the present list can be a reliable resource, especially at the high-frequency levels, although the data were collected from a single newspaper.

In contrast, at the low-frequency levels, the correlations of the present list are low with the 1966 list (r = .43) and with the 1956 list (r = .28). This may imply a drastic change of kanji usage over the decades or some unreliability of the present list at the low-frequency level. The first interpretation is easily dismissed, considering the overall high correlations with other lists, as indicated in Table 3, and the similar low correlation between the 1966 and 1956 lists at low-frequency level (r = .40), which were developed relatively close in time. Does this mean that the present list is not reliable at the low-frequency list? That does not have to be the conclusion. The most likely interpretation is that the low correlations are due to the differences in size of the corpora of the three lists. The size of the 1993 kanji corpus was much greater than the other two, containing 23,408,236 tokens and 4,476 types. The 1966 list was compiled on the basis of 991,375 kanji tokens and 3,213 types, and the 1956 list was based on 280,094 kanji tokens and 3,328 types. Since the present correlation analysis was conducted with the 3,000 highest ranked characters in the 1993 list, some characters did not even exits in the 1966 or 1956 list. For instance, among the 38 characters ranked at 2,996 in the 1993 list, 17 characters were not included in the 1956 list, and 23 characters were not included in the 1966 list. Thus, the size difference in the corpus seems to be the most probable reason for the low correlation between the lists. If that is the case, the largest corpus could be the most reliable information for low-frequency charactersthat is, the present list can be plausibly used as the most

Table 3 Correlation of Kanji Frequency Among 1993, 1966, and 1956 Lists With All 3.000 Ranked Characters

	1993 N	1966 N	1956 M
List	r	r	r
1993 N	1.00		
1966 N	.95	1.00	
1956 M	.89	.92	1.00

Note-N, newspapers; M, magazines.

Table 4
Correlation of Kanji Frequency Among 1993
1966, and 1956 Lists With High-, Mid-,
and Low-Frequency Ranked Characters

		1966N	1956M
List	Frequency	r	r
1993N	high	.92	.80
	mid	.68	.55
	low	.43	.28
1966N	high	1.00	.86
	mid	1.00	.60
	low	1.00	.40

Note—N, newspapers; M, magazines. High = characters ranked from 1st through 1,000th. Mid = characters ranked from 1,001st through 2,000th. Low = characters ranked from 2,001st through 3,000th.

reliable resource. Thus, the correlation analysis among the three lists can support the high reliability of the present list.

Another issue relating to the present project is the reliability of a computerized Japanese corpus (i.e., CD-HIASK'93), transformed from the original hard copy form (i.e., the Asahi newspaper). There are few instances in which kanji characters appearing in the newspaper did not appear encoded as kanji in the current CD-ROM corpus. The original locations of those characters in the newspaper were marked by symbol characters, such as the "geta mark" (\Box) in the electronic format (Yokoyama, Sasahara, Nozaki, & Long, 1998). This is due to several revisions made in JIS,11 which is an electronic character encoding standard and assigns a code to approximately 6,300 kanji characters. Although only a few hundred of these cases were observed out of 23 million kanji tokens in the current CD-ROM corpus and these were among the lowest frequent characters, this inconsistency between printed and electronic data formats should be kept in mind when low-frequency characters are used or focused on.

In the present project, a new kanji character frequency list was developed with the largest newspapers corpus in Japanese corpus linguistic history. Although there are still some issues left, the present list provides useful information on kanji usage in the current printed media. Furthermore, the present list has become available and accessible in computer database over the Internet,¹² which helps researchers control and interpret logographic psycholinguistic studies more accurately and efficiently.

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NOTES

1. The set of Kyoiku kanji contains 881 characters to be taught in elementary schools. These characters were selected by the Ministry of Education in 1948. This set was revised, and 1,006 characters were selected and defined as Gakushu kanji for the same purpose in 1989.

2. Verbs, adjectives, and adverbs are often written in a combination of kanji and kana characters. The stem of those words, which does not change in conjugation, is written in kanji, and the inflectional endings in hiragana. For instance, $\mathbf{\hat{g}} \prec \mathbf{\hat{s}}$ /ta-beru/(*to eat*), $\mathbf{\hat{\pi}} \neq \mathbf{\hat{v}}$ /oo-kii/(*big*), and $\mathbf{\bar{F}} \leq /$ haya-ku/(*early*) are all written with the first character in kanji and the rest in hiragana.

3. Owing to Japanese copyright ownership issues, it may not be feasible to provide the 1976 NLRI kanji list in computer database form in the near future.

4. Headlines were excluded from the present analysis because inconsistencies were observed in headlines in hard copy versions of the newspapers, as compared with headlines downloaded from the CD-ROM.

5. In addition to the articles downloaded from CD-ROM, 114 articles were input manually into the database, since they were not included in the CD-ROM.

6. These printable characters include kanji, hiragana, katakana, Latin alphabets, Arabic numerals, punctuation, and symbols (commas, periods, quotation markers, etc.).

 Appendix C, katakana frequency list, is cited from Nozaki, Chikamatsu, and Yokoyama (1997).

8. The first 3,000 ranks included 3,031 characters in the 1993 list.

9. Logarithmic transformation was used because the data were positively skewed—that is, there were more low-frequency characters and fewer high-frequency characters. A value of 1 was added before the logarithmic transformation,—that is, log10 (raw frequency+1) instead of log10 (raw frequency). This is because many of lowest frequency characters in the 1993 list were not found at all in the 1966 list (i.e., zero occurrence), which would make the logarithmic transformation impossible.

10. No value of logarithmic transformation was plotted between 0 and 1 in the *y*-axis because all top 3,000 ranked characters occurred more than 13 times in the 1993 list and the value of log10(raw frequency +1) was more than 1.

11. JIS has been revised four times over the last two decades, in 1978, 1983, 1990, and 1997. In each revision, a few new codes were added or replaced with old codes for kanji characters. Consequently, although it is very rare, some characters may appear different, depending on the version used for decoding on computers. For instance, four kanji characters that are part of the 1983 JIS standard were replaced by symbol characters on the CD-ROM. For further discussion, see Yokoyama et al. (1998).

12. The presently developed kanji character frequency list is available at http://nozaki-lab.ics.aichi-edu.ac.jp/ on the World-Wide Web.

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30前9688080 $ id$ 57128130 $ dt$ 41775180 $ ft$ 32674230 $ kt$ 26698280 $ zt$ 2237131 $ tt$ 9574081 $ tt$ 56649131 $ tt$ 41498181 $ tt$ 32619231 $ tt$ 26673281 $ st$ 2224432 $ ch$ 9548382 $ tt$ 56562132 $ tt$ 41321182 $ tt$ 32609232 $ Lt$ 26386282 $ ut$ 2224333 $ tt$ 9535183 $ tt$ 56689133 $ tt$ 40315183m32408233 $ tt$ 26328283 $ mt$ 2210834 $ m$ 9505484 $ tt$ 55727134 $ tt$ 39407186 $ tt$ 235 $ tt$ 25973286 $ tt$ 2200835 $ tt$ 9429785 $ tt$ 54695137 $ tt$ 39407186 $ tt$ 31607237 $ tt$ 25858287 $ tt$ 2186438 $ tt$ 8750087 $ tt$ 38777188 $ tt$ 31539 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																		
31 生 95740 81 目 56649 131 氏 41498 181 資 32619 231 側 26673 281 参 22244 32 合 95483 82 千 56562 132 数 41321 182 首 32609 232 広 26386 282 単 22213 33 行 95351 83 全 56089 133 権 40315 183 町 32408 233 税 26328 283 州 22108 34 部 95054 84 京 55727 134 教 39517 184 世 32407 234 省 26272 284 基 2071 35 地 94297 85 実 55624 135 題 39433 185 女 32208 235 使 25994 285 流 2038 36 後 88040 86 問 54953 136 道 39407 186 挙 31999 236 増 25973 286 領 21999 37 議 87500 87 決 54695 137 保 38994 187 院 31607 237 認 25858 287 死 21864 38 党 87133 88 相 54614 138 受 38775 188 委 31539 238 付 25779 288 井 21843 39 八 86828 89 米 54562 139 勝 38645 189 查 31519 238 官 25779 289 容 21808 40 民 86051 90 当 54077 140 総 38639 190 界 31240 240 求 2551 290 疑 21612 41 六 85900 91 度 54048 141 原 38404 191 団 31087 241 半 25640 291 校 21533 42 見 85767 92 下 54047														際			空	
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33 行 95351 83 全 56089 133 権 40315 183 町 32408 233 税 26328 283 州 22108 34 部 95054 84 京 55727 134 教 39517 184 世 32407 234 省 26272 284 基 22071 35 地 94297 85 実 55624 135 題 39433 185 女 32208 235 使 25994 285 流 22038 36 後 88040 86 問 54953 136 道 39407 186 ¥ 31999 236 増 25973 286 領 21999 37 議 87133 88 相 54614 138 受 38775 188 ズ 31539 238 付 25779 288 井 21808 39 八 86828 89 米 54562 139 勝 38645 189 在 31519																		
34 部 95054 84 京 55727 134 教 39517 184 世 32407 234 省 26272 284 基 22071 35 地 94297 85 実 55624 135 題 39433 185 女 32208 235 使 25994 285 流 22038 36 後 88040 86 問 54953 136 道 39407 186 挙 31999 236 増 25973 286 領 21999 37 議 87500 87 決 54695 137 保 38994 187 院 31607 237 認 25858 287 死 21864 38 党 87113 88 相 54614 138 受 38775 188 委 31539 238 付 25779 289 容 21808 40 民 86051 90 当 54077 140 総 38639 190 界 31240 240 求 25754 290 疑 21612 41 六 85900 91 度 54048 141 原 38404 191 団 31087 241 半 25640 291 校 21533 42 見 85767 92 下 54047 142 思 38272 192 校 </td <td></td> <td>州</td> <td></td>																	州	
35 地 94297 85 実 55624 135 題 39433 185 女 32208 235 使 25994 285 流 22038 36 後 88040 86 問 54953 136 道 39407 186 挙 31999 236 増 25973 286 領 21999 37 議 87500 87 決 54695 137 保 38994 187 院 31607 237 認 25858 287 ½ 21864 38 党 87133 88 相 54614 138 妥 38775 188 盃 31539 238 ft 25779 288 # 21864 39 八 86828 89 米 54562 139 勝 36639 190 累 31240 240 求 25754 290 疑 21868 40 民 86051 90 当 54077 140 総 38639 190 界 31240																	基	
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37 議 87500 87 決 54695 137 保 38994 187 院 31607 237 認 25858 287 死 21864 38 党 87133 88 相 54614 138 受 38775 188 委 31539 238 付 25879 288 井 21864 39 八 86828 89 米 54562 139 勝 38645 189 査 31519 238 官 25779 289 容 21808 40 民 86051 90 当 54077 140 総 38639 190 界 31240 240 求 25754 290 疑 21612 41 六 85900 91 度 54048 141 原 38404 191 団 31087 241 半 25640 291 検 21533 42 見 85767 92 下 54047 142 思 38272 192 校 30617 243 阪 25521 292 古 21530 43 問 84934 93 主 53796 143 以 37777 193 労 30617 244 企 25377 294 特 21456 45 員 83847 95 表 52129 145 平 37547 193 第 </td <td></td> <td>領</td> <td>21999</td>																	領	21999
38 党 87133 88 相 54614 138 受 38775 188 委 31539 238 付 25779 288 井 21843 39 八 86828 89 米 54562 139 勝 38645 189 査 31519 238 官 25779 289 容 21808 40 民 86051 90 当 54077 140 総 38639 190 界 31240 240 求 25754 290 疑 21612 41 六 85900 91 度 54048 141 原 38404 191 団 31087 241 半 25640 291 検 21533 42 見 85767 92 下 54047 142 思 38272 192 校 30617 243 阪 25521 292 古 21530 43 問 84934 93 主 53796 143 以 37777 193 予 30617 244 企 25377 294 特 21456 45 員 83847 95 表 52129 145 平 37547 195 国 30581 245 蝐 25330 295 係 21338 46 入 82282 96 化 52076 146 協 37433 196 討 </td <td></td> <td>237</td> <td></td> <td></td> <td>287</td> <td>死</td> <td></td>													237			287	死	
39 八 86828 89 米 54562 139 勝 38645 189 查 31519 238 官 25779 289 容 21808 40 民 86051 90 当 54077 140 総 38639 190 界 31240 240 求 25754 290 疑 21612 41 六 85900 91 度 54048 141 原 38404 191 団 31087 241 半 25640 291 検 21533 42 見 85767 92 下 54047 142 思 38272 192 校 30617 243 阪 25521 292 古 21530 43 問 84934 93 主 53796 143 以 37777 193 予 30617 244 企 25377 294 特 21472 44 新 84073 94 理 52743 144 強 37577 193 第 30617 244 企 25377 294 特 21456 45 員 83847 95 表 52129 145 平 37547 195 回 30581 245 朝 25330 295 係 21338 46 入 82282 96 化 52076 146 協 37433 196 計 </td <td></td> <td>井</td> <td>21843</td>																	井	21843
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50 東 79738 100 不 50768 150 多 36947 200 重 30219 250 職 25253 300 式 20690																		
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	CF	~	27.4104	CF	1	40.7119		~	49.9366	CF	-	57.0228	CF	1000	62.8109	CF		67.7131
Cr 27.4104 Cr 40.7117 Cr 47.7500 Cr 57.0220 Cr 02.0107 Cr 07.7151			27.4104			40.7119	01		-77.7500			57.0220			52.0107			51.1151

APPENDIX A Kanji Character Frequency List

R C F R C F R C F R C F R C F R C F R C F R C F R C F R C F R C F R C F R C F R C F S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S S								AFI	'ENDIX A		unu	eu)						
10.2 2 20.57 35.2 % 17106 40.2 x 14668 45.3 % 12865 50.2 III 11197 55.3 % 9827 303 w 20507 35.4 L 17040 403 % 1273 50.4 % 11114 55.5 % 9827 305 m 20207 35.5 % 16025 40.6 45.5 % 1273 50.6 % 11115 55.6 % 9702 307 2 20007 35.7 # 16788 40.8 \$ 1433 458 % 10265 50.7 % 11064 557 % 79762 310 4 19917 360 \$ 16709 41.1 84122 462 462 1021 51.0 # 11020 56.7 \$ 9701 317 # 19517 36.4 # 1620 417 <	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
102 2 20370 352 % 17106 402 x 14668 453 % 12865 502 M 11171 553 % 9827 303 W 20507 354 L 17040 403 % 14566 455 % 12703 507 % 11115 556 % 9827 307 % 200207 357 % 16678 409 % 14335 458 % 12065 508 % 11046 557 % 757 % 766 % 7762 310 % 11046 559 % 11046 559 % 7762 310 % 11048 158 1071 11048 14262 462 463 K 1255 317 % 11020 563 % 11020 567 % 780 780 781 781 781 781 781050 771 %	301	止	20667	351	敗	17216	401	庁	14694	451	愛	12884	501	様	11241	551	火	9865
101 20 20 20 20 303 48 11174 533 38 98.05 105 20 20281 335 16 17940 404 44 456 455 12713 504 58 11114 555 50 97 11130 555 50 97 97 90 11174 554 48 98.05 11174 554 49 97.06 307 41.010 357 81 1658 407 14.143 147 52 127.06 507 80 11164 556 40 97.00 300 14.07 11.04 14.133 457 81 12.066 308 82 11046 556 47 97.00 307 40 11.012 506 177 40 11.133 14.120 461 11 12.545 517 40 10.01 11.012 506 47 97.00 31.31 11020 561 107.00 561 107.00 561 107.01 10.11 10.44 10.11 10.44 10.11		置		352	術	17108	402	武	14668	452	横	12865	502	彚	11203	552	他	9828
303 b) 2037 334 E 1740 404 K 14566 455 K 1273 504 FK 11130 555 L 9766 303 20234 335 ft 16982 405 K 14564 456 K 12713 506 FK 11116 555 K 9780 307 ψ 20100 357 ft 16982 400 K 14471 457 K 12713 506 FK 11116 555 M 9780 307 K 19987 359 # 16746 400 K 14330 459 R 12645 517 M 11046 557 F 9760 7772 7772 7774 17774 1568 1309 K 11047 554 K 9704 1074 K 19704 11116 1564 K 1274 11110 11074 554 K 9706 777 17711 11110 11074 11074 11074 11074 11074		果	20557	353	説	17106	403	造	14659	453	族	12820	503	橋	11197	553	満	9827
905 91 20281 355 加 16922 406 41 4566 456 12713 506 78 11115 556 ∞ 9796 306 ± 20027 338 tal 16798 408 xi 14383 438 yi 12706 507 78 11066 537 \equiv 9780 300 ± 20027 338 tal 16798 408 xi 14333 438 yiii 12631 500 RE 11046 559 # 9702 317 # 19917 360 # 16122 410 ¥ 14262 462 12610 510 # 11025 562 # 9706 313 # 16502 417 # 14202 463 \$ 12425 517 # 11025 563 # 9609 9114 455 # 10821 566 # 9643 317 # 1629 417 # 14245 517 # 10822 565	304			354	足	17040	404	佐	14601	454	被	12773	504	答	11174	554	録	9805
306 & 20234 356 £ 16925 406 য় 14471 457 Ŷ 12716 506 % 11116 556 % 9780 307 ½ 20007 335 য় 16798 408 314 343 358 % 12085 507 % 11066 557 % 9780 309 ሺ 19987 359 乘 16744 400 ½ 14369 459 \$ 12016 510 309 % 17046 500 \$ 7702 317 Å 19844 367 % 16709 411 % 14264 461 11 1555 517 ½ 11012 567 % 9792 317 % 19830 366 ñ 16610 414 % 12443 516 101796 567 % 9624 317 % 19320 367 第							405	与		455	供	12765		隊		555	丸	
907 308 20027 357 福 16798 408 3138 20127 358 201287 358 201287 359 7518 4079 408 3138 41674 409 41383 458 310 41047 41399 4139 41400 4128 41242 414 4120 466 21242 517 4119 4141 4162 467 21242 517 4109 4141 4163 4162 4142 4142 4142 4142 4142 4142 4142 4143 417 4142 4143 417 4142 417 4143																	夜	
308 ± 20027 358 wile 1678 409 114383 458 wile 12685 509 Mill 11046 559 \$\$\$\$ \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$																		
309 10987 359 乗 1676 409 質 14369 459 末 12631 509 和 11046 559 介 7622 310 有 19917 360 环 16712 410 限 14335 460 負 12283 511 281 11037 560 所 9711 313 第 19561 363 戦 16657 413 % 14222 462 第 12524 513 第 10955 563 単 9684 315 該 19561 363 第 16602 415 ½ 14120 464 第 12443 516 第 10790 566 第 9624 317 転 19320 367 港 16502 417 第 14133 466 2 12443 516 第 1964 第 19795 567 第 9624 317 転 19320 367 第 16333 419 41933 459 12433<																		
370 有 19917 360 球 16712 410 限 14335 460 負 12610 510 細 11020 561 河 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 777 77																		
317 総 19884 367 新 16709 411 路 14264 461 Ш 12585 517 独 1102 567 河 9711 317 語 19633 362 決 16660 412 懲 143 民 14224 464 451 111 165 563 भ 9699 314 월 19517 364 導 16602 415 技 14120 463 第 12421 514 40 1075 563 # 9699 316 ½ 19529 366 第 16632 417 第 14023 465 ½ 12431 517 # 10790 568 % 9595 317 範 19224 368 証 1643 418 # 1394 468 ½ 12333 518 # 10792 567 # 9595 320 ½ 19104 370 ½ 16208 420 ¾ 13818 477 Ц 12148																		
312 石 19633 362 残 16660 412 態 14262 462 器 12552 512 光 11012 562 計 9708 313 請 19561 363 額 16657 413 泉 14202 463 低 12544 513 # 10955 564 単 9684 315 終 19363 365 算 16602 415 技 14129 465 字 12461 515 推 10871 566 第 9642 316 @ 19320 366 南 16663 416 助 14113 466 追 12443 516 样 10795 567 署 9624 318 @ 19204 369 ዿ 16324 419 # 13911 470 ڸ<																		
313 語 19561 363 額 16657 413 果 14202 463 低 12482 514 60 10871 563 逆 9684 315 & 19533 365 第 16600 415 枚 14120 466 ž 12482 514 67 洋 10705 566 ½ 9684 316 & 19320 367 港 16503 416 助 14113 466 ½ 12433 517 祥 10790 566 ½ 9624 317 転 19324 369 其 16434 419 廿 13933 469 164 12334 519 井 10790 566 ½ 955 520 詳 10791 568 4959 520 詳 10694 577 非 9434 322 ½ 18716 377 ½ 16259 422 第 13818 477 12148 527 其 10644 577 19343 9313 <																		
314 通 19517 364 導 16610 414 % 14129 464 节 12482 514 ф 10871 564 達 9684 315 終 19359 366 16600 415 技 14113 466 ≟ 12443 516 洋 10822 565 林 9642 317 転 19320 367 港 16520 417 節 14053 466 差 1243 517 衛 10796 567 署 9624 318 ữ 19246 369 16324 419 谷 13933 466 第 12335 519 共 10790 567 署 9624 320 送 19104 370 究 16308 420 % 13911 470 % 12259 520 10752 569 373 \$ 9377 321 K 18766 373 % 16201 423 席 13803 473 12175 521 10564																		
315 終 19363 365 第 16602 415 技 14120 465 芊 12461 515 推 10796 565 林 9642 317 転 19320 367 诺 16503 416 19 14113 466 i 12443 517 第 10795 567 78 9632 317 転 19246 369 耳 16324 419 1914 373 % 16324 419 47 1914 370 % 16324 419 47 13818 12259 520 ¥ 10755 577 # 9532 321 tk 18766 377 tk 16259 422 編 13818 477 tk 12125 524 th<10553																		
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324 位 18746 374 争 16165 424 形 13788 474 整 12125 524 訪 10557 574 憲 9337 325 研 18714 375 急 16136 425 展 13711 475 首 11987 525 辺 10535 576 厚 9317 326 護 18702 376 案 16093 426 町 13708 476 退 11983 525 請 10535 576 厚 9314 327 収 18605 377 松 16063 427 戸 13646 477 守 11946 528 離 10447 578 素 9310 329 消 18557 379 援 16005 428 公 13420 480 環 11923 529 深 10435 579 益 9310 330 軍 18513 381 何 16005 431 仕 13490 480 環 11803 531 ψ 10228 580 接 9254 333 銀 18379 383 宅 15976 432 ⋢ 13479 482 太 11706 533 ψ 10228 580 ξ 924 333 銀 18379 383 宅 15976 432 ⋢ 13479 <td< td=""><td>322</td><td></td><td>18815</td><td>372</td><td></td><td>16259</td><td></td><td></td><td></td><td>472</td><td></td><td>12148</td><td></td><td></td><td>10564</td><td></td><td></td><td></td></td<>	322		18815	372		16259				472		12148			10564			
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326 護 18702 376 楽 16093 426 頭 13708 476 退 11983 525 諸 10535 576 庫 9314 327 収 18605 377 松 16063 427 戸 13646 477 中 11968 527 呼 10451 577 森 9311 328 再 18596 378 茶 16052 428 谷 13624 478 注 11945 527 評 10451 577 森 9310 330 軍 18521 380 製 16017 430 況 13490 480 環 11863 530 師 10289 580 接 9281 331 能 18133 381 何 16005 431 位 13480 481 型 11808 531 史 10288 587 登 9160 332 比 18385 382 率 15978 432 葉 13479 482 太 11804 532 处 1028 583 撃 9160 334 m 18302 384 例 15708 435 監 13312 483 客 11756 533 € 10220 585 ½ 9083 335 輸 18109 386 可 15703 436 長 13292 <td< td=""><td>324</td><td>位</td><td>18746</td><td>374</td><td>争</td><td>16165</td><td>424</td><td>形</td><td>13788</td><td>474</td><td></td><td>12125</td><td>524</td><td></td><td>10557</td><td>574</td><td></td><td>9337</td></td<>	324	位	18746	374	争	16165	424	形	13788	474		12125	524		10557	574		9337
327<	325	研	18714	375	急	16136	425	展	13711	475	窅	11987	525	辺	10535	575	吉	9317
328 再 18596 378 落 16052 428 谷 13624 478 注 11946 528 離 10447 578 並 9310 329 消 18557 379 援 16023 429 働 13525 479 返 11923 529 深 10345 579 益 9281 330 軍 18521 380 製 16017 430 況 13490 480 環 11863 530 師 10289 580 援 9254 331 能 18513 381 何 16005 431 仕 13480 487 型 11808 537 史 10228 583 ξ 9160 332 比 18379 383 宅 15916 433 早 13458 483 天 11804 532 处 10228 583 撃 9101 334 18379 385 備 15708 435 監 1312 483 ⋜ 11756 533 段 10228 583 撃 9101 334 18104 385 備 15708 435 監 1312 483 ⋜ 11756 534 材 10220 585 找 9081 335 前 18109 386 可 15703 436 授 13222	326	護	18702	376	楽	16093	426	頭	13708	476	退	11983	525	請	10535	576	庫	9314
329 消 18557 379 援 16023 429 働 13525 479 返 11923 529 深 10345 579 益 9281 330 軍 18521 380 製 16017 430 況 13490 480 環 11863 530 師 10289 580 技 9254 331 能 18513 381 何 16005 431 仕 13490 480 環 11863 530 師 10289 580 技 9254 332 比 18835 382 率 15978 432 葉 13479 482 太 11804 532 处 10249 582 乗 9104 333 銀 18379 383 宅 15916 433 早 13458 483 ズ 11756 534 材 10224 584 券 9083 335 輸 18194 385 備 15708 435 監 13312 485 影 11739 535 販 10220 585 捜 9081 336 崎 18109 386 可 15703 436 技 13292 486 財 11721 536 積 10107 587 閣 9009 337 警 18075 387 訴 15625 437 廿 13285 <t< td=""><td>327</td><td>収</td><td>18605</td><td>377</td><td>松</td><td>16063</td><td>427</td><td>戸</td><td>13646</td><td>477</td><td>守</td><td>11968</td><td>527</td><td>呼</td><td>10451</td><td>577</td><td>森</td><td>9311</td></t<>	327	収	18605	377	松	16063	427	戸	13646	477	守	11968	527	呼	10451	577	森	9311
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330 軍 18521 380 製 16017 430 况 祝 13490 480 環 11863 530 師 10289 580 接 9254 331 能 18513 381 何 16005 431 仕 13480 481 型 11808 531 史 10288 581 登 9160 332 比 18385 382 率 15978 432 菜 13479 482 太 11804 532 处 10249 582 梁 9160 333 銀 18379 383 宅 15916 433 早 13458 483 天 11756 533 段 10228 583 撃 9101 334 南 18302 384 例 15708 435 監 1312 485 影 11773 535 販 10220 585 找 9083 335 輪 18194 385 備 15703 436 授 13292 486 財 11721 536 積 10107 587 找 9000 337 警 18075 387 訴 15625 437 円 13285 488 望 11648 538 振 10107 587 ⋈ 9000 338 18055 388 備 15514 439 栗 13241					援			働	13525	479	返	11923	529	深	10345	579	益	9281
331<能					製		430	況	13490	480	環	11863	530	師	10289	580	接	9254
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344 違 17785 394 担 15101 444 課 13069 494 響 11398 544 階 9991 594 編 8892 345 夫 17655 395 労 15078 445 良 13056 495 花 11388 545 根 9986 595 責 8867 346 ± 17596 396 優 14952 446 伝 13043 496 復 11306 546 船 9967 596 寄 8856 346 ± 17596 397 域 14941 447 英 13009 497 春 11296 547 賞 9944 597 模 8847 348 身 17527 398 難 14846 448 管 13004 498 述 11293 548 赤 9908 598 鮮 8815 349 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
345 夫 17655 395 労 15078 445 良 13056 495 花 11388 545 根 9986 595 責 8867 346 ± 17596 396 優 14952 446 伝 13043 496 復 11306 546 船 9967 596 寄 8856 346 義 17596 397 域 14941 447 英 13009 497 春 11296 547 賞 9944 597 模 8847 348 身 17527 398 難 14846 448 管 13004 498 述 11293 548 赤 9908 598 鮮 8815 349 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
346 士 17596 396 優 14952 446 伝 13043 496 復 11306 546 船 9967 596 寄 8856 346 義 17596 397 域 14941 447 英 13009 497 春 11296 547 賞 9944 597 模 8847 348 身 17527 398 難 14846 448 管 13004 498 述 11293 548 赤 9908 598 鮮 8815 349 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
346 義 17596 397 域 14941 447 英 13009 497 春 11296 547 賞 9944 597 模 8847 348 身 17527 398 難 14846 448 管 13004 498 述 11293 548 赤 9908 598 鮮 8815 349 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
348 身 17527 398 難 14846 448 管 13004 498 述 11293 548 赤 9908 598 鮮 8815 349 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
349< 配 17505 399 防 14835 449 条 13000 499 好 11289 549 歌 9882 599 図 8737 350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
350 館 17362 400 幹 14780 450 念 12958 500 去 11273 550 浜 9873 600 催 8733																		
CF 71.7398 CF 75.1727 CF 78.1088 CF 80.6841 CF 82.9314 CF 84.9251	350	館		400	幹			念			去			浜			催	
	CF		71.7398	CF		75.1727	CF		78.1088	CF		80.6841	CF		82.9314	CF		84.9251

APPENDIX A (Continued)

							APP	PENDIX A	(Con	tinu	ed)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
601	右	8727	651	核	7701	701	占	6760	751	厚	6064	801	徳	5313	851	遠	4810
602	央	8705	652	療	7693	702	留	6748	752	辞	6063	801	固	5313	852	老	4798
603	走	8703	653	余	7692	703	罪	6740	753	香	6062	803	震	5300	853	雑	4796
604	江	8700	654	週	7691	704	級	6736	754	湾	6021	803	熊	5300	854	狙	4787
605	障	8656	655	波	7654	705	竹	6735	755	暴	6009	805	坂	5293	855	削	4780
605	易	8656	656	完	7624	706	短	6728	756	圧	6003	806	塚	5292	856	臨	4760
607	清	8652	657	織	7616	707	等	6725	757	勤	5980	807	測	5280	857	焼	4759
608	速	8614	658	類	7594	708	換	6689	758	抗	5949	808	賛	5273	858	底	4754
609	博	8547	659	左	7545	709	将	6683	759	倍	5939	809	倒	5270	859	為	4747
610	欧	8543	660	講	7507	710	尾	6664	760	背	5920	809	旬	5270	860	昇	4724
611	友	8533	661	津	7503	711	芸	6632	761	昭	5845	811	普	5254	861	養	4720
612	秒	8517	662	顏	7492	712	毎	6627	762	途	5831	812	版	5251	862	儀	4716
613	督	8505	663	駅	7454	713	締	6625	763	戻	5817	813	停	5231	863	努	4715
614	健	8477	664	就	7440	714	寺	6623	764	貨	5811	814	築	5217	864	混	4710
615	休	8473	665	夏	7423	715	Ţ	6590	765	、帯	5768	815	(脱	5208	865	樹	4701
616	除	8472	666	愛舞	7423	716	植	6556	766	順	5766	816	執	5200	866	温	4675
617	渉	8472 8468	667	廃	7422	717	羽	6552	767	押	5747	817	軽	5196	867	宣	4674
618	飛	8448	668	装	7402	718	亡	6545	768	曲	5742	818	練	5170	868	죑	4672
	献	8448 8444	669	降	7382	719	迎	6536	769	岸	5738	819	康	5169	869	創	4663
619	凯		670	批	7370	720	績	6529	770	户 徒	5727	820	街街	5163	870	絶	4637
619	与存	8444	671	而否		720	傾旅	6527	771	崩	5724	820	浦	5158	870	郵	4637
621		8443		百賀	7351		까 岩						避			密	
622	航	8430	672		7339	722		6524	772	源 彼	5703	822	棄	5143	872	т 令	4623
623	介	8422	673	破幻	7285	723	盟	6507	773		5686	823		5141	873		4622
624	給	8327	674	紀	7224	723	喜	6507	774	則	5650	824	列	5120	874	恵	4612
625	蔵	8320	675	脳	7201	725	沖	6505	775	輪	5647	825	損患	5118	875	契	4595
626	超声	8298	676	債	7188	726	陸	6501	776	精	5635	825	患	5118	876	繰	4591
627	座	8248	677	厳	7176	727	標	6488	777	逆	5618	827	載	5109	877	救日	4585
628	採	8194	678	楽	7175	728	払	6480	778	囲	5601	828	爆	5106	878	届	4553
629	殺	8165	679	便	7168	729	替	6472	779	聴	5590	829	居	5094	879	齡	4532
630	従	8156	680	歴	7135	730	奈	6447	780	善	5587	830	募	5082	880	願	4521
631	未	8129	681	拔	7106	731	皇	6380	780	刑	5587	831	陣	5080	881	恐	4513
632	色	8125	682	危	7083	732	許	6372	782	池	5584	832	像	5064	882	遊	4512
633	険	8106	683	延	7069	733	因	6355	78 3	踏	5572	833	傷	5056	883	揭	4499
634	富	8102	684	冷	7061	734	伸	6332	784	服	5568	834	漁	5037	884	息	4492
635	幅	8101	685	興	7036	735	熱	6327	785	適	5547	835	乱	5024	885	致	4466
636	鹿	8098	685	越	7036	736	攻	6324	786	犯	5499	836	卒	5021	886	納	4452
637	目	8090	687	馬	7023	737	永	6310	787	遅	5496	837	迫	5018	887	幕	4449
638		8069	688	異	6959	738		6276	788	塁	5477	838	絡	4984		枚	4446
639	遺	8047	689	父	6921	739	王	6251	789	倉	5458	839	遣	4981	889	賃	4439
640	札	8007	690		6910	740	散	6237	790	壊	5439	840	闘	4967	890	Ш т	4433
641	激	8002	690		6910	741	玉	6233	791	角	5433	841	星	4961	891	更	4432
642	摘	7982	692		6902	742	油	6225	7 9 2	僚	5427	842	緊	4930	892	葬	4431
643	突	7968	693		6891	743	妻	6224	7 93	略	5388	843	諸	4918	893	裹	4407
644	黒	7943	694		6874	744		6217	794	欠	5346	844	惑	4904	894	栄	4404
645	写	7915	695		6836	745	禁	6210	7 95	郡	5344	845	彦	4887	895	拠	4400
646	豊	7908	695		6836	746	志	6186	7 96	雨	5333	846	鳥	4874	896	染	4397
647	具	7901	697	頼	6796	747	静	6159	7 9 7	層	5326	847	跡	4862	89 7	岐	4387
648	ا	7881	698	盛	6791	748	印	6099	7 9 7	償	5326	848	之	4848	<i>898</i>	抱	4379
649	苦	7851	699	習	6780	7 49	維	6094	7 99	婚	5324	849	浮	4837	899	需	4378
649	伊	7851	700	般	6779	750	幸	6067	800	宿	5314	850	庭	4823	900	兆	4370
CF		86.6954	CF		88.2397	CF		89.6189	CF		90.8281	CF		91.9183	CF		92.8971

APPENDIX A (Continued)

							ALL	PENDIX A	A (COI	unu	eu)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
901	房	4368	951	君	3878	1000	泉	3387	1051	俊	2893	1101	菱	2556	1151	紛	2262
902	刊	4362	952	扱	3875	1002	依	3376	1052	沿	2886	1102	魚	2554	1152	貟	2260
903	著	4346	953	痛	3866	1003	埋	3372	1053	臓	2884	1103	悲	2552	1153	舎	2259
904	E	4345	954	秘	3858	1004	症	3362	1054	衝	2883	1104	荒	2548	1154	衣	2244
905	逃	4304	955	詰	3854	1005	宗	3358	1055	誉	2882	1105	吸	2537	1155	賄	2240
906	雇	4298	956	節	3853	1006		3355	1056	豪	2876	1106	誤	2528	1155	童	2240
907	貴	4293	957	陽	3840	1007	枠	3344	1057	排	2874	1106	握	2528	1155	快	2240
908	招	4284	958	了	3835	1007	互.	3344	1058	華	2857	1108	籍	2519	1158	訓	2239
909	隆	4278	958	緩	3835	1009	駐	3329	1059	孝	2849	1109	E	2515	1159	肝	2237
909	迷	4278	960	託	3831	1010		3308	1060	兼	2848	1110	一句	2513	1160	毛	2236
911	汚	4271	961	端	3827	1011	群	3290	1061	雪	2846	1111	袋	2509	1161	礼	2235
912	仲	4262	962	功	3820	1012	曜	3287	1062	唱	2814	1112	載	2501	1162	炭	2233
913	抑	4261	963	探	3818	1012	慎	3260	1062	雅	2810	1112	包	2301	1163	<u></u> 濃	2232
914	草	4201	964	松盤	3817	1013		3254	1063	鋼	2810		範	2490		辰寝	
914 915	重板	4243	965	巻	3802	1014	奪	3254 3253	1064	照		1114	範揺		1164 1165	役洗	2229
	希			志却						隠	2806	1115	筆	2480			2201
916		4230	966 067		3793	1016		3245	1066		2796	1115		2480	1166	驚	2189
917	暮	4198	967 068	訟	3773	1017	夢	3238	1067	剤	2790	1115	暫	2480	1167	也響	2183
918	措	4190	968	阜	3749	1018	項	3220	1068	謝	2789	1118	析	2472	1168	慣日	2179
919	刻	4188	969 070	布	3731	1019	診	3217	1069	撮	2788	1119	綱	2468	1169	昼	2162
920	併	4174	970	笑	3728	1020	簡	3194	1070	波	2787	1120	梅	2460	1170	歯	2151
921	承	4113	971	困	3714	1021	律	3186	1071	携	2782	1121	揚	2457	1171	臣	2149
921	災	4113	972	縮	3707	1022	祭	3185	1072	巡	2770	1122	窓	2452	1172	柄	2148
921	季	4113	973	夕	3704	1023	拒	3183	1073	吹	2767	1123	床	2448	1173	宏	2143
924	誌	4109	974	徴	3691	1024		3149	1074	殿	2764	1124	潟	2441	1174	滑	2141
925	欲	4095	975	称	3649	1025	片	3131	1074	忠	2764	1125	侵	2439	1175	仁	2139
926	借	4077	976	閉	3645	1026		3128	1074	晴	2764	1126	芝	2437	1176	至	2135
927	宇	4069	977	奥	3637	1027	躍	3114	1077	冬	2752	1127	茨	2428	1177	忐	2133
928	邦	4059	978	盗	3634	1028	充	3113	1078	茂	2751	1128	哲	2413	1178	微	2129
929	秀	4053	979	懸	3598	1029	免	3106	1079	揮	2744	1129	꽢	2405	1179	歓	2117
930	堂	4036	980	飲	3591	1030	刺	3079	1080	徹	2739	1130	柳	2397	1180	焦	2108
931	複	4034	981	章	3586	1031	祉	3078	1081	摿	2737	1131	騒	2390	1181	掘	2089
932	傦	4033	982	還	3572	1032	銃	3077	1082	薄	2712	1132	暗	2388	1182	克	2081
933	里	4031	983	誘	3564	1033	勧	3066	1083	獲	2687	1133	索	2381	1183	抵	2079
934	折	4024	984	弾	3556	1034	看	3055	1084	戒	2679	1134	襲	2375	1184	泊	2075
935	瀬	4019	985	貸	3553	1035	巻	3042	1085	腐	2670	1135	娘	2372	1185	似	2062
936	措	4010	986	我	3548	1036	譲	3033	1086	柱	2667	1136	網	2349	1186	鉱	2061
937	純	4009	9 87	控	3538	1037	仙	3032	1087	飯	2659	1137	塩	2341	1187	液	2057
938	絵	3995	988	智	3531	1038	甲	3015	1088	敏	2655	1138	挑	2335	1188	牛	2056
939	洒	3969	989	裕	3515	1039	埼	3006	1089	堀	2650	1138	郷	2335	1189	括	2052
940	触	3963	990	預	3511	1040		3004	1090	透	2645	1140	喪	2334	1190	嶋	2043
941	訳	3961	991	贈	3509	1041		2993	1091	勉	2639	1141	到	2325	1191	鳴	2029
942	鈴	3957	992	緒	3496	1042	典	2962	1092	駆	2632	1142	緑	2320	1191	趣	2029
943	筋	3953	993	傾	3467	1043	操	2959	1092	隣	2632	1142	誕	2320	1193	阿	2028
944	弘	3923	994	掛	3465	1045	御	2948	1094	犠	2622	1144	弟	2312	1193	酸	2025
945	射	3919	995	腐	3452	1044	悩	2948	1094	妥	2622	1144		2303	1194	胸	2025
946	弱	3913	996	仏	3451	1045	宝	2923	1095	敷	2599	1145		2303	1194	乳	2023
940 947	叔	3913	990 997	慮	3431	1040		2923	1090		2595	1140 1147		2294 2281	1190	靴較	2022
947 948	代伴	3893	997 998	燃	3430	1040	以 荷	2923		械	2595	1147 1148	裂裂	2281	1197	戦距	
948 949	撤	3893	998 999	肉	3412	1048 1049	줴顧		1097 1099	瓶貯							2011
	瓜奏		999 1000	兩東				2912		 好 茶	2580	1148 1150		2274	1199	斎	2008
950 CE	×	3880			3387	1050	们日	2902		ж	2559	<u>1150</u>	畑	2272	<u>1200</u>	偽	2002
CF		93.7751	CF		94.5564	CF		95.2278	CF		95.8138	CF		96.3309	CF		96.7869

APPENDIX A (Continued)

	APPENDIX A (Continued)										ed)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
1201	杯	2000	1251	犬	1774	1301	虫	1616	1351	零	1425	1401	覆	1222	1451	喫	1075
1202	斉	1996	1252	尊	1771	1301	喚	1616	1352	序	1424	1402	嘉	1221	1452	渕	1070
1203	妙	1991	1253	鶴	1767	1303	踊	1615	1353	孤	1408	1403	卓	1212	1453	卸	1067
1204	既	1982	1254	縦	1758	1304	鯨	1614	1354	没	1406	1404	拍	1210	1454	尻	1063
1205	浅	1959	1255	泳	1756	1305	勇	1612	1354	亀	1406	1405	煮	1204	1455	磁	1060
1205	飾	1959	1256	垣	1754	1306	丘	1611	1356	狭	1404	1405	亜	1204	1456	妹	1056
1207	雲	1957	1257	須	1748	1307	陳	1608	1357	耐	1395	1407	慢	1201	1456	帳	1056
1208	筑	1954	1258	旨	1747	1308	陥	1607	1357	恒	1395	1408	芳	1200	1458	栗	1054
1208	即	1954	1259	幼	1744	1309	祖	1601	1359	豆	1391	1409	凍	1199	1458	艦	1054
1210	湖	1952	1260	賢	1743	1310	俳	1600	1360	浄	1389	1410	俁	1195	1460	浸	1052
1211	硬	1950	1261	詩	1741	1310	枝	1600	1361	駒	1387	1410	彰	1195	1461	湿	1046
1212	威	1946	1262	懇	1737	1312	牲	1596	1362	瞬	1380	1410	曙	1195	1462	漫	1045
1213	露	1943	1263	昌	1736	1313	梶	1584	1363	拓	1377	1413	胞	1189	1463	冒	1041
1214	閥	1941	1264	貞	1734	1314	腰	1578	1363	郊	1377	1413	彫	1189	1463	訂	1041
1215	覇	1940	1264	泰	1734	1315	怒	1577	1365	彩	1373	1415	匹	1187	1463	XI]	1041
1215	矢	1936	1266	菜	1732	1316	耳	1569	1366	糧	1370	1416	菌	1185	1466	壇	1040
1217	潮	1933	1267	翼	1731	1317	龍	1568	1367	塾	1360	1417	径	1183	1467	淡	1035
1217	鎖	1935	1268	畿	1731	1318	浪	1566	1367	飼	1360	1418	畫	1181	1468	姉	1031
1210	祝	1920	1269	嫌	1729	1319	煙	1562	1369	李	1354	1419	土黙	1179	1469	祥	1030
1219	琴	1923	1209	毒	1725	1320	膨	1560	1369	菊	1354	1420	培	1174	1470	涙	1028
1220	今邸	1922	1270	₩ 励	1726	1320	覧	1559	1371	刷	1351	1421	恋	1174	1471	尼	1023
	釈		1271	輝	1706	1321	棟	1555	1372	冊	1346	1422	泣	1172	1472	筒	1019
1221	版慶	1919	1271	禪添	1708	1323	升	1547	1372	鏡	1340	1423	⊸尋	1160	1473	庄	1015
1223	废是	1915	1275	甘	1688	1323	大	1541	1373	玄	1345	1424	磨	1159	1475	忙	1017
1224	<i>走</i> 旗	1905		- 幌		1324 1325	ス那	1530	1374	粉	1338	1425	潜	1159	1474	虚	1016
1225		1904	1275		1687					殖		1425	剰		1474	<u>虚</u> 披	1014
1226	桜	1897	1276	沈蕃	1682	1326	肥簿	1528	1376	^加 廷	1329	1425	鑑	1151 1142	1476	暖	1014
1227	封	1883	1277		1680	1327		1527	1377	虹軒	1321		血紅			仮征	
1228	旭	1881	1277	脅	1680	1328	軸	1525	1378	塹墓	1320	1428	服	1140	1476	11L. 唯	1014
1229	熙	1880	1279	刷	1677	1329	魅	1524	1379		1309	1429		1139	1479		1013
1230	浴	1872	1280	黄	1676	1330	梨	1521	1380	寒	1306	1429	笠险	1139	1480	謀	1008
1231	賠	1871	1281	沼	1675	1331	穂	1517	1381	怖	1300	1431	陰四	1136	1481	叫	1000
1232	炎	1870	1282	湯	1668	1332	繊	1516	1382	拘	1298	1432	阻	1129	1482	咲	997
1233	昔中	1867	1283	諭	1661	1333	帝	1511	1383	頂	1297	1433	諮	1127	1483	奇姑	995
1234	宙	1864	1284	舗	1658	1334	穴	1507	1384	幡	1292	1434	灯	1120	1484	妨目	987
1235	牧	1860	1285	炉	1656	1335	稿	1490	1385	噴	1289	1434	遂	1120	1485	晃	978
1235	兄	1860	1286	箱	1654	1336	啓日	1489	1386	欄	1286	1436	髪业	1119	1486	猶	973
1237	詳	1859	1287	竜	1653	1337		1487	1387	眠	1285	1436	尚	1119	1486	屈	973
1238	寿	1857	1288	岳	1649	1338		1484	1388		1284		弥	1111		悔	972
1239	柔	1849	1289	剣	1641	1339		1483	1389	疲	1267	1438	概	1111	1489	釣	970
1240	繁	1842	1290		1640	1340	糸	1482	1390		1264	1440	雰	1110	1490	晚	968
1241	麻	1841	1290		1640	1341	曽	1481	1391	悟	1257	1441	剛	1107	1491	肺	964
1242	滋	1829	1290	Ŧ	1640	1342	卵	1478	1392	恩	1256	1442	銘	1102	1492	媛	963
1243	肩	1825	1293	敵	1639	1343	聖	1476	1392	憶	1256	1443	掃	1094	1492	暇	963
1244	慰	1819	1294		1637	1344		1475	1394		1255	1444	缶	1086	1494	嵐	959
1245	腕	1804	1295		1631	1345		1471	1395	誇	1254	1445	耕	1085	1495	跳	958
1246	貫	1802	1296		1626	1346	頑	1456	1396		1253	1446	霊	1083	1496	脈	957
1247	腹	1799	1296	錦	1626	1347	偏	1449	1397		1246	1446	陶	1083	1497	辻	954
1248	朗	1788	1298	稼	1625	1348	萯	1447	1398		1231	1448	脇	1078	1498	柴	953
1249	撲	1785	1299	罰	1623	1349	遇	1437	1399	軟	1228	1449	伏	1077	1498	隔	953
	N 15	1770	1300	縁	1622	1350	漏	1435	1400	寛	1223	1450	熟	1076	1500	巣	948
1250	滅	1779	1500	115475	1022	1000		1100	1100	~-					1000	214	

APPENDIX A (Continued)

							AFF	'ENDIX A		unu	eu)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
1501	騰	943	1551	翔	818	1601	冠	729	1650	毅	649	1701	呉	559	1750	羅	484
1502	栽	942	1552	嘆	815	1602	墨	728	1652	唐	648	1702	机	558	1750	僧	484
1503	俵	940	1553	衰	814	1603	霧	727	1653	釜	645	<i>1703</i>	尿	555	1753	肢	483
1504	奨	939	1554	澤	813	1604	墳	725	1654	澄	639	1704	惛	554	1753	怪	483
1505	秩	937	1555	徐	811	1605	蒸	722	1655	萩	636	1704	霞	554	1755	鍋	480
1506	塗	936	1556	靖	809	1605	拾	722	1656	牟	634	1706	隅	553	1756	盲	475
1507	祈	935	1556	懐	809	1607	峰	721	1656	靴	634	1707	朴	552	1757	灘	474
1508	菅	932	1558	堺	807	1608	邪	719	1656	勘	634	1708	臭	545	1757	践	474
1508	唆	932	1559	粒	796	1609	陵	716	1659	乏	632	1709	猫	541	1759	圭	472
1510	随	929	1560	貝	793	1610	艇	715	1659	髄	632	1710	辛	540	1760	鉢	469
1511	抽	919	1561	冨	792	1611	鈍	714	1659	吾	632	1711	謌	539	1761	呂	466
1512	衡	917	1562	逸	787	1612	寮	709	1662	洞	628	1711	悼	539	1762	獣	463
1513	据	915	1563	疎	786	1613	泥	708	1662	笹	628	1711	壤	539	1762	宴	463
1514	斜	913	1563	虐	786	1614	奮	706	1664	誓	625	1714	鼻	535	1764	蒲	462
1515	桑	912	1565	才	784	1615	棋	704	1665	遭	624	1714	畳	535	1765	鳳	461
1516	荘	903	1566	陛	782	1616	亭	702	1666	宜	622	1716	累	534	1766	桃	458
1517	鬼	902	1567	Л	781	1617	幻	700	1667	劣	618	1717	狩	533	1767	麗	456
1518	乾	895	1567	汁	781	1618	恥	699	1667	矛	618	1717	寂	533	1768	乃	454
1519	佳	887	1567	惨	781	1618	姓	699	1669	桐	615	1719	赴	528	1768	呈	454
1520	粘	883	1567	葛	781	1618	粛	699	1669	芽	615	1719	膚	528	1770	吐	453
1521	拝	881	1571	粧	779	1621	廊	698	1671	輔	614	1719	炊	528	1771	裸	451
1522	隻	876	1571	准	779	1622	郭	695	1671	碑	614	1722	忍	527	1771	窒	451
1523	猛	875	1573	柏	778	1623	妃	691	1673	獄	612	1723	穀	523	1773	囚	449
1524	漢	873 874	1574	詐	777	1623	潔	691	1673	峡	612	1724	酷	520	1774	紳	444
1525	棒	873	1575	俗	773	1625	穏	689	1675	擦	611	1724	荻	520	1774	循	444
1525	砕	873	1576	滝	770	1626	悦	687	1676	肌	608	1726	帽	519	1774	綾	444
1527	糖	868	1577	酬	767	1627	欺	685	1677	顕	606	1727	亮	518	1777	幣	443
1528	架	865	1578	胆	766	1628	灰	682	1678	鎮	605	1727	庶	518	1778	鼔	441
1529	√ 孜	864	1579	紋	764	1629	磯	680	1679	偶	589	1727	恭	518	1779	該	440
1530	脂	862	1579	稚	764	1630	桂	679	1680	把	587	1730	鷹	514	1780	遷	439
1530	鋭	862	1581	芦	762	1631	Ш	676	1681	椿	586	1730	怠	514	1781	搭	436
1532	盾	861	1582	綿	761	1632	疫	675	1682	坊	584	1730	弦	514	1782	坪	434
1533	緯	860	1582	漂	761	1633	伯	674	1683	搬	583	1733	匠	513	1783	漠	432
1534	甘	858	1582	溝	761	1634	駄	673	1684	符	582	1734	傘	512	1783	猪	432
1535	姫	855	1585	瑞	759	1635	妊	671	1685	敦	581	1735	拐	509	1783	腎	432
1535	堤	855	1586	雷	758	1635	M	671	1686	傍	580	1736	寸	508	1783	飢	432
1537	紫紫	854	1587	革	754	1637	舟	668	1686	垂	580	1737	憂	503	1787	琵	431
1538	銅	852	1587	嫁	754	1638	巧	667	1686		580	1738	瓶	502	1787	寧	431
1539		852 850	1589	珠	753	1639	酔	664	1689		578	1739	胃	496	1787	朱	431
1539	祐	830 847	1589	殿	753	1640	仰	662	1690	暑	574	1740	諾	494	1790	琶	430
1540	勳	847 847	1591		753 751	1641	晶	660	1690	盲后	574	1741	函	491	1791	窮	429
1540	洲	846	1592	位	750	1642		659	1692	宰	573	1742	頻	490	1791	憾	429
1542 1543	冰	840	1592	詞	730	1643		656	1693		572	1742	が枯	490	1793	蘭	425
1545	尓篠	843 842	1593	烈	748	1643	膜	656	1694		567	1744	履	489	1793	鵈	425
1544 1545	翻	842 838	1594	堰	747	1645		655	1694		567	1744	槽	489	1795	畠	424
1545	ᇑ淳	838	1594	鎌	747	1645	庵	652		刃	567	1744	閲	489	1796	如	423
1540 1547	行癒	832 825	1590	棚	741	1646	辰	652	1697		566	1747	錯	487	1797	舶	419
1547 1548	感麦		1597	釧	739	1646	涯	652		鳩	565	1747	哉	487	1798	偉	419
	反紡	821 820	1598		733	1640 1649		652 650	1698	巓鐘	563	1747		487	1790	瀖	416
1549 1550	動	820 819	1600		734	1649 1650		630 649	1700		560	1750	虜	487	1800		410
CF	- 17 4	98.8138	CF	1 2	98.9790	CF	TUL	99.1262	CF	,	99.2550	CF	177	99.3665	CF	11=1	99.4618
		90.0130			70.7/70			<i>77.1404</i>			19.4330			77.3003			77.4010

APPENDIX A (Continued)

							APP	ENDIX A	(Con	tinu	ed)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
1800	騎	415	1851	娯	363	1901	痴	302	1951	或	254	2000	梁	206	2049	僑	169
1802	俸	411	1852	幾	360	1902	摂	300	1951	遮	254	2002	嶽	204	2052	曳	168
1803	樋	410	1853	蛇	359	1903	享	299	1951	傑	254	2002	奔	204	2053	逝	167
1804	楠	408	1854	鍛	358	1904	岬	295	1951	茅	254	2004	瘍	202	2054	鳥	166
1804	娠	408	1855	枢	354	1904	扶	295	1955	Z	252	2004	塀	202	2055	惧	165
1806	旋	405	1856	篤	351	1904	樺	295	1956	喬	251	2006	痢	201	2056	癖	164
1806	殻	405	1857	疾	350	1907	匿	293	1957	睦	250	2006	隈	201	2057	洸	163
1808	涼	404	1857	串	350	1907	偵	293	1957	睡	250	2008	諏	199	2057	痕	163
1808	腸	404	1857	朽	350	1907	錠	293	1959	廣	249	2008	擬	199	2059	聯	162
1808	畜	404	1860	紘	348	1907	渦	293	1960	播	248	2010	昑	198	2059	禎	162
1808	鶏	404	1861	憤	346	1911	紺	292	1960	肖	248	2011	漆	197	2059	衹	162
1812	粋	402	1861	屝	346	1912	猟	288	1962	絹	247	2011	蔭	197	2062	藻	161
1812	召	402	1861	柿	346	1912	猿	288	1963	暁	246	2013	棺	195	2063	勅	160
1814	虎	400	1864	泡	344	1914	陪	287	1964	胎	245	2014	峠	194	2064	卑	159
1815	潘	399	1864	碁	344	1914	甚	287	1965	樫	243	2015	鴻	193	2064	拳	159
1815	漬	393	1866	掌	340	1914	塊	286	1966	詠	243 241	2015	閧	191	2066	, 錬	157
1810	資 洪	398 397	1867	上	334	1917	窯	285	1967	忌	239	2010	眞	191	2000	硝	157
	縛	397	1867	伍	334 334	1917	<u>一</u> 剖	285	1968	臼	239	2010	偷	191	2000	爾	156
1818	尼		1869	亘		1918	驚	284	1969	日肯	237	2016	汎	191	2008	牡	156
1818	産	396		卓辱	333	1919	肇	283	1969	丙	230 236	2010	蕉	191	2008	條	155
1818		396	1869	受量	333	1919	軍叙	283	1909	遍	230	2010	熈魁	191	2070	⊾	155
1821	眺	395	1871		332		寂窪			颯帆			飚騨			庵	155
1821	赦	395	1872	又	329	1922		278	<i>1971</i>	琢	233	2022	₩ 奴	190	2072 2073	滝姜	
1823	弊	389	1873	戱	327	1922	俱	278	1971		233	2023		189		安慕	153
1824	苑	388	1874	悠	326	1924	喝	277	1974	樽	230	2023	爪芭	189	2073	称隼	153
1825	蘇	385	1874	賓	326	1925	胴	274	1975	秦	228	2025		188	2073		153
1826	郁	384	1876	譜	323	1925	嘱	274	1976	挿	225	2026	厘	187	2073	謎	153
1827	磐	383	1876	酢	323	1925	尺	274	1977	寅	223	2026	此	187	2077	綻	150
1828	沸	382	1878	巴	322	1928	鵬	272	1978	薩	221	2028	抹	185	2078	渴	149
1829	琉	380	1878	曹	322	1929	屯	271	1978	沙	221	2028	欣	185	2079	藍	148
1830	哀	379	1880	弔	321	1929	冗	271	1978	敢	221	2028	閑	185	2079	橿	148
1831	凡	377	1880	憎	321	1931	箕	269	1981	厳	219	2028	禍	185	2081	崔	146
1831	槻	377	1882	餓	320	1931	朋	269	1982	屏	217	2032	漱	183	2081	潰	146
1831	扇	377	1883	笛	319	1931	亨	269	1982	舘	217	2032	暢	183	2081	栈	146
1834	慈	376	188 3	挟	319	1934	硫	268	1984	峯	216	2032	侍	183	2081	榊	146
1835	伐	374	1885	凝	316	1934	濠	268	1984	粕	216	2032	芥	183	2085	嬢	142
1836	蓮	373	1886	瓦	315	1934	橘	268	1984	ᅪ	216	2036	蒼	182	2086	蛍	141
1836	E	373	1886	慨	315	193 7	盧	267	1987	劉	214	2036	渓	182	2087	隷	140
1838		372	1888	憩	314	193 7		267	1987		214	2038		181	2087	愁	140
1839	椎	371	1889	豚	312	1939		266	1989	佑	213	2039	鵜	180	2089	腺	139
1839	濁	371	1890	窃	311	1940	栖	265	1990	鋳	212	2040	滴	179	2089	獅	139
1839	燥	371	1890	挫	311	1940	駿	265	1990	禅	212	2041	胡	176	2091	遼	138
1842	媒	370	1892	淵	310	1942	楼	264	1990	腫	212	2041	茎	176	2091	珂	138
1842	奄	370	1892	聡	310	1943	榎	263	1993	蕪	210	2043	鍵	175	2091	鞍	138
1844	墜	369	1894	嗣	309	1943	唄	263	1994		209	2044	尉	173	2094	誰	137
1845	愚	368	1895	淑	308	1945	鄭	262	1995	玲	208	2045	杵	172	2095	婿	136
1846	苫	367	1895	恨	308	1945	醸	262	1995	羊	208	2045	翁	172	2095	枕	136
1847	嶺	366	1897	崇	307	1947	廉	258	1995	闍	208	2047	慌	171	2095	姑	136
1848	酵	365	1898	礁	305	1948	酪	256	1998	肪	207	2048	匡	170	2095	斡	136
1848	嵣	365	1899	斐	303	1949	雀	255	1998	桧	207	2049	迅	169	2099	畔	135
1850	晋	364	1899	舌	303	1949	款	255	2000	趙	206	2049	塞	169	2099	袖	135
CF		99.5445	CF		99.6146	CF		99.6736	CF		99.7226	CF		99.7627	CF		99.7953

APPENDIX A (Continued)

							API	'ENDIX A		unu	eu)						
R	С	F	R	Ċ	F	R	С	F	R	С	F	R	С	F	R	С	F
2099	蚕	135	2150	楢	112	2200	堆	95	2249	廠	79	2298	爵	67	2351	蹊	59
2099	孔	135	2152	租	111	2200	櫛	95	2249	骸	79	2298	汐	67	2351	賦	59
2103	妖	134	2152	斥	111	2203	脊	94	2253	諌	78	2298	矩	67	2351	枇	59
2103	栓	134	2152	鯉	111	2203	稽	94	2253	褐	78	2298	欽	67	2351	淘	59
2105	揖	133	2152	允	111	2205	倭	93	2253	牙	78	2305	礒	66	2351	挺	59
2105	呆	133	2156	涛	110	2205	佃	93	2256	蜜	77	2305	齏	66	2351	帥	59
2105	繕	133	2156	賭	110	2207	雁	92	2256	杷	77	2305	侶	66	2351	叱	59
2105	拙	133	2156	宋	110	2207	旺	92	2256	榛	77	2305	捻	66	2351	蒔	59
2105	襟	133	2159	濱	109	2209	摰	91	2256	鴎	77	2305	衷	66	2351	閤	59
2110	庸	132	2160	簗	108	2209	鉾	91	2260	邨	76	2310	邱	65	2351	狐	59
2110	粟	132	2160	醜	108	2209	箸	91	2260	綜	76	2310	焉	65	2351	饗	59
2112	萬	131	2162	侮	107	2212	逐	90	2260	漕	76	2310	妄	65	2351	凱	59
2112	其	131	2162	峻	107	2213	實	89	2260	膳	76	2310	鋪	65	2351	芋	59
2114	虹	130	2164	褒	106	2213	芙	89	2260	迦	76	2310	蕃	65	2364	汪	58
2114	杜	130	2165	焕	105	2213	巃	89	2265	鎔	75	2310	檀	65	2364	蔑	58
2116	餅	129	2165	禄	105	2213	銚	89	2265	麓	75	2310	惰	65	2364	槌	58
2116	迭	129	2167	暉	104	2213	捉	89	2265	畷	75	2317	董	64	2364	旦	58
2118	哨	128	2167	壽	104	2213	采	89	2265	嬉	75	2317	伽	64	2364	餌	58
2118	謹	128	2167	薮	104	2219	萌	88	2265	桶	75	2319	笘	63	2369	諫	57
2120	淧	127	2167	孟	104	2219	逗	88	2270	脩	74	2319	冤	63	2369	舵	57
2121	蛭	126	2167	賊	104	2219	讃	88	2271	菩	73	2319	惇	63	2369	狛	57
2122	渥	124	2167	唇	104	2219	鷺	88	2271	埴	73	2319	瞳	63	2369	杭	57
2123	祀	122	2167	玩	104	2223	鐸	87	2271	錫	73	2319	戴	63	2373	袮	56
2123	幽	122	2174	瑠	103	2223	凹	87	2274	瀋	72	2319	噌	63	2373	堵	56
2125	蝶	120	2174	霜	103	2223	葵	87	2274	壕	72	2319	卿	63	2 3 73	帖	56
2125	瀧	120	2174	芹	103	2226	檜	86	2274	玖	72	2326	魯	62	2373	畝	56
2127	稜	119	2174	罊	103	2226	璃	86	2277	壷	71	2326	筣	62	2373	碓	56
2127	蜂	119	2174	蚊	103	2226	賜	86	2277	詣	71	2326	匂	62	2373	梓	56
2129	碧	118	2179	魏	102	2226	薗	86	2277	於	71	2326	芯	62	2379	壷	55
2130	叔	117	2179	眉	102	2226	瑛	86	2277	杏	71	2326	抄	62	2379	篭	55
2130	酌	117	2179	宍	102	2231	拷	85	2281	堯	70	2326	儒	62	2379	某	55
2130	兜	117	2182	彬	101	2231	牽	85	2281	尹	70	2326	斬	62	2379	鋒	55
2130	姻	117	2182	蛮	101	2233	湧	84	2281	汰	70	2326	頃	62	2379	菰	55
2134	洛	116	2182	蹴	101	2234	堕	83	2281	惣	70	2326	蓋	62	2379	艶	55
2134	頓	116	2185	慧	100	2235	濤	82	2281	伺	70	2326	胤	62	2385	賈	54
2134	雫	116	2186	斑	99	2235	圓	82	2281	鯖	70	2336	團	61	2385	浙	54
2134	翫	116	2186	巽	99	2235	椋	82	2287	曝	69	2336	鰐	61	2385	拉	54
2134	壱	116	2186		99	2235	竪	82	2287		69	2336	~ •	61	2385	麺	54
2139		115	2186		99	2235		82	2289	譚	68	2336		61	2385	桝	54
2139	燆	115	2186		99	2235		82 82	2289	皓垣	68	2336		61	2385	篇北	54
2139	蟹	115	2191		98	2235		82 82	2289	煩林	68	2336		61	2385	韮	54
2139	燕	115	2191		98	2235		82	2289	埜	68	2336	婆	61	2385	綴	54
2143	升 殉	114	2191	叡	98 07	2243		81	2289	宵細	68	2336	痘經	61	2385	銑	54
2143		114	2194	貌	97	2243		81	2289	朔蛄	68	2336	綬魴	61	2385	狗	54
2143	雌	114		厄	96 06		峨花	81	2289 2289	舷	68	2336	鮫雌	61	2385	韻	54
2143	嚇	114	2195	蒙爾	96 06		荏	81	2289	徽茎	68	2336	惟	61	2396	佛繭	53
	凸脑	113	2195	麿	96 06		附	80 80	2289	葦	68	2347	榮衣	60	2396	繭	53
2147	嫡翌	113	2195		96 06	2247	鍾	80 70	2298	黎泊	67 67	2347	恣脚	60	2396	廟西	53
2147	翠筎	113		寡曲	96 05	2249	赳啄	79 70	2298	狼杠	67 67	2347	傲	60 60	2396	酉	53
2150 CE	籠	112	2200 CE	甫	95	2249 CE	啄	79	2298	柘	67	2347 CE	灸	60	2400	禰	52
CF		99.8220	CF		99.8434	CF		99.8626	CF		99.8776	CF		99.8926	CF		99.9039

APPENDIX A (Continued)

							AFF	'ENDIX A	A (Con	unu	eu)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
2400	E	52	2449	蜷	46	2496	瓜	40	2543	耶	35	2599	蔡	31	2646	惠	28
2402	璧	51	2449	娩	46	2496	鮼	40	2543	瓢	35	2599	滉	31	2646	彭	28
2402	晟	51	2449	沌	46	2503	彗	39	2543	燈	35	2599	鬱	31	2646	咸	28
2402	溜	51	2449	悌	46	2503	牌	39	2543	溺	35	2599	幇	31	2646	偕	28
2402	蓉	51	2449	諜	46	2503	醍	39	2543	鯛	35	2599	凰	31	2646	傭	28
2402	輿	51	2449	坦	46	2503	塑	39	2543	楚	35	2599	麟	31	2646	糞	28
2402	塵	51	2449	只	46	2503	漸	39	2543	蝉	35	2599	爺	31	2646	釗	28
2402	氶	51	2449	卯	46	2503	穣	39	2543	稀	35	2599	膿	31	2646	蔦	28
2402	眘	51	2459	舩	45	2503	砦	39	2559	箏	34	2599	廿	31	2646	蜘	28
2402	梗	51	2459	冴	45	2503	醐	39	2559	禮	34	2599	凧	31	2646	燦	28
2411	襄	50	2459	袴	45	2503	沓	39	2559	拗	34	2599	脆	31	2646	絃	28
2411	藪	50	2459	崖	45	2512	迪	38	2559	傲	34	2599	雛	31	2646	ŧ∕L	28
2411	婁	50	2459	五	45	2512	虔	38	2559	唾	34	2599	梱	31	2646	咽	28
2411	但	50	2464	齊	44	2512	腱	38	2559	捷	34	2599	昂	31	2664	琿	27
2411	槍	50	2464	勃	44	2512	治	38	2559	鵠	34	2599	姶	31	2664	殷	27
2411	厨	50	2464	薙	44	2512	櫻	38	2559	硯	34	2616	簑	30	2664	杞	27
2411	樽	50	2464	醤	44	2512	姪	38	2559	飴	34	2616	筌	30	2664	揄	27
2411	紗	50	2468	丼	43	2512	鱒	38	2568	綺	33	2616	癬	30	2664	揶	27
2411	縞	50	2468	歪	43	2512	罵	38	2568	昴	33	2616	涵	30	2664	罹	27
2411	窟	50	2468	渚	43	2512	樟	38	2568	怜	33	2616	濫	30	2664	圀	27
2411	夷	50	2468	坐	43	2512	柵	38	2568	瀕	33	2616	斌	30	2664	啫	27
2422	聰	49	2468	訣	43	2512	腔	38	2568	剥	33	2616	庇	30	2664	俑	27
2422	洙	49	2468	怨	43	2512	巷	38	2568	妬	33	2616	塙	30	2664	牢	27
2422	捺	49	2468	嘘	43	2512	喉	38	2568	梯	33	2616	Ŧ	30	2664	彪	27
2422	宕	49	2475	蕭	42	2512	鞠	38	2568	裾	33	2616	蛙	30	2664	套	27
2422	兎	49	2475	毬	42	2512	俺	38	2568	嵩	33	2616	厩	30	2664	捗	27
2422	酎	49	2475	巖	42	2527	鸑	37	2568	梢	33	2616	或	30	2664	佼	27
2422	湛	49	2475	碗	42	2527	嘲	37	2568	漉	33	2616	茜	30	2664	袈	27
2422	爽	49	2475	鱗	42	2527	賂	37	2568	寓	33	2629	羞	29	2664	姦	27
2422	薪	49	2475	葺	42	2527	呑	37	2568	喰	33	2629	齋	29	2664	虻	27
2422	絢	49	2475	謄	42	2527	填	37	2581	辜	32	2629	澁	29	2681	鞆	26
2432	絆	48	2475	諦	42	2527	舛	37	2581	笙	32	2629	曼	29	2681	蛯	26
2432	嵜	48	2475	摺	42	2533	濶	36	2581	揆	32	2629	琳	29	2681	薇	26
2432	囃	48	2475	嘗	42	2533	禧	36	2581	拮	32	2629	濡	29	2681	茫	26
2432	撫	48	2475	戎	42	2533	詫	36	2581	峙	32	2629	剃	29	2681	筰	26
2432	詔	48	2486	鍼	41	2533	吏	36	2581	們	32	2629	叢	29	2681	瞑	26
2432	喧	48	2486	邊	41	2533	涌	36	2581	螺	32	2629	棲	29	2681	煌	26
2432	桁	48	2486	膠	41	2533	蔓	36	2581	牝	32	2629	錘	29	2681	掟	26
2432	萓	48	2486	噺	41	2533	汀	36	2581	味	32	2629	菖	29	2681	嶌	26
2440	頸	47	2486	娼	41	2533	碩	36	2581	丙	32	2629	偲	29	2681	櫓	26
2440	與	47	2486	響	41	2533	墾	36	2581	挽	32	2629	纂	29	2681	蓑	26
2440	旙	47	2486	弧	41	2533	筃	36	2581	茣	32	2629	拶	29	2681	吠	26
2440	捧	47	2486	畦	41	2543	雉	35	2581	疏	32	2629	庚	29	2681	憧	26
2440	舜	47	2486	癌	41	2543	衞	35	2581	夙	32	2629	茄	29	2681	砥	26
2440	而	47	2486	Ŧ	41	2543	禹	35	2581	嫉	32	2629	挨	29	2681	撰	26
2440	倹	47	2496	峲	40	2543	檄	35	2581	粥	32	2646	蛛	28	2681	趨	26
2440	頴	47	2496	緻	40	2543	楸	35	2581	蝦	32	2646	莽	28	2681	裟	26
2440	噂	47	2496	傳	40	2543	乖	35	2581	畏	32	2646	炳	28	2681	垢	26
2449	釉	46	2496	砺	40	2543		35	2599	袁	31	2646		28	2681	侠	26
2449	諧	46	2496	廻	40	2543	燿	35	2599	蓼	31	2646	榜	28	2681	砧	26
CF		99.9139	CF		99.9239	CF		99.9331	CF		99.9381	CF		99.9431	CF		99.9481

APPENDIX A (Continued)

							AFF	PENDIX A		unu	eu)						
R	С	F	R	С	F	R	С	F	R	С	F	R	С	F	R	С	F
2681	臥	26	2725	穎	24	2785	羨	21	2836	柊	19	2886	遜	17	2931	淋	15
2702	陜	25	2752	邁	23	2785	屍	21	2836	鐙	19	2886	惹	17	2931	悶	15
2702	鐵	25	2752	磋	23	2785	糠	21	2836	貼	19	2886	忽	17	2931	蕗	15
2702	躊	25	2752	溪	23	2785	旪	21	2836	紬	19	2886	繋	17	2931	鏑	15
2702	蹖	25	2752	棹	23	2785	甥	21	2836	痩	19	2886	禽	17	2931	寵	15
2702	謳	25	2752	曖	23	2806	鄒	20	2836	嗚	19	2886	誼	17	2931	耽	15
2702	計	25 25	2752	嵊	23	2806	胚	20	2836	碕	19	2000 2907	靡	16	2931	蛸	15
2702	蔷	25 25	2752	寇	23	2806	總	20 20	2836	虞	19	2907	顯	16	2931	蹟	15
2702	圖肛	23 25	2752	逸勁	23	2800	筝	20 20	2836	贞	19	2907	躬	16	2931	蛋妾	15
	渾		2752	坊		2800	牙矮	20 20	2836	駕	19	2907	贅	16	2931	竣	15
2702		25		TB 聾	23		廣瞞			鯰		2907	蜃蜃		2931	勾	15
2702	泄	25	2752		23	2806		20	2861		18			16			
2702	斂	25	2752	廉	23	2806	甦	20	2861	靱	18	2907	糺	16	2931	糊	15
2702	哈	25	2752	苓	23	2806	珀	20	2861	蘆	18	2907	秉	16	2931	鰍	15
2702	黨	25	2752	頬	23	2806	游	20	2861	荼	18	2907	猥	16	2931	蛎	15
2702	楓	25	2752	鞭	23	2806	晰	20	2861	絲	18	2907	熾	16	2931	苛	15
2702	紐	25	2752	疋	23	2806	雙	20	2861	筧	18	2907	杣	16	2966	裔	14
2702	梼	25	2752	毘	23	2806	剱	20	2861	祠	18	2907	孵	16	2966	蟇	14
2702	凋	25	2752	尖	23	2806	猷	20	2861	琥	18	2907	亙	16	2966	膀	14
2702	黛	25	2752	鉦	23	2806	頁	20	2861	爛	18	2907	諒	16	2966	胱	14
2702	煎	25	2752	餐	23	2806	鍿	20	2861	戌	18	29 07	瞥	16	2966	罠	14
2702	凄	25	2752	尭	23	2806	氾	20	2861	巍	18	2907	焚	16	2966	篁	14
2702	椙	25	2772	瞠	22	2806	嚢	20	2861	咤	18	290 7	栂	16	2966	疥	14
2702	疹	25	2772	疱	22	2806	汝	20	2861	叟	18	2907	杓	16	2966	當	14
2702	蟻	25	2772	烋	22	2806	吊	20	2861	儲	18	2907	匙	16	2966	璋	14
2725	鴈	24	2772	崑	22	2806	叩	20	2861	豹	18	2907	甑	16	2966	獨	14
2725	饒	24	2772	毀	22	2806	曾	20	2861	弼	18	2907	轟	16	2966	猴	14
2725	藝	24	2772	凌	22	2806	戚	20	2861	稗	18	2907	謁	16	2966	愣	14
2725	笏	24	2772	蒜	22	2806	斯	20	2861	緋	18	2907	洩	16	2966	哭	14
2725	琲	24	2772	頒	22	2806	坤	20	2861	碇	18	2907	姥	16	2966	勣	14
2725	珈	24	2772	鎧	22	2806	砿	20	2861	蛋	18	2907	穐	16	2966	于	14
2725	洒	24	2772	臆	22	2806	鳅	20	2861	苔	18	2931	鬆	15	2966	勿	14
2725	山椒	24	2772	溢	22	2806	妓	20	2861	楕	18	2931	隕	15	2966	亦	14
2725	扁	24	2772	亥	22	2806	莞	20	2861	遡	18	2931	閔	15	2966	膝	14
2725	奎	24	2772	「椅	22	2806	侃	20	2861	詮	18	2931	鉉	15	2966	誹	14
2725	重哺	24	2785	槇	21	2800	迂	20	2861	裳	18	2931	邇	15	2966	秤	14
2725	匯	24 24	2785	属	21	2800	邊	20 19	2886	藏	13	2931	萍	15	2966	岱	14
				鎬		2836		19	2886	耿	17	2931	舫	15	2966	笥	14
2725	椀	24 24	2785		21	2830 2836		19 19	2880 2886		17	2931		15	2900		14
2725	蝋	24	2785		21											燭	
2725	憐	24	2785	筍	21	2836		19	2886		17	2931		15	2966		14
2725	緬	24	2785	瞰	21	2836		19	2886		17	2931		15	2966	膏	14
2725	祷	24	2785		21	2836		19	2886		17	2931		15	2966	倦	14
2725	轍	24	2785		21	2836		19	2886		17	2931		15	2966	頚	14
2725	醒	24	2785		21	2836		19	2886		17	2931	恂	15	2966	枯	14
2725	楯	24	2785		21	2836		19	2886		17	2931		15	2966	碍	14
2725	咋	24	2785		21	2836		19	2886	嘔	17	2931	彙	15	2966	襖	14
2725	犀	24	2785		21	2836		19	2886		17	2931		15	2996	瑤	13
2725	乞	24	2785		21	2836		19	2886		17	2931	儡	15	2996	韶	13
2725	汲	24	2785	馴	21	2836		19	2886		17	2931	傀	15	2996	霍	13
2725	劾	24	2785	腿	21	2836	籾	19	2886	馳	17	2931	煉	15	2996	鐐	13
2725	鴬	24	2785	揃	21	2836	斧	19	2886	箪	17	2931	燐	15	2996	賤	13
CF		99.9531	CF		99.9581	CF		99.9631	CF		99.9681	CF		99.9731	CF		99.9781

APPENDIX A (Continued)

APPENDIX A (Continued)

2996	C 滂 諍	F 13
	· •	13
	錚	
2996	13.	13
2996	攎	13
2996	腑	13
2996	聶	13
2996 ¹	聘	13
2996 i	經	13
2996	籃	13
2996	炯	13
2996	榴	13
2996	楷	13
2996	梵	13
2996	將	13
2996	學	13
2996	娜	13
2996	俯	13
2996	豫	13
2996	慾	13
2996	盙	13
2996	扮	13
2996	楳	13
2996	遁	13
2996	瀞	13
	禿	13
2996	涜	13
2996	嬬	13
2996	鞘	13
	鮭	13
2996	愡	13
	劫	13
	怯	13
	鋸	13
	竿	13
	盈	13
CF		99.9815

Note—R = Rank of frequency, C = Character of kanji, F = Frequency occurrence in 23,408,236 character corpus.

	Hi	APPE APPE	NDIX B r Freque		List
R	С	 F	 	C	F
1	の	1918313	49	ほ	48752
2	に	1108840	50	\sim	47013
3	た	1067566	51	び	32312
4	い	1060284	52	ts	31212
5	は	937811	53	2	26965
6	を	936356	54	ね	23490
7	È	927938	55	S.	23280
8	る	916652	56	ぐ	21549
9	が	860742	57	ぎ	19865
10	L	848132	58	ひ	19148
11	で	764834	59	よ	14425
12	τ	758316	60	づ	13125
13	な	720156	61	ぼ	12402
14	か	537294	62	ざ	12102
15	 っ	467350	63	\$	11606
16	'n	450805	64	Þ	11522
17	5	423294	65	ぞ	10047
18	も	396142	66	ゆ	8486
19	5	352965	67	ぜ	6893
20	す	340654	68	x	5124
20	, Ŋ	333999	69	ぱ	4349
22	z	312227	70	ゆ	2755
22	だ	280911	71	ぴ	1608
$\frac{23}{24}$	たま	278599	72	ぽ	1315
24 25	よさ	258960	73	is.	986
25 26	っき	233505	74	ふ	477
20 27	らめ	233305	75	あ	125
27 28	ری ۲	223800	75 76	え	125
	、あ	204256	70	んぢ	82
29 20	むけ		78	うゑ	82 75
30	じど	199362 196555	70 79	あ	73 48
31	د ل		79 80	お	48 21
32	れえ	190068		るい	21
33 24	んよ	163664 154206	81 82	わ	3
34 25	ょう	154206		わう	3
35 26	や	133999	83	9	1
36 27					
37	そわ	131611			
38	わち	123077			
39	らみ	99183			
40		89264			
41 42	せろ	83444			
42		73467			
43	ばセ	72228			
44	おじ	65870			
45	じべ	56857			
46	へず	56005			
47	すげ	53256			
48	り	49126			

Note—R = Rank of frequency, C = Character of hiragana, F = Frequency occurrence in 20,711,361 character corpus.

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	Ka	takana Let	ter Frequ	iency	List
R	С	F	R	С	F
1	ン	290948	49	ネ	22462
2	ル	189442	50	ガ	22061
3	ス	178214	51	ハ	21839
4	ト	162802	52	ワ	21784
5	ア	127 8 45	53	ソ	20784
б	イ	120807	54	ケ	20633
7	ラ	117203	55	モ	20070
8	リ	106744	56	ノ	19572
9	ク	98209	57	ズ	19240
10	ッ	86894	58	ピ	18692
11	力	82982	59	朩	18204
12	シ	80626	60	I	17817
13	タ	75319	61	E	17731
14	Ц	75301	62	ペ	14881
15	ド	74257	63	ゴ	13931
16	ジ	61171	64	+	12526
17	フ	61115	65	ギ	10732
18	ν	60608	66	Э	10318
19	メ	60230	67	ザ	10144
20	コ	58724	68	ア	10121
21	7	56123	69	ゼ	7689
22	プ	54159	70	Ŀ	7289
23	テ	53404	71	\sim	7129
24	Д	50758	72	ユ	6653
25	チ	48437	73	ゲ	6481
26	バ	44970	74	才	6245
27	ビ	44462	75	ヌ	2897
28	グ	40433	76	ゾ	2640
29	キ	39608	77	ヴ	1145
30	ウ	39323	78	ウ	1050
31	サ	39202	7 9	ヂ	149
32	Ξ	38711	80	ヅ	127
33	ナ	38047	81	ヲ	122
34	I	36458	82	工	73
35	ブ	35920	83	ヰ	40
36	パ	35416	84	カ	14
37	セ	34883	85	ワ	9
38	オ	34718	86	ケ	2
39	1	33747			
40	デ	32665			
41	ユ	32616			
42	Ľ	29262			
43	ヤ	28144			
44	ボ	26651			
45	ダ	26396			
46	ッ	24541			
47	ポ	23742			
48	ベ	22755			

APPENDIX C Katakana Letter Frequency List

Note—R = Rank of frequency, C = Character of katakana, F = Frequency occurrence in 3,608,288 character corpus.

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