

# The best *kanji* dictionaries for English-speaking learners: A comparison and analysis

Timothy M. Harris

*Osaka Sangyo University*

## Reference data:

Harris, T. M. (2006). The best kanji dictionaries for English-speaking learners: A comparison and analysis. In K. Bradford-Watts, C. Ikeguchi, & M. Swanson (Eds.) *JALT2005 Conference Proceedings*. Tokyo: JALT.

Twenty years ago there was only one large dictionary of *kanji* (Sino-Japanese characters) available in English: the original “Nelson.” Since then, no less than three excellent dictionaries have appeared (including a completely revised “New Nelson”), followed by the publication of smaller, portable versions of each of the three dictionaries. While this is a most welcome development, it makes the student’s task of choosing a dictionary more challenging, as all three dictionaries (as well as their corresponding compact versions) differ significantly in various ways. This in-depth comparison and analysis will enumerate and explore these differences, focusing on the unique strengths of each dictionary.

二十年前、英語で書かれた大きな漢英字典は、「ネルソン」として知られるもののみであった。その後、全面的に改訂された「新版ネルソン」を含めて、優れた漢英字典が3冊出版された。また、それぞれの携帯版も相次いで登場した。このような状況は大いに歓迎すべきことであるが、これら3冊の字典（携帯版も同様）は、それぞれ異なる特徴があるので、学習者にとっては漢英字典を選択する際、これまで以上に悩むことになる。本稿では、これらの漢英字典を比較し、その違いを分析し、それぞれの長所を指摘する。

**T**here are now more English-language dictionaries of *kanji* (Sino-Japanese characters) available than ever before. While this is a welcome development, it makes the task of selecting a dictionary more challenging, particularly for beginning students who are new to the study of *kanji*. Less than 20 years ago, the only large *kanji* dictionary available in English was the original “Nelson,” published in 1962. A completely revised and updated version was published in 1997, and including this “New Nelson,” there are now three excellent dictionaries to choose from:

- The New Nelson Japanese-English Character Dictionary: Based on the Classic Edition by Andrew N. Nelson, revised by John H. Haig (1997, Tuttle, 1600 pages)
- *The Kanji Dictionary*, Mark Spahn & Wolfgang Hadamitzky (1996, Tuttle, 1748 pages)
- New Japanese-English Character Dictionary, Jack Halpern (Editor in Chief) (1990, Kenkyusha, 1992 pages)

These will be referred to as Nelson, S&H, and Halpern, respectively. The revised New Nelson is significantly larger than the original (1600 pages vs. 1112 pages), partly because it contains more kanji (7,107 vs. 5,446), including all the JIS kanji (i.e. the 6,355 kanji which can be input and displayed on current personal computers), and partly because of a much larger index, as explained later. Interestingly, the original Nelson is also still available, having been republished in 2004 as *The Original Modern Reader's Japanese-English Character Dictionary: Classic Edition*, and it is conceivable that one could unknowingly purchase it in place of one of the three newer and better dictionaries. Thankfully, with its red cover it can be easily distinguished from the New Nelson, which has a blue cover (and is much thicker). The earlier version of S&H (printed in a grainy dot-matrix font and published by Cheng & Tsui Company in 1991) is surprisingly still on bookstore shelves, and again it can be easily distinguished from the new version, as the earlier version is paperback and has a different title: *Japanese Character Dictionary: With Compound Lookup via Any Kanji*. Halpern was republished in the U.S. by NTC in

1993 as *NTC's New Japanese-English Character Dictionary*, but apparently with no change in content. Both versions are still in bookstores: the NTC version has a white cover, whereas the original version has a yellow cover.

In addition to the latest versions of these three large, hardcover dictionaries, the last 7 years have seen the appearance of a smaller, portable version of each dictionary:

- *The Compact Nelson Japanese-English Character Dictionary* (1999, Tuttle, 780 pages)
- *The Learner's Kanji Dictionary* (2004, Tuttle, 906 pages)
- *The Kodansha Kanji Learner's Dictionary* (2002, Kodansha, 1008 pages)

The style and colors of the covers match the larger versions, with the exception of Halpern. Published by Kodansha with a completely different title and cover than the larger version, one would be unlikely to realize at first glance that it is actually an abridged version of the larger Halpern dictionary. Moreover, it should not be confused with Kodansha's other English-language kanji dictionary of roughly the same size (*Kodansha's Essential Kanji Dictionary*, 2002), which is also still available under its original title (*Kodansha's Compact Kanji Guide*, 1991), and which does not have any of the features (discussed later) that make Halpern the superior choice.

All three large, hardcover dictionaries are similar in size, but they all differ significantly, primarily in terms of the following four criteria:

1. Number of kanji entries (*oyaji*, literally “parent kanji”)
2. Number of compounds (*jukugo*, i.e. words composed

of 2 or more kanji)

3. Lookup systems and indexes
4. Format and content of kanji entries

The importance of these criteria in selecting a dictionary, particularly for beginning students, cannot be overemphasized. Some beginners might be inclined to focus on the first two criteria, with the assumption that “more is better,” but this is true only for higher-level students and beginners who plan to attain a high degree of literacy. The latter two criteria are actually far more important for the majority of beginners, as will be seen in the discussion that follows.

### Number of kanji

Nelson and S&H contain a comparable number of kanji (7,107 and 7,062, respectively), whereas Halpern has approximately half as many at 3,587. However, what Halpern lacks in quantity it makes up for in quality, as will be discussed in detail later. It should be noted that both Nelson and S&H contain a significant number of “variants” (i.e. kanji which differ in shape to some degree from their standard equivalents), but Nelson does not divulge how many of these it contains, making it impossible to compare with S&H (which has 1,152, leaving 5,910 standard kanji). Of the three dictionaries, Halpern provides the most detail regarding the 3,587 kanji it contains:

- 2,135 main kanji entries: 1,945 *jōyō* (“general use”) kanji + 166 *jinmei-yō* (“personal name”) kanji + 24 additional kanji

- 980 “nonstandard entries”: 873 older, traditional forms (*seiji*) + 82 alternative forms (*itaiji*) + 25 forms based on handwritten shortcuts
- 472 “reference entries”: 327 “phonetically replaced” kanji (170 official + 157 unofficial) + 145 radicals or radical variants

“Phonetically replaced” kanji are non-*jōyō* kanji for which homophonous *jōyō* kanji were substituted in actual usage in order to conform to the official *jōyō* list. Halpern’s “nonstandard entries” correspond to the “variants” found in Nelson and S&H, and omitting these 980 kanji from the total of 3,587 leaves 2,607 standard kanji, which is still less than half as many as S&H’s 5,910 standard kanji. (The book jacket advertises “4,421 kanji including 834 cross-listings,” but these cross-listings consist merely of kanji listed in alternative locations where one might mistakenly look for them. Omitting the cross-listings leaves a total of 3,587 different kanji.) In all three dictionaries, each kanji is assigned a unique “label”: a serial number in Nelson (1 to 7107) and Halpern (1 to 3587), and a “descriptor” in S&H (2h5.3, for example).

### Number of compounds

The total number of compounds included in each dictionary differs even more than the number of individual kanji. Halpern has far fewer kanji to begin with, and unlike Nelson and S&H (which list only compounds of 2 or more kanji), Halpern lists *words and expressions* (42,200 total), whether they involve any additional kanji or not, so it cannot be meaningfully compared to the other two dictionaries in this

respect. Although Nelson and S&H have almost the same number of kanji, Nelson contains far more compounds (“over 70,000”) than S&H (“over 48,000”), but this is ironically due to a superb feature of S&H that distinguishes it not only from Nelson, but also from traditional Japanese kanji dictionaries (*kanwa jiten*): in S&H the compounds listed for a given head kanji (*oyaji*) are not limited to words which begin with that kanji. Compounds are divided into groups according to whether the head kanji is the first kanji in the compound, the second, the third, etc. According to the authors, the advantage of this feature is that a given compound can be found by looking up any kanji in the word. This is especially helpful if the first kanji in a compound is particularly difficult to find or obscured on a blurry fax. There is another advantage to this feature, which the authors do not specifically mention, but which is equally valuable: one obtains a much fuller sense of the “productivity” of a given kanji (i.e. the number and type of compounds in which that kanji appears). This information is simply absent from other dictionaries, and the disadvantage of this is especially pronounced in cases where a given kanji appears at the beginning of very few compounds or even none. For example, if a particular kanji is the first element in only 2 compounds but the second kanji in 20 compounds, Nelson (like other traditional dictionaries) lists only 2 compounds for that kanji, which unfortunately creates the false impression that it does not appear in many compounds.

The fact that each compound is listed in 2 or more places in S&H (but in only 1 place in Nelson—after its first kanji) means that Nelson is able to include a greater number of compounds in fewer pages. This is the one disadvantage

to S&H’s approach, but for most learners it will have minimal impact, as the additional compounds in Nelson are typically very low-frequency vocabulary items. Like S&H, Halpern lists compounds (and other words and expressions) regardless of the position of the head kanji, but as mentioned earlier, Halpern has far fewer compounds overall, so it is not a substitute for S&H in this regard. Of course, when one’s purpose in looking up a kanji is just to find out its reading(s), then the number of compounds in any of the dictionaries is irrelevant.

### Lookup systems and indexes

Undoubtedly one of the biggest differences between the three dictionaries is their respective innovations that simplify the task of looking up kanji:

- Nelson: Universal Radical Index (URI)
- S&H: simplified 79-radical system
- Halpern: System of Kanji Indexing by Patterns (SKIP)

Since there is a learning curve involved in any kanji lookup system, it is important to make an informed choice, but this is especially difficult for beginning students, who are new to the kanji lookup process. As with traditional Japanese kanji dictionaries, all three dictionaries have indexes for looking up kanji based on their readings, but of course this is of no help when one’s purpose for looking up a kanji is to find out how to pronounce it.

Radicals (*bushu*) are the components of kanji that have traditionally been used to classify and order kanji in dictionaries, and the underlying concept of the radical lookup

system (i.e. looking up kanji by their constituent parts) is actually a good one, but its traditional implementation is outdated, inefficient, and unnecessarily difficult to use. The traditional set of 214 radicals dates back to the 42-volume *Kangxi Zidian* published in China in 1716, which contains approximately 42,000 characters, and as S&H point out, “It may be argued that the compilers...had to have so many radicals in order to classify so many characters into groups of manageable size, but a smaller set of radicals suffices for the no more than 5,000-6,000 characters of modern Japanese” (p.xiv-xv).

It is unfortunate that some beginning students are unnecessarily intimidated by the radical system, since there is an enormous difference between the old, traditional system and newer streamlined systems. On the contrary, learning some form of the radical system actually helps students, since it increases their familiarity with the “building blocks” involved, facilitating a “component analysis” approach to learning kanji (which is the basis of the most effective mnemonics). The main problem with the traditional radical system (aside from using more radicals than necessary) is the difficulty involved in correctly predicting the radical of a given kanji. The traditional radicals for each kanji were chosen based on their semantic roles, creating “the paradoxical predicament of having to know the meaning of a character in order to locate it in a dictionary and look up its meaning” (S&H, p.xv). The post-war simplification of many *jōyō* kanji exacerbated this problem, since some *jōyō* kanji no longer even “contain” their traditional radicals. The original Nelson departed from the traditional system in favor of a “radical priority” system: many kanji were

reclassified under different radicals (based on their positions in their respective kanji), and a list was provided of the possible positions ordered in a “priority” sequence, allowing radicals to be identified through process of elimination with a minimum of wasted time.

The revised New Nelson ironically returned to the *traditional* radical system (with the justification that knowledge of this system is useful in making the transition to traditional dictionaries), but the saving grace is the Universal Radical Index (URI), which lists the same kanji in multiple locations under all of its radical-like components, eliminating the need to decide which component is the traditional radical. This results in a much larger index than necessary (230 pages with over 32,000 entries, meaning that each kanji appears an average of more than 4 times), but this lookup method is easier and faster than the original version’s radical priority system. Whether using the URI or not, the actual lookup procedure follows tradition: individual kanji are located by a combination of radical and “residual stroke count” (the remaining number of strokes in the non-radical portion of the kanji). Since the kanji are grouped in the dictionary by radical, they can also be located directly without the use of any index, but of course this method requires one to guess the “correct” radical.

S&H uses a simplified radical lookup system, which greatly reduces the number of radicals from 214 to only 79 (actually 135 including all variants), and which includes a “zero radical” category of 262 kanji which do not contain an easily identifiable radical, arranged in order of stroke-count. The method of determining the radical under which a kanji is listed is similar to the original Nelson’s radical

priority system (i.e. the radical for each kanji was selected by the authors based on its position, and a search sequence is provided). According to S&H, the radical selected is the same as the traditional radical for “about 85%” of the kanji in the dictionary (p.xv). As in Nelson, kanji are grouped by radical, and the actual lookup procedure is the same: a combination of radical and residual stroke count. Since S&H does not have a URI, kanji must be looked up directly, but the simplified radical system makes this much easier than in Nelson, and it is ultimately faster in the long run than the 2-step process involving an index. Another very helpful feature of S&H, which is lacking in Nelson, is the inclusion of an “overview list” of kanji at the beginning of each radical section, as found in traditional Japanese kanji dictionaries.

There is no doubt that Nelson’s URI is more “foolproof” in terms of maximizing the likelihood of finding a particular kanji (except in those cases where there simply is no clearly identifiable radical), but S&H’s approach to compounds actually provides an additional “indirect” lookup method that can circumvent the difficulty of identifying the radical: if a kanji appears in a compound, one can look up that compound under (one of) its *other* kanji in order to discover at least one reading of the more-difficult-to-find kanji, which can then be located by using the reading index.

Clearly, there is a learning curve entailed in using any system of radicals, but the effort is well worth it in the long run. For those who desperately wish to avoid the radical system altogether, Halpern’s dictionary is the answer. Its “System of Kanji Indexing by Patterns” (SKIP) groups kanji according to 4 “patterns,” depending on whether a kanji can be analyzed as: left-right, top-bottom, enclosure-enclosed,

or solid. The solid pattern is a catchall category similar to the “zero radical” in S&H, but is further analyzed into 4 subcategories based on the presence of a top line, bottom line, dissecting “through” line, or none of these. Determining the pattern of a kanji is generally an easy process, (and in fact, most radicals appear in the positions listed above anyway: left, right, top, bottom, enclosure), but it can be harder than it sounds in some cases. Halpern includes detailed instructions on how to determine the pattern of a kanji, so there is still a learning curve involved here, as with learning how to identify the radical in a kanji. In fact, some of the most difficult kanji to look up using the radical system are likely also the most difficult to find using SKIP. (In the case of the left-right pattern and enclosure, the left portion or enclosure frequently corresponds to a radical anyway, whereas the hardest kanji to find are often the “solid pattern” or “zero radical” kanji.) As with S&H, kanji can easily be looked up directly, and there is also a Pattern Index, which serves a function similar to S&H’s overview lists (and Nelson’s URI): kanji can be located by scanning columns, rather than flipping pages. Like the radical system, SKIP still entails counting strokes (for *both* halves of the pattern, except in the case of the solid pattern), which could actually be a drawback to the SKIP method in the long run, since remembering the shapes of radicals is obviously easier than memorizing stroke counts.

Halpern advertises 6 lookup methods, but SKIP actually accounts for 3 of these: the Pattern Index, the “Direct Method” (i.e. searching for kanji directly without using an index), and the “Scan Method,” which is merely a shortcut that can only be used when one part of a kanji contains

12 or more strokes. The other 3 methods have significant limitations. Like S&H and Nelson, Halpern has a reading index (only helpful when one already knows at least one reading of a kanji), and there is also a radical index, but both the index and the radical chart are buried between other indexes, making them difficult to use. (In S&H and Nelson, the radical charts are conveniently located on the insides of the covers.) The sixth method consists of using the “List of Kanji Synonym Groups” in the appendix to look up a kanji by its meaning, but this is a very hit-and-miss process, and of course entails knowing the meaning of a kanji.

### Format and content of kanji entries

What puts Halpern in an entirely separate category from S&H and Nelson is the *quality* of its entries, which is particularly important for beginning students. Whereas the entries in S&H and Nelson consist primarily of exhaustive lists of compounds (and provide no way to distinguish high-frequency vocabulary items from much less common words), Halpern places tremendous focus on the *meanings* of each kanji, and lists useful and/or representative *words and expressions* (not just compounds) containing the head kanji, grouping and ordering them according to meaning. For each kanji, Halpern has distilled at least one “core meaning” or “keyword” which helps to tie the various meanings together (and which can serve as a useful mnemonic device). Both versions of Halpern provide a detailed explanation of this approach, but the smaller version summarizes it best (except for item “d” in the list below, which appears only in the larger version, p.69a):

Unlike traditional dictionaries, which usually order senses chronologically, this dictionary present [sic] the senses in a cogent order that shows their interrelatedness. The core meaning serves as the basis of organization, and the various senses are grouped around it in clusters so that they can be perceived as a logically structured, psychologically integrated unit.

留, for example, has several distinct senses, but they are clustered around the core word KEEP in a way that shows their differences and similarities, greatly reducing the burden of memorization. If the senses were arranged as shown in the left column below, they would appear to be an arbitrary list, rather than as a structured unit.

#### Arbitrary List

- a) keep from moving
- b) detain
- c) leave behind
- d) pay attention to  
(p.26a)

#### Expansion from Core

- KEEP in place
- KEEP in custody
- KEEP for future use
- KEEP in mind

This treatment of meaning makes Halpern a true “learner’s” dictionary instead of merely a compendium of kanji compounds. Entries also include a number of other excellent features not found in S&H or Nelson, which set it apart as a learner dictionary for kanji: stroke order, frequency data, usage information, and exhaustive cross-references to (a) kanji synonyms (kanji with the same or similar meaning)

and (b) *kun'yomi* homonyms (kanji that share the same native Japanese *kun* reading). This last feature is extremely useful, since it can be challenging to know which kanji to use to write a word consisting of a *kun* reading shared by other kanji. For example, there are no less than 4 ways to write the verb *kaeru* (“change”), each with a different kanji, depending on the exact meaning and nuance.

Halpern’s entries are extremely easy to read, due to superior formatting and layout, and they also include Chinese readings and (simplified) Chinese forms, as well as the calligraphic *gyōsho* and *sōsho* forms. Finally, Halpern contains no less than 200 pages of front matter and 193 pages of appendices, in contrast to Nelson’s and S&H’s appendices of 46 and 49 pages, respectively, and almost no front matter at all.

All three dictionaries label *jōyō* kanji as such, and Nelson and Halpern further distinguish the *kyōiku* (“education”) kanji, a subgroup of the *jōyō* kanji consisting of the 1,006 kanji taught in Japanese elementary schools. In S&H, *jōyō* kanji can be identified by the presence of a cross-reference number to S&H’s excellent book *Kanji & Kana* (revised in 1997), a guide for learning the *jōyō* kanji. (The cross-referencing works in both directions.)

### Compact versions

The smaller, portable versions of each of the three large dictionaries are essentially abridged versions with less kanji and compounds/words, and they have the same layout and lookup systems as their larger counterparts, except for minor differences in S&H and more significant differences in

Halpern. The main feature which differentiates the smaller S&H from the larger version (and which makes it a “learner” dictionary) is the inclusion of stroke order (and 2 pen-written forms). The smaller Halpern, like the larger version, also includes stroke order, so Nelson is the only one of the three compact dictionaries without it. The smaller Halpern has even better formatting than the larger version, including the welcome addition of color: “core meanings” and “high-frequency” kanji are printed in red, for example. Other differences in the smaller Halpern include the omission of synonym cross-references (as well as the “List of Kanji Synonym Groups” in the appendix), Chinese forms and readings, and calligraphic *gyōsho/sōsho* forms. Helpful frequency information for each kanji is still provided, but in a different form than in the larger version.

Kanji in the smaller S&H and Nelson have the same serial number (or “descriptor”) as in the larger versions, meaning that they are automatically mutually cross-referenced. (Since the smaller versions are missing many of the kanji in the larger versions, this of course means that there are gaps in their numerical sequences.) The kanji in the smaller Halpern have different serial numbers than in the large version, but cross-reference numbers for the large version are provided. (This is not true in reverse, however.) Interestingly, the smaller Halpern actually contains some kanji not included in the larger version. The total number of *jinmei-yō* (“personal name”) kanji was officially increased from 166 to 285 after publication of the larger Halpern, and the smaller version includes all of these new additions. (In 2004 the number of *jinmei-yō* kanji was increased again to 778.) The total numbers of kanji (and compounds) for each of the smaller dictionaries are as follows:



Nelson	3,068 kanji, 30,000 compounds
S&H	2,882 kanji, 12,073 compounds
Halpern	2,230 kanji (1,945 <i>jōyō</i> + 285 <i>jinmei-yō</i> )

## Conclusion

Serious beginning students are advised to purchase the large Halpern if possible, and eventually the large S&H at least by the time they reach intermediate level. The large Nelson can only be recommended as a “backup” for students who already own the large S&H. The small Halpern will suffice for students on a tight budget or for those not planning on continuing their study of Japanese for more than 1 or 2 years. In any case, the small Halpern is the best choice for students who want a portable dictionary, whether in addition to or in place of a larger dictionary, even though it is the largest and most expensive of the compact versions. While serious students should ideally learn to look up kanji by radical, there is simply no substitute for Halpern’s quality of lexicography and its exceedingly user-friendly layout. The only reason to choose Nelson or S&H as a compact dictionary would be the greater number of kanji (and compounds), but the small Halpern is sufficient to read even a Japanese newspaper, as it contains all the *jōyō* kanji. To look up non-*jōyō* kanji, one would do best to go straight to the larger S&H or Nelson, which have over twice as many kanji as their respective compact versions. For those who want a maximum number of kanji in a very portable form, a hand-held electronic dictionary is actually the best choice (albeit more expensive), since virtually all current models contain all 6,355 JIS kanji (over twice as many as even the

compact Nelson). For more kanji than the large Nelson, one must turn to a Japanese-only kanji dictionary, but it is worth noting that these generally have *less* compounds than Nelson. The new *Shin-Kangorin* (2004), for example, contains 14,313 kanji (over twice as many as Nelson), but only approximately 50,000 compounds. To sum up, Halpern (large or small) is the best choice for actually *learning* the *jōyō* kanji, whereas the large S&H and Nelson provide the most comprehensive lookup of compounds and non-*jōyō* kanji.

**Timothy Harris** holds an MA in Teaching Foreign Language (Japanese) and an MA in East Asian Languages and Literatures, with an emphasis on historical Japanese linguistics. He taught at Kwansei Gakuin University from 1995-1998, and is currently teaching at Osaka Sangyo University.

## References

- Hadamitzky, W. & Spahn, M. (1997). *Kanji & Kana, Revised Edition: A Handbook of the Japanese Writing System*. Rutland: Charles E. Tuttle Company.
- Haig, J. H. & Nelson, A. N. (1997). *The New Nelson Japanese-English Character Dictionary: Based on the Classic Edition by Andrew N. Nelson*. Rutland: Charles E. Tuttle Company.
- Haig, J. H. & Nelson, A. N. (1999). *The Compact Nelson Japanese-English Character Dictionary: Based on the Classic Edition by Andrew N. Nelson*. Rutland: Charles E. Tuttle Company.

- Halpern, J. (1990). *New Japanese-English Character Dictionary*. Tokyo: Kenkyusha.
- Halpern, J. (1993). *NTC's New Japanese-English Character Dictionary*. Chicago: NTC Publishing Group.
- Halpern, J. (Ed.) (2002). *The Kodansha Kanji Learner's Dictionary*. Tokyo: Kodansha International.
- Kamata, T. & Yoneyama, T. (2004). *Shin-Kangorin*. Tokyo: Taishūkan Shoten.
- Kodansha International. (2002). *Kodansha's Essential Kanji Dictionary*. Tokyo: Kodansha International.
- Kodansha International. (1991). *Kodansha's Compact Kanji Guide*. Tokyo: Kodansha International.
- Nelson, A. N. (2004). *The Original Modern Reader's Japanese-English Character Dictionary: Classic Edition*. Rutland: Charles E. Tuttle Company.
- Spahn, M & Hadamitzky, W. (1991). *Japanese Character Dictionary: With Compound Lookup via Any Kanji*. Boston: Cheng & Tsui Company.
- Spahn, M & Hadamitzky, W. (1996). *The Kanji Dictionary*. Rutland: Charles E. Tuttle Company.
- Spahn, M & Hadamitzky, W. (2004). *The Learner's Kanji Dictionary*. Rutland: Charles E. Tuttle Company.