


# 考えて学ぶ日本語

## Learning Japanese with Thinking

山口登志子 YAMAGUCHI, Toshiko

● シンガポール国立大学  
National University of Singapore

 **考える力, 分類, 言語の知識, 問題設定型学習法**  
Thinking skills, Categorization, linguistic knowledge, Problem-Based Learning

### ABSTRACT

外国語を外国で学ぶ場合、特に初級においては学習者が文法事項や統語パターンを「頭に入れる」段階から始まるといえよう。中級に進むとこの学習姿勢にいくらか柔軟性が出てくるようだが、授業で習ったことを「覚える」そしてそれを「使う」という基本姿勢は変わらないようだ。本稿では、そのような背景の学生達が「言語のしくみ」を認識することによって、「考える力」を会得し、日本語力を伸ばす活性剤になるのではないのかと提案する。認知言語学の「分類」の理念を基に、漢字の「手」が5分類され熟語を形成するのをまず示し、大学教育で現在注目されている「問題設定型学習法」における「問題発見」が言語学習において「考える力」の出発地点ではなく、目的言語の「しくみ」（たとえば、熟語の成り立ち）の体系的な認識・理解こそ考える力の出発地点ではないかと主張する。

## Introduction

When students learn a foreign language, particularly in an overseas setting, they might pass through a stage in which they rely on memorizing basic grammar and vocabulary in order to assimilate the system of a new language. Even at the Intermediate level in which students encounter more speaker-oriented expressions and have a larger vocabulary, their knowledge might still rely on their memory of classroom instructions rather than their own thinking about the language facts. Based on my teaching experience in Japanese language and linguistics at the National University of Singapore, my view is that if students are exposed to, or become conscious of, ‘linguistic facts’, that is, they are taught strategies to examine the way in which the language is organized or patterned and how it is used, they will be compelled not to rely too much on rote-learning. They will learn the new language more efficiently and might also nurture enthusiasm for learning as well as self-monitor the process of their learning. Through this learning process, which combines language learning with linguistics, or more appropriately, ‘linguistic thinking’, students are expected to practice how to think critically about the language facts. This in turn should help to link the thinking skills to their existing knowledge, leading them to achieve a higher level of proficiency. In the context of higher education, one powerful method which has been pursued among university institutions to challenge students to think is problem-based learning (PBL). This method identifies the process of discovering and solving problems with the process of establishing thinking skills. In Section 5, I

suggest that the conscious awareness of linguistic knowledge about the target language should be the cornerstone of thinking skills in language learning.

The paper deals with 漢字 kanji or logographic scripts, one writing system in Japanese whose origin is traced back to the adaptation of Chinese characters into the Japanese lexicon (particularly from the 5th century onward). Because of this history, kanji resemble in form and meaning characters used in present-day Chinese. One of the salient characteristics of kanji is that they frequently appear in combination with another kanji, forming 熟語 jukugo or compounds of two characters. What is intriguing here is the fact that compound words such as 手紙 ‘letter’, 手術 ‘operation’, 手袋 ‘gloves’, or 歌手 ‘singer’, which uniformly contain a kanji character 手 ‘hand’, end up with conceptually different lexical meanings. These compounds do not always have the same shape as their Chinese counterparts (e.g. 手紙 is expressed as 信 in Chinese); even if the form is the same, their semantics are not always identical (see Section 3). These idiosyncrasies of compound formation are a difficult task not only for Chinese students but also for students of other languages. Moreover, learners of Japanese may learn these words individually. For instance, in a textbook such as ようこそ youkoso (1999) they appear in different sections (Chapters 6, 4, 7, 5, respectively), and due to this fact learners as well as teachers may lose sight of the linguistic connections underlying them. This paper seeks to explain the uses of compound words from the point of view of cognitive categorization (Section 4).

Cognitive linguistics, built on the results

from research by experimental psychologists (see Rosch, 1999 for the summary), acknowledges that humans tend to categorize objects or concepts into prototypical and peripheral groups when they perceive the world, and that the category members are not separated by rigid boundaries but linked by family resemblances. Lakoff (1987, p. 9) aptly states that “[...] we understand the world not only in terms of individual things but also in terms of categories of things [...]. We have categories for everything we can think about. To change the concept of category itself is to change our understanding of the world” (italics in original). His book accordingly provides evidence for the utility of the prototype structure of language comprehension (e.g. There-constructions). I will utilize this cognitive framework to support the view that some kanji, if not all, are used systematically, and that an understanding of these systems may help the learners to infer the meanings of unknown kanji-words. The acquisition of this linguistic knowledge will exercise their thinking skills on the basis of the cognitive resources they simultaneously build up. In order to explicate what exactly this linguistic knowledge is, we examine a kanji-character 手 ‘hand’ and its different combinations with other kanji characters in Section 4, suggesting that the reason 手 can create compound words with extended meanings is attributed to its ‘radial structure’ (see Lakoff, 1987, pp. 83-4), in which ‘hand’ as four fingers and a thumb stands as a central meaning to which noncentral subcategories of ‘hand’ are related. This paper is a preliminary case study with respect to the behavior of 手 in the hope that this approach consolidates my underlying attitude toward language teaching / learning:

‘thinking skills’, built on linguistic knowledge, enhance the learning of a foreign language.

## 2. Kanji in reference books

Aside from textbooks used in language classrooms, students may need to refer to reference books such as Shibatani (1990) or Iwasaki (2002) to know more about Japanese. These books describe the nature of kanji under headings such as loan words, word formation, or Japanese lexicon (Shibatani, 1990, pp. 142ff.; Iwasaki 2002, pp. 29). Based on the information therein, the characterizations of kanji can be summarized in the following manner. First, kanji are classified as Sino-Japanese words or 漢語 kango when they are read in a Chinese way (i.e. 音 on reading) and written in Chinese characters. These Chinese words stand in contrast to native Japanese words or 大和言葉 yamatokotoba, which are read in a Japanese way (i.e. 訓 kun reading). Second, kanji are also used to write native Japanese words. For instance, 風 reads as /fuu/ as a Sino-Japanese word (e.g. 台風 taifuu ‘typhoon’), and /kaze/ as a native Japanese word (e.g. 大風 ookaze ‘heavy wind’).<sup>1</sup> Third, there are groups of words which contain Chinese characters but they are manufactured in Japanese and reimported into the Chinese lexicon. For this, Iwasaki (2002, p. 31) lists examples such as 自由 ‘freedom’, 自然 ‘nature’, 文学 ‘literature’, 心理 ‘psychology’, 古典 ‘classics’, and 工業 ‘industry’. Fourth, many Sino-Japanese words appear in combination with another kanji, forming a compound word, and examples given just above represent a case in point; 自然 consists of 自 ‘self’ and 然 ‘manner’, meaning that ‘nature’ is the manner in which things exist by themselves. Fifth, these compounds include

not only combinations of the same origin but also hybrid combinations, which consist of both native and Sino-Japanese words. While 夜風 *yokaze* ‘night wind’ is a native-native compound, 強風 *kyoufuu* ‘strong wind’ contains two Sino-Japanese characters. By contrast, while 時計 *tokei* ‘watch, clock’ consists of 時 (native) and 計 (Sino-Japanese), 台所 *daidokoro* ‘kitchen’ combines 台 (Sino-Japanese) with 所 (native).

The information illustrated above is useful in that students gain a bird’s eye view of the structure of kanji. However, it seems that the major problems students encounter in the process of language learning may not be subsumed exclusively under these categories. For instance, when a Chinese student comes across 手紙 or 台所 for the first time, the puzzle s/he may experience falls under none of these five, but simply that it is impossible for him/her to process the combination of ‘hand’ and ‘paper’ to arrive at the concept of ‘letter’ or to infer the concept of ‘kitchen’ from the combination of ‘table, stand’ and ‘place’. As this example indicates, students are confronted with problems when they are not able to utilize their prior knowledge (either their native language or the Japanese grammar already acquired), and this happens because the grammar of their target language is imposing constraints on its use.

### 3. Use of kanji<sup>2</sup>

On the basis of my ongoing research, I would like to classify, though tentatively, compound words in Japanese with respect to their Chinese counterparts into the following three groups. In the first group Japanese and Chinese share the same form and the same

meaning. One good example is 時間, which means ‘time’ in both languages. In the second group Japanese and Chinese share the same form but the meanings attached are different, though they are conceptually related. 医院 means in Japanese ‘doctor’s office’, which normally has one doctor with one nurse in attendance, but in Chinese it means ‘hospital’. Chinese does not possess the expression 病院 which means ‘hospital’ in Japanese. What corresponds to Japanese 医院 ‘doctor’s office’ in Chinese is 診所, which does not exist in Japanese. There are other interesting cases which belong to this category: 汽車, which means ‘train’ in Japanese, means ‘car’ in Chinese. 勉強 means ‘study, learn’ in Japanese, while it means ‘achieve something with difficulty’ in Chinese. 手紙 means ‘letter’ in Japanese, but it can mean ‘toilet paper’ in some Chinese dialects. The third group is that Japanese and Chinese do not share the same combinations, although both languages have each component part. 非常口 ‘emergency exit’ is absent in Chinese but it has 緊急出口 as its equivalent. Another example is that 財布 ‘wallet, purse’ which is absent in Chinese, though it has 錢包 as its equivalent.

Among these three classifications, the second and third groups might be the hardest for students, since inferences about the meanings from their existing knowledge might not be drawn as easily as the first group. In the next section, my tentative categorizations of compounds with 手 will be presented, which it is hoped will shed light on the nature of kanji.

### 4. Categorizations of 手

I have consulted 現代漢語例解辭典 *Gendai kango yorei jiten* (1992) to collect compounds

which contain 手. As mentioned earlier, the meanings of many compounds are extended uses of the central meaning. Note that in 4.1 手 is shown to have as its central meaning a body part (e.g. 手足 'hands and legs / feet'), and all the others (e.g. 手芸 'handicraft', 手切れ金 'money for severance of connections', 歌手 'singer', 手記 'note') in the following sections possess some extensions of the core meaning. Lakoff claims (1987, Chapter 6) that meaning extensions are in part due to the radial structure of language. This radial structure explains why some central categories can have noncentral or not specialized subcategories - categories not generated on the basis of the central category (unlike 'housewife' vs. 'mother') but their occurrence is only 'motivated' by cultural or social needs in a given society. Examples such as 'adoptive mother', 'birth mother', 'foster mother', 'unwed mother' which are all created radially by convention, and as such, the existence of these expressions is culture-specific (Lakoff, 1987, p. 84). It is here important to ask how, then, the specialized instance of 'mother' (e.g. 'housewife') differs from the non-specialized instances mentioned above. Lakoff claims that metonymy is another medium to provide extended subcategories. For example, the metonymic relation that exists between 'mother' and 'housewife' shows that 'housewife' stands for 'mother' in that mothers are normally housewives and this standing-for relation also provides a sense of what a mother is supposed to be. Thus, housewife-mother is seen to be a specialized instance of 'mother', and one can say that it is derived on the basis of the central meaning of mother, forming a social stereotype (e.g. mothers stereotypically stay at home, are involved in households, and

rear a child). In cases of 'adoptive mother', 'birth mother', 'foster mother' or 'unwed mother', by contrast, they do not provide a picture of what mothers are supposed to be, because the proto-typical sense of mother (e.g. someone who gives birth to a child and nurtures him/her) is not shared by them, and these examples are, therefore, categorized as noncentral, not specialized, or conventionally motivated. In this regard, it makes more sense to say that they are created as variations of the mother to reflect our socio-cultural needs.

The following sections demonstrate that the formation of compounds which contain 手 is attributed to the radial structure of compounds derived from 'hands'; there are some conventional relations between hands and other expressions. The extended meanings do not represent the central concept of hands, but these subcategories are created as the result of socio-cultural<sup>3</sup> motivations. In this respect, the five categories proposed show that the extensions are by no means random, and exhibit regularity. It is the acquisition of this regularity that I believe will help students to promote efficiency and motivation in their learning of Japanese.

#### 4. 1. Hands as body parts

Body-parts is taken as the central category of 手. It indicates four fingers and a thumb. 手足 *teasi* means hands and legs (including feet) and 手中 *tetyuu* indicates that something is in one's hands. A slightly different usage of 手 as a body part is 手袋 *tebukuro* 'gloves' which indicates that hands are covered by 袋 *fukuro*, which functions here as a container. A similar expression might be 足袋 *tabi* which are worn on the feet when we wear Japanese styled clothes (e.g. kimono). The basic conceptual

sense used for 足袋 is the same as that of 手袋 in that a body part is put in a container-like entity. Similarly, in 手錠 tejou ‘handcuffs’, 錠 ‘key, lock’ is seen to be put on one’s wrists, creating the sense of ‘handcuffs’.<sup>4</sup> 手さげかばん means a small bag usually with a handle that is held by one hand; ‘hand’ is again used to indicate a body part.

#### 4. 2. Hands as closeness

There are compounds with 手 which do not refer specifically to the body part but they indicate that something is in the vicinity of one’s physical presence. Compounds such as 手本, 手帳 or 手荷物 refer to the location of the referents of compounds that are close to the speaker. 手本 tehon ‘model’ must be located close to the person who conducts an action to model or copy something. Similarly, 手帳 tetyou ‘small notebook’ is what we normally have in our handbag or pocket. 手荷物 tenimotu ‘hand luggage’ can either mean a small piece of luggage which we take into the airplane or the luggage that is brought to the destination of our journey. In either sense, closeness is implied in that the luggage accompanies its owner. 手切れ金 tegirekin refers to money that is paid when one breaks a relationship with someone or some organization; 手 denotes the close relationship one had before. There is an expression 手を切る in 我々はその会社と手を切った which means that we severed our connections with the company.

#### 4. 3. Hands as an instrument

Hands represent an instrument with which some work is conducted. 手作り tezukuri ‘handmade’, which consists of 手 and 作り ‘make’, has the same meaning as ‘handmade’ in English that something is made by someone using their hands or using tools rather

than machines. Similarly, words such as 手芸 syugei ‘handicraft’, 手術 syujutu ‘operation’, or 手工業 syukougyou ‘manual industry’ all indicate activities that involve the use of hands: 手芸, which contains 芸 ‘art’, often refers to embroidery or knitting, and 手術, which contains 術 ‘skilled art’, cannot be conducted without surgeon’s hands, while 手工業 refers to an industry (= 工業) which produces handicrafts. Words such as 手話 syuwa, 手品 tejina, and 手紙 tegami form another group in that although hands are used as an instrument, they do not imply that the denoted activity results in a product. 手話 syuwa ‘sign language’ literally means ‘speak (= 話) with hands’ and refers either to the language itself or to the activity in which people communicate with hands / fingers. 手品 tejina ‘magic’ is a skilled performance to entertain people, for example, by making things appear or disappear. The reason 手 is used here might be that magicians often use their hands to perform tricks. Some magicians may use other body parts, but Japanese does not have expressions such as \*足品, \*腕品. 手紙 seems to mean that one writes something on a piece of paper by means of one’s hands.

#### 4. 4. Hands as skills

Hands also refer to one’s skills, and this meaning is expressed differently depending on which kanji follows 手. 手腕 syuwan, where 手 is combined with 腕 ‘arms’, means an ability to deal with the matters efficiently, and 手法 syuhou, where 手 co-occurs with 法 ‘manner’, refers to technical skills or methods one may use to create a work of art. 手柄 tegara which combines 手 with 柄 ‘pattern’ refers to a skillful deed that deserves appreciation.

#### 4. 5. Hands as an occupation

The final subcategory of 手 is when it is attached to particular kanji and the compound refers to specific occupations. 助手 *joshiyū* combines 助 ‘help’ and 手, meaning an assistant, while 歌手 *kasyū* contains 歌 ‘sing, song’ and means a singer. 運転手 also contains 運転 ‘drive’ and results in the meaning of ‘professional driver’. 交換手 *koukansyū* refers to a telephone operator with a compound word 交換 which means ‘exchange’. The reason why hands refer to an occupation might be explained by family resemblance: those who have an occupation are, in one sense, ‘skilled’ in that occupation (see section 4.4). 歌手 can be paraphrased as ‘someone who is skilled in singing’ and 助手 is likewise said to be someone who is skilled in helping people at the work place.

## 5. Problem-based learning vs. Linguistic knowledge

As Boud and Feletti (1997, p. 1) explain, PBL starts from a problem, query, or puzzle that the learner wishes to solve. This discovery of a problem is followed routinely by discussions in small groups with a supportive tutor or library search to achieve the solution, and, more importantly, the problem is presented in the same context as it would be in real-life. As Gijsselaers (1996, pp. 17-8) provides one case with respect to the jeans market, the problem the students may raise is why the Lee Company is not able to sell jeans despite the growing market demand described in a situation given to the students. In other words, our real world knowledge leads us to the claim that high consumer demand must activate the market. Thus, the process of discovering a problem is, according to Gijsselaers (*ibid.*, p.

18), based much on what the students already know about, or have experienced through, the real world. When we apply this sense of problem-discovering to language learning, however, we notice that the problems in language learning might not be what students discover but what students must tackle (Section 2). As our study on kanji 手 has shown, neither would students’ prior or real world knowledge be utilized usefully before they have established a good command of the grammar of a target language. That is, although we are all in search of a method by which we can enhance students’ thinking ability, PBL may not be an appropriate medium for language learning, precisely because the grammar attends to aspects of our experiences while using a language, and this means that the speakers who possess a grammar might express the world through this grammar (see Slobin 1996). In this respect, Humboldt’s words are instructive ([1836] 1988, p. 60, cited in Slobin, 1996, p. 91):

To learn a foreign language should therefore be to acquire a new standpoint in the world-view hitherto possessed, [...] since every language contains the whole conceptual fabric and mode of presentation of a portion of mankind. [...] this outcome is not purely and completely experienced.

The fact that Chinese students are puzzled by processing the meanings of words such as 手紙, 手話, or 手品 might not be taken as a problem in the sense of PBL, but it clearly states that existing knowledge (e.g. 手 means ‘hand, and 品 means ‘item’) does not always work in accord with the knowledge required for the construction of the grammar of a target language. What resolves this puzzle is, we have suggested (Section 4), linguistic

knowledge - the awareness of the categorizations of 手 in our case study - which we expect students to acquire and apply to their learning materials. Although the research presented is based on my own observations rather than empirical studies, I hope that the paper has at least made the point clear that the students' systematic establishment of linguistic knowledge about the target language should boost the acquisition of Japanese, because learning will, then, consort with thinking.

## Endnotes

- 1 Note that 風 is read as /feng/ in Mandarin Chinese. Some 音 readings in Modern Japanese might have been derived from Chinese dialects. 菊 is probably a good example for this; while its Mandarin Chinese reading is /ju/, it is read as /kik/ in Fukien dialect (tones are not provided).
- 2 My thanks go to students who attended my introductory linguistics course in the semester II 2003 in the National University of Singapore, and drew my attention to the interesting differences of uses of characters in Japanese and Chinese.
- 3 I conceptualize culture, in a rather broad manner, as shared knowledge or ideas by the members of a given society (see Marshall et al., 1998, pp. 137-138).
- 4 In Mandarin Chinese there is no character 鏡.

## References

- Boud, D., & Feletti, G. (1997). Changing problem-based learning. Introduction to the second edition. In Boud, D., & Feletti, G. (Eds.), *The Challenge of Problem Based Learning* [second edition] (pp.1-14). London and Stirling: Kogan Page.
- Gijselaers, W.H. (1996). Connecting Problem-Based practices with educational theory. In Wilerson, L., & Gijselaers, W.H. (Eds.), *Bringing Problem-Based Learning to Higher Education: Theory and Practice* (pp.13-21). San Francisco: Jossey-Bass Publishers.
- Hayashi, O. (1992) *Gendai kango yourei jiten* [Modern Sino-Japanese Dictionary]. Tokyo: Shogakukan.
- Humboldt, W. von. [1836] (1988). *On Language: the diversity of human language structure and its influence on the mental development of mankind*. Heath, P. (Trans.). Cambridge: Cambridge University Press.
- Iwasaki, S. (2002). *Japanese*. Amsterdam & Philadelphia: John Benjamins.
- Lakoff, G. (1987). *Women, Fire, and Dangerous Things*. Chicago: University of Chicago Press.
- Marshall, G. (1998). *Dictionary of Sociology* [second edition]. Oxford: Oxford University Press.
- Rosch, E. (1999). Principles of categorization. In Margolis, E., & Laurene, S. (Eds.), *Core Readings* (pp. 189-206). Cambridge, Mass: The MIT Press.
- Shibatani, M. (1990). *Languages in Japan*. Cambridge: Cambridge University Press.
- Slobin, D.I. (1996). From "thought and language" to "thinking for speaking". In Gumperz, J.J., & Levinson, S.C. (Eds), *Rethinking Linguistic Relativity* (pp. 70-96). Cambridge: Cambridge University Press.
- Tosaku, Y. (2001) *ようこそ* [second edition]. Vol I and II. Boston: McGraw-Hill.