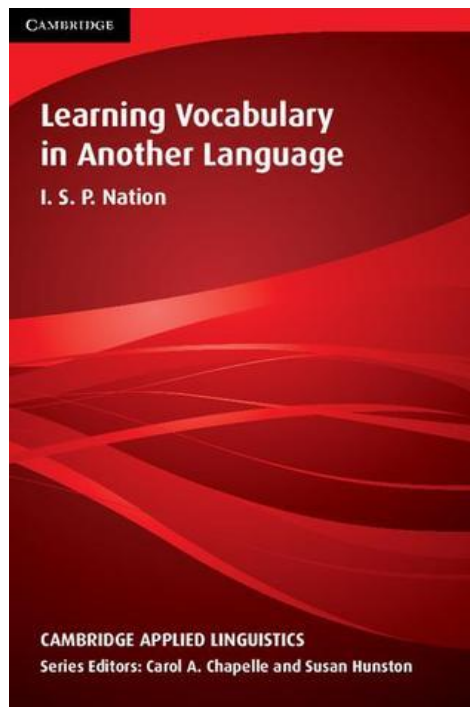


Scans uit I.S.P. Nation Learning vocabulary in another language 2nd edition Cambridge 2013 p. 462-7



The keyword technique is primarily a way of making a strong link between the form of an unknown word and its meaning. It involves two steps after the learner has met the unknown word and has found

or been provided with its meaning. The first step is to think of a first language word (the keyword) which sounds like the beginning or all of the unknown word. The second step is for the learner to think of a visual image where the meaning of the unknown word and the meaning of the keyword are combined. Here is an example.

If an Indonesian learner wants to learn the English word *pin*, the learner could use the key word *pintu* which is the Indonesian word for 'door'. The learner then thinks of an image involving a door and a pin.



The technique is more clearly seen as a four-part process. Here are some examples.

1.		2.		3.		4.
unknown word	→	first language keyword	→	a mental image combining the meaning of the unknown word and the meaning of the keyword	→	meaning of the unknown word

The keywords have been chosen from a variety of languages including English. Bird and Jacobs (1999) suggest that for languages with very limited syllable structure like Chinese, it may also be useful to choose keywords not only from the first language but from known words in the second language.

Step 2 provides a word form link between the unknown word and the keyword. Step 3 provides a meaning link between the keyword and the meaning of the unknown word. The unknown word prompts recall of the keyword because of its formal similarity to the keyword. The keyword prompts recall of the image combining the keyword meaning and the meaning of the unknown word. This image prompts

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1.		2.		3.		4.
<i>fund</i>	→	<i>fun</i> (Thai) meaning 'teeth'	→	a fund of money being eaten by a set of teeth	→	a supply of money for a special purpose
<i>candid</i>	→	<i>can</i> (English) meaning 'container'	→	a can with a label which honestly shows its contents	→	honest and truthful
<i>core</i>	→	<i>hor</i> (Serbo-Croat) meaning 'choir'	→	a choir standing on the core of an apple	→	the most important or central part

recall of the meaning of the unknown word and completes the set of links between the form of the unknown word and its meaning. Thus the whole sequence provides a link from the form of the unknown word to its meaning.

Instead of an image at Step 3, some experimenters (Pressley et al., 1980b) have used a sentence which describes what the image might be, for example, 'There is a *pin* in the *pintu*.' The keyword technique can be used with ready-made keywords and images as in the examples above. This is generally recommended for younger learners and seems to work as well as self-created keywords and images (Hall, 1988; see Gruneberg and Pascoe, 1996, for a discussion of this). Some researchers (Fuentes, 1976; Ott et al., 1973) found that learners in the control group were spontaneously using keyword-like techniques.

There has been considerable research on the keyword technique. It has been found that the technique works with:

1. learners of differing achievement (Levin et al., 1992; McDaniel and Pressley, 1984) although learners with low aptitude may find it more difficult to use the technique (McGivern and Levin, 1983)
2. learners at a variety of grade levels including very young children (Pressley et al., 1981)
3. elderly learners (Gruneberg and Pascoe, 1996)
4. educationally disadvantaged learners

The technique has been used with a wide range of languages: English speakers learning English words; English speakers learning Spanish, Russian, German, Tagalog, Chinese, Hebrew, French, Italian, Greek and Latin; Dutch speakers learning Spanish; and Arabic speakers learning English.

The keyword technique can be used in L1 or L2 learning, for learning the gender of words (Desrochers et al., 1989; Desrochers et al., 1991), and with learners working in pairs or individually (Levin et al., 1992). When it is used for L1 learning, the unknown word is an L1 word and the keyword is usually a higher frequency L1 word, for example, *cat* could be the keyword for *catkin*.

The experiments evaluating the keyword technique have compared it with:

- rote learning;
- use of pictures (Levin et al., 1982);
- thinking of images or examples of the meaning, or instantiation (Pressley et al., 1982);
- context – the unknown word is placed in sentence contexts and the meaning of the word is provided (Brown and Perry, 1991; Moore and Surber, 1992);
- added synonyms – the meaning is accompanied by other known synonyms (Pressley et al., 1982); and
- guessing from context (McDaniel and Pressley, 1984).

The keyword technique has been shown in these studies to usually perform better than any of these other methods and at least as well as them.

The keyword technique has positive effects on both immediate retention and long-term retention (one week to ten years). This finding is not consistent as there are a few studies which suggest that long-term retention is not good with the keyword technique (Wang and Thomas, 1992, 1995; Wang et al., 1993) and so such learning may need to be closely followed by some additional meetings with the words. The case study described by Beaton et al. (1995) shows that even after ten years without opportunity for use, some memory for words learned by the keyword technique remains. Without any revision 35% of the words were remembered with correct spelling and 50% correct or with some small spelling errors. After ten minutes spent looking at the vocabulary list around 75% were recalled correctly or with minor errors and after one and a half hours' revision almost 100% of the 350 words were recalled correctly. This relearning is a very sensitive test of retained knowledge.

The effect of the keyword technique is not limited to receptive recall of a synonym. Studies have shown it be effective for recall of definitions (Avila and Sadoski, 1996; Levin et al., 1992); in sentence completion tasks (Avila and Sadoski, 1996); in story comprehension (Avila and Sadoski, 1996; McDaniel and Pressley, 1984; Pressley et al., 1981); in writing sentences using the words studied (McDaniel and

Pressley, 1984); and in productive recall (Gruneberg and Pascoe, 1996; Pressley et al., 1980a). The keyword needs to overlap a lot in form with the unknown word for productive recall to be successful (Ellis and Beaton, 1993) and repetition may be more effective. Learners find using the keyword technique an **enjoyable** activity (Gruneberg and Sykes, 1991) and can achieve **large amounts** of learning with it (Gruneberg, 1992: 180; Gruneberg and Jacobs, 1991) with some learners learning 400 words in 12 contact hours and 600 words in four days. It is unlikely that these rates could be sustained but they represent very useful initial achievements.

To be effective, **learners need extended training** with the keyword technique. Hall (1988) spent a total of three hours over a period of four weeks training learners in the use of the keyword technique and even this was probably not enough time. As with all the major vocabulary-learning strategies, learners need to be brought to a level of skill and confidence where they find it just as easy to use the strategy as not use it. If their grasp of the strategy is unsure, then they will rarely use it. A fault with many of the experimental studies of the keyword technique is that training seems to have been very short or is not described clearly in the reports.

Several studies show that the keyword technique works well on some words (usually where keywords are easy to find) and not so well on others (Hall, 1988). It would be interesting to see if extended training in the keyword technique results in ease of use with most unknown words or if there are still problems finding keywords for many words and with some languages whose syllable structure differs greatly from the first language. Gruneberg's *Linkword* books (1987) provide keywords for a wide range of vocabulary indicating that the only limit on finding a key word could be the learner's imagination. In the books learners are encouraged **to spend about 10 seconds thinking of the image** so that there really is visualisation.

Barcroft et al. (2011) used a priming study to compare the nature of access to word meanings of words learned by the keyword technique with that of words learned by rote rehearsal. When the keyword was used as a prime, those who had learned by rote rehearsal had faster access to the meaning than those who had learned using a keyword. The interpretation of this finding is that accessing words learned by the keyword technique **involves additional semantic processing** which hinders access. The keyword technique uses additional links compared to the normal form-meaning connection, and while these make the item memorable, the path from form to meaning is more complicated. Because Barcroft et al. found no difference between keyword and rote rehearsal in amount of learning, they argue that we should not use a

technique which provides lower quality access for no great advantage. The compromise position is that there is a very large amount of evidence to show that the keyword technique helps words stick in the memory, and so it should just be used for words that proved to be difficult to retain using normal word card retrieval procedures, that is, the keyword technique should not be used as the standard learning procedure, but should be used as a problem-solving last resort for words that keep slipping away.

Although there has been discussion of possible shortcomings of the keyword technique (see, for example, Sagarra and Alba, 2006: 230–31), the overwhelming evidence is strongly in favour of the technique for both immediate recall and long-term recall, and for use with a wide variety of languages. No vocabulary-learning technique has been so extensively investigated with largely similar positive results. Although there have been some improvements in research methodology to control for the effects of testing on learning and to correctly monitor the treatments, the results have confirmed the findings of Pressley's (1977) classic study and Ellis and Beaton's (1993) analysis that it is the attention to both form and meaning, as well as the linking visual image, that make the keyword technique work.