

ACQUISITION OF OPPOSITES AND COGNITIVE EXPLANATION

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Resum. **Adquisició de contraris i explicació cognitiva.** Aquest article presenta una anàlisi de l'ordre d'adquisició de dues parelles de termes contraris en anglès. La investigació es basa en enquestes d'aprenents xinesos d'anglès a diversos nivells. L'anàlisi arriba a la conclusió que els termes reconeguts, no-marcats i molt freqüents, dels quals es deriven conceptes i termes que expressen una etapa anterior d'una acció, tendeixen a ser més fàcils d'aprendre i gaudeixen d'un percentatge dominant en primera adquisició, mentre que els seus homòlegs tenen un percentatge molt més baix. Enfront d'aquestes conclusions, l'estudi suggereix que els aprenents i professors d'una llengua estiguin més atents als termes que estan en situació desfavorable en la cadena d'aprenentatge del vocabulari d'una llengua.

Paraules clau: vocabulari, contraris, adquisició de llengües.

Abstract. This paper presents an analysis of the acquisition sequence of two pairs of contrasting terms in English. The research is based on questionnaires completed by Chinese learners of English of various levels. The analysis concludes that easily-recognisable, unmarked, high-frequency terms, from which are derived concepts and terms that express an earlier stage of an action, tend to be easier to learn and enjoy a higher retention level during the first phase of acquisition while those terms which do not share these characteristics have a much lower retention level during the same stage. Given these conclusions, this study suggests that learners and teachers of a language should pay more attention to those terms which are in an unfavourable position in the vocabulary acquisition sequence of a language.

Key words: vocabulary, opposites, language acquisition

1 Introduction

Vocabulary acquisition is a topic which attracts most attentions from language educators. The significance in studying vocabulary acquisition lies in discovering how vocabulary is acquired and how it are taught and learned.

The research presented in this paper focuses on the analysis of the acquisition of opposites whose target language is English as a second language. It intends to find the answers to the following questions: How do English learners acquire opposites during their acquisition of language? Are opposites acquired on the basis of “first-come-first-acquired” regularity, which seems to dominate the acquisition of the majority of vocabulary? Do English learners have special preference to one of the terms in a pair of opposites and thus have stronger intention to learn one of the two opposite members? Does acquisition of opposites practically and even purely depend upon their frequency in language use? To answer the questions, a survey was conducted as follows:

Method: questionnaire. 38 pairs of randomly selected opposites and 5 pairs of intentionally selected opposites were listed in the questionnaires and the interviewees were asked to answer the question: which term in each pair of the opposites does the learner have a better command of and thus has more confidence in using it correctly? In other words, the question is, practically, about which term takes priority in acquisition and is therefore acquired first. If two members in a pair of opposites are believed to be acquired simultaneously, then both.

Interviewees: The randomly selected opposites were tested on 43 Chinese Ph.D candidates of Engineering, who studied English in China and learned about 5000-8000 English words, while the intentionally selected opposites were tested on 11 school children, who learned about 500-700 English words.

Interviewees made their decision on the basis of their intuition, their current English ability and their tendency to use one word instead of its opposite if both were suitable for use. Table 1 and Table 2 present the investigation results for the randomly selected opposites and Table 3 presents the results for the intentionally selected opposites.

2 Intentional Learning and incidental Learning

Hatch & Bown 1995 divide vocabulary learning into “intentional learning” and “incidental learning”. Intentional learning is defined as being designed, planned for, or intended by teachers or learners. Incidental learning is the type of learning as a byproduct of learning something else. Research shows that this byproduct accounts for a larger number of vocabulary acquired in both L1 acquisition and L2 language learning.

Opposites, like non-opposite terms, are lexical items and therefore the acquisition of opposites must share the similar characteristics with general vocabulary acquisition. That is, some terms in opposite pairs are learned

intentionally and some incidentally. In language classes, teachers may intentionally let students learn the planned terms in opposites, or may introduce a term's opposite as an explanation of the term when the term is the target word for learning, so that students are exposed to the pair of opposites simultaneously. For instance, when "positive" is taught, "negative" is purposely introduced by the teacher; when "senior" is learned, "junior" may be introduced at the same time. Does intentional teaching result in intentional learning? The investigation shows that none of the informants reports simultaneous acquisition of both terms in a pair of opposites. This gives some clue, though quite weak, that teachers' intentional mention, if they ever do, of the opposite of a term, does not produce the intended effects of intentional teaching.

But we assume that learners consciously or unconsciously give preference to one member over the other in a pair of opposites. The survey of obviously commendatory and derogatory opposites is shown in Table 1. The results show that the votes for the positive terms are predominantly higher than those for negative terms. All interviewees believe they learned "positive", "ordered", "kind", "cautious" and "moral" earlier and have a predominantly better command of them than their counterparts "negative", "disordered", "cruel", "impudent" and "depraved". The other 10 commendatory terms following enjoy more than 75% votes and only two derogatory terms ("criticism" and "illiterate") have more than half of favorable votes, with 65.1% and 81.3% respectively. The fact that 15 informants reported "erudite" was a new word to them is a possible reason for the extremely small number of votes for the word. We have good reasons to assume that speakers have psychological preference to commendatory terms and thus "consciously select" them and give priority to their acquisition. But this is a psychological process in which speakers or language learners show a naturally inherited bias against derogatory terms. As all the commendatory terms convey the linguistic meanings of GOODNESS, learners are expected to give an unconscious preference to GOODNESS over BADNESS. Language learners, including intentional language learners, love merits and thus they have an inherited intention to acquire the commendatory terms first. But the intentional learning of this type is, in most cases, conducted in an unconscious way.

There seems to be a tendency for natural languages to have more positive terms than negative terms in general. For instance, in *Chambers Dictionary of Synonyms and Antonyms* (Manser 1989), there are more synonyms for 'positive' (30 synonyms) than for 'negative' (12 synonyms), more for 'good' (63 synonyms) than for 'bad' (42 synonyms), more for 'glorious' (31 syn-

onyms) than for ‘infamous’ (11 synonyms). This fact indicates that natural languages naturally require more positive words since speakers may be more prone to use languages to describe positive aspects of the world. From cognitive perspective, we suppose that the positive side of a concept comes to languages first because we favour the use the negation of a positive term to describe the negative property of the concept. Thus Chinese speakers prefer to describe the weather with (1) though *cha* ‘bad’ is linguistically a more economic and exact choice.

- (1) Jintian tianqi bu hao.
 ‘Today weather not good’
 It is not fine today.

Because of that practical application of languages, positive rather than negative terms are preferably acquired by language learners. That positive terms are more frequently used than negative terms is also a common phenomenon in some frequently used greetings which contain positive terms, though the positive terms in some cases may be neutralized.

- (2) a. Good morning. (? Bad morning.)
 b. Nice to see you again. (? Bad to see you again.)
 c. Best regards. (? Worst regards.)

As a whole, the votes for commendatory terms are 67.2% higher than those for derogatory terms. At this point we might ask ourselves what other interpretations are possible for the salient preference for commendatory terms in addition to their more opportunities to be applied in languages? The adjective opposites in Table 1 include terms describing personal characteristics, such as “kind, cautious, moral, polite”, terms describing human performance and accomplishment, such as “famous, intelligent, energetic, glorious, genuine, and innovative” and terms describing ideas proposed, work accomplished or cause followed, such as “constructive, desirable and holy”. Thus these three subsets of terms are descriptions of inert human characters, capabilities and external performance. This shows that the terms for inert characters or qualities in the first subset enjoy the greatest number of votes (98%). These terms are very general and express some most commonly desired human qualities.

Another point we may note is that language learners may take it for granted that structurally simpler words are easier to learn. But the results of observation show that it is not necessarily as expected. In some pairs of

Commendatory Partner	Votes for 1 st Acquisition	%	Derogatory Partner	Votes for 1 st Acquisition	%
Positive	43	100%	Negative	0	0%
Ordered	43	100%	Disordered	0	0%
Kind	43	100%	Cruel	0	0%
Cautious	43	100%	Impudent	0	0%
Moral	43	100%	Depraved	0	0%
Constructive	41	95.3%	Destructive	2	4.7%
Desirable	41	95.3%	Invidious	2	4.7%
Polite	40	93%	Impudent	3	7%
Holy	39	91%	Impious	4	9%
Famous	37	86%	Disgraceful	6	14%
Intelligent	35	81.3%	Stupid	8	18.7%
Energetic	34	79%	Idle	9	21%
Glorious	34	79%	Infamous	9	21%
Genuine	33	76.7%	Fake	10	23.3%
Innovative	29	67.5%	Conservative	14	32.5%
Applause	15	34.9%	Criticism	28	65.1%
Erudite	18	18.7%	Illiterate	25	81.3%
Total	647	83.6%		127	16.4%

Table 1: Commendatory and derogatory opposites

opposites with two members different in semantic complexity, the morphologically simpler partners are more difficult to be acquired. The examples are: idle (21%), fake (23.3%) in Table 1 and scare (23%) in Table 2, and these three terms are structurally simpler than their opposites but more difficult for learning. The fact implies an idea that structural simplicity of vocabulary is not always in agreement with easiness in learning.

3 Regularity comes from irregularity

Some opposites share a common feature that two members of a pair are noticeably different in possession of certain properties or lack of certain properties. As showed in Table 2, one member in each pair of the opposites ‘contains’ more property of some kind and the other ‘lacks’ the property. For example, ‘distant’ indicates ‘having a greater distance than adjacent’ while ‘adjacent’ indicates ‘having a shorter distance than distant’, ‘married’ indicates ‘having a wife or husband’ while ‘divorced’ indicates ‘losing a wife or husband’, ‘alive’ indicates ‘having life’ while ‘dead’ indicates ‘losing life’, etc. As the questionnaire shows the terms with more possessions (Column I) have

slightly more favorable votes (52.6%) than the terms lacking the possessions (Column II) (47.4%). But the difference in votes is not as large as the difference between the commendatory and derogatory opposites, and the former difference is 5.2% while the latter difference is 67.2%. This fact cancels the conclusion that the members with additional features are easier to acquire than the members without or with less of the property. This conclusion is only clearly seen in the first half pairs of the opposites in Table 2, such as “distant : adjacent”, “married : divorce”, “enrich : impoverish”, “alive : dead”, to name only a few, and also almost half of the pairs do not support the statement. It seems that there is no regularity in the acquisition order for this opposite group. However, further analysis may reveal some commonly-shared embedded features in their acquisition.

I	Votes for 1 st Acquisition	%	II	Votes for 1 st Acquisition	%
Distant	42	96%	Adjacent	1	4%
Married	42	96%	Divorced	1	4%
Alive	42	96%	dead	1	4%
Enrich	40	93%	Impoverish	3	7%
Distant	36	84%	Intimate	7	16%
Experienced	36	84%	Innocent	7	16%
Abundant	10	23%	Scarce	33	77%
Retain	30	70%	Abolish	13	30%
Employed	29	67%	Jobless	14	33%
Excessive	29	67%	Insufficient	14	33%
Gain	26	60%	Lose	17	40%
Amplify	22	51%	Abbreviate	21	49%
Found	18	41%	Lost	25	59%
Present	17	40%	Absent	26	60%
Massive	17	40%	Slight	26	60%
Plenty	16	37%	Lack	27	63%
Informed	15	35%	Ignorant	28	65%
Ample	13	30%	Inadequate	30	70%
Abundance	3	7%	Lack	40	93%
Accompanied	0	0%	Alone	43	100%
	452	52.6%		408	47.4%

Table 2: Opposites Different in Property Possession

There are opposites which refer to a process, a procedure, or a state and two members in an opposite pair represent two different sections of a whole procedure or state scale. For instance, the pair of opposites “start : stop” represents at least a two-sectioned scale: “STOP — START”, which means

everything which is started is originally in a stopped state, and thus in this stop-start procedure, “stop” represents the first section and “start” the second. In the same way, some opposites in Table 2 clearly represent such scales.

(3)	a.	MAKE	RETAIN	ABOLISH	
	b.		ABSENT	PRESENT	
	c.	NOTHING	SCARCE	ABUNDANT	
	d.		ALONE	ACCOMPANIED	
	e.		INADEQUATE	AMPLE	
	f.	BORN	ALIVE	DEAD	
	g.		IGNORANT	INFORMED	
	h.		LACK	ABUNDANCE	
	i.		JOBLESS	EMPLOYED	
	j.		INNOCENT	EXPERIENCED	
	k.		SLIGHT	MASSIVE	
	l.	POSSESSED	LOST	FOUND	POSSESSED
	m.	SINGLE	MARRIED	DIVORCED	SINGLE

As the analysis above shows, scales covering the two members of the opposite pairs are two-sectioned, three-sectioned, or even four-sectioned. The four-sectioned scales are both cycled process, but the very first section indicates different meanings from the last section though they are lexicalized by the same term. For example, in (3m), the first concept SINGLE refers to the period before marriage, and the second SINGLE the period after divorce. But this is not the interest of this paper. What we are interested in here is the order of the sections represented by each pair of opposites. For example, the section represented by “alive” occurs earlier than that represented by “dead” and “married” occurs before “divorced”. There is a general tendency which shows that more interviewees report that the term represents an earlier section as acquired first, with the only exception of “innocent”, which generally occurs earlier than “experienced” but more second acquisition votes are reported. We may roughly state that the terms indicate an earlier section of the scale represented by both members of a pair of opposites take most of learners’ priority for acquisition while the terms representing a section occurring later than the first section are mostly acquired second. For other opposites, we may not easily put them into such sectioned scales. For example, it is not easy to define which action or state occurs first, “amplifying”

I Unmarked	Votes for 1 st acquisition	%	II Marked	Votes for 1 st acquisition	%
Long	11	100%	Short	0	0%
Wide	11	100%	Narrow	0	0%
High	11	100%	Low	0	0%
Big	11	100%	Small	0	0%
Many	11	100%	Few	0	0%
Total	55	100%		0	0%

Table 3: Non-complementary Antonyms

or “abbreviating”, “distant” or “adjacent / intimate”, “enrich” or “impoverish”. The first acquisition order for “distant” and “experienced” must be related with their noun form “distance” and “experience”, as in my experience, the two nouns were acquired much earlier than its adjective forms, which helps to learn “distant” and “experienced” more easily.

4 Markedness and Unmarkedness Properties

In Table 3, 5 purposely selected pairs of opposites were tested in the same way and the 11 interviewees were school students who had learned about 500-700 English words.

The common feature these opposites share is that one member in each pair of opposites is unmarked and the other is marked (see Cruse 2000). For example, “wide” and “many” in the following two questions are unmarked.

- (4) a. How *wide* is the road?
b. How *many* students are enrolled this year?

Because “wide” in (4a) does not necessarily means “with a greater width” and the road may be narrow actually, and “many” in (4b) does not mean “with a greater number” and the number may be big or small. As Table 3 shows, all the terms in Column I are unmarked and the terms in Column II are marked, since even if the question “How narrow is the road?” is used, the road is known to be narrow and the same with “few”.

Table 3 gives a neat picture of the acquisition order for the non-complementary antonyms and the interviewees report 100% 1st acquisition for unmarked terms and 0% 1st acquisition for marked terms. Interpretation of the result depends on: 1. the concepts represented by each pair of opposites; 2. difference in frequency. LENGTH is embedded in “long : short”,

WIDTH is embedded in “wide : narrow”, HEIGHT is embedded in “high : low”, and SIZE is embedded in “big : small”. Among the five concepts, three of them are actually derived forms of the unmarked terms “long”, “wide” and “high”. Since most concepts are shared by all human beings of different cultures and usually lexicalized in different natural languages, this universality feature of concepts helps language learners to learn the unmarked terms more easily. Conceptualization can also explain the 1st acquisition of “distant” (for DISTANCE) and “experienced” (for EXPERIENCE) in Table 2. Two exceptions are SIZE and NUMBER concepts which are not derived from “big” and “many”, and their 1st acquisition has relation with their high-frequency in language use. When the size or number of something is to be asked, we use “How big is X?” instead of “How small is X?” and “How many is X?” instead of “How few is X?”. Thus “big” and “many” have more opportunities to be used in language than their opposite partners. In the same way, “long”, “wide” and “high” also enjoy more frequency than their opposites and because of their greater importance and more frequent occurrence in language, language learners, therefore are more likely to learn the terms. This conclusion is in agreement with Coady & Huckin 1997.

5 Conclusion

The analysis above reveals that one member of a pair of opposite has a more favorable position in natural languages and easier for language learners to acquire. This seems a universal phenomenon for all languages. Even though acquisition of opposites is merely an issue in vocabulary learning in second language acquisition, it may clarify some more important and general problems in second language learning. The preference to vocabulary can be reasonably extended to preference to phrases, sentences or even discourses. Thus in teaching and learning languages, teachers and learners should put more attention to the less attractive, low-frequent, marked and derogatory vocabulary and language pieces. When a pair of opposites is introduced, an intentional mentioning of the concept containing the opposites may help language learners to build a link between the two opposites and learn them more easily. Though simultaneous acquisition of a pair of opposites seems impossible, both teachers and learners are recommended to use opposites to explain the meanings of their counterparts and define the meanings of a term which its opposites can provide, in many cases, a clearer picture of the meaning than with its synonyms because the meanings of an opposite are mostly directly reverse to the meanings of its counterpart.

References

- [Coady & Huckin 1997] J. Coady & T. Huckin. *Second Language Vocabulary Acquisition*. Cambridge University Press, Cambridge, 1997.
- [Cruse 2000] D. A. Cruse. *Meaning in Language*. Cambridge University Press, Cambridge, 2000.
- [Hatch & Bown 1995] E. Hatch & C. Bown. *Vocabulary, Semantics and Language Education*. Cambridge University Press, Cambridge, 1995.
- [Manser 1989] M. H. Manser, ed. *Chambers Dictionary of Synonyms and Antonyms*. W & R Chambers Ltd. and Cambridge University Press, Edinburgh, 1989.