

On the Nature of Signposts¹

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Abstract

Dictionary entries for highly polysemous words have long proved difficult for lexicographers and dictionary users alike. From the lexicographer's point of view, senses and possibly subsenses need to be identified, and tough decisions must be made about the order of senses within the entry. From the user's standpoint, long entries require a certain amount of time and patience, because users must often wade through large amounts of information before finding the answer to their initial query. In response to this, lexicographers working on English monolingual learner's dictionaries have introduced "access facilitating devices" Lew's (2010), also known as pointers, guide words or signposts, to help users disambiguate and thus find information more quickly. This paper addresses the nature of signposts: what sort of information do they convey, and what semantic relationship do they have with the headword? In our paper, we will analyze several entries for nouns and adjectives in four learner's dictionaries of English (CALD, LDOCE, MEDAL and OALD) and discuss the differences across dictionaries. Our analysis shows a preference for synonyms, as opposed to superordinates or contextual information, in the English dictionaries analyzed. We then show how signposts are being used in the DAELE, an ongoing project of a learner's dictionary of Spanish.

1. Introduction

Dictionary entries for highly polysemous words have long proved difficult for lexicographers and dictionary users alike. From the lexicographer's point of view, many senses and possibly subsenses need to be identified, and tough decisions must be made about the order of senses within the entry. From the user's standpoint, long entries require a certain amount of time and patience, because it is often necessary to wade through large amounts of information before finding the answer to one's initial query. In response to this, lexicographers working on English monolingual learner's dictionaries have introduced "access facilitating devices" (Lew 2010), also known as pointers, short cuts, guidewords or signposts, to help users find information more quickly. Several studies have addressed the usefulness of these expressions in look-up strategies, whether they be found in menus at the beginning of the entry or as guidewords introducing specific senses (Tono 1997, 2001; Lew 2010; Nesi & Tan, 2011).

This paper addresses different, but equally valid, issues in relation to signposts, namely: what sort of information do they convey, and what semantic relationship do they have with the headword? Data is taken from several polysemous entries in four learner's dictionaries of English. The study shows that in the four dictionaries studied, signposts are of a quite varied nature, to such an extent that they seem to be an unsystematic part of dictionary entries. A better understanding of the nature of signposts is essential if the practice is to be implemented in other dictionary projects. Based on the data analyzed, we suggest how signposts can be used in noun and adjective entries in the *Diccionario de aprendizaje del español como lengua extranjera* (DAELE), an ongoing project at the Institut Universitari de Lingüística Aplicada.

2. Signposts in English advanced learner's dictionaries

2.1 Background

Signposts have been used in English learner's dictionaries since 1995, which explains their absence from Cowie's (1999) review of English pedagogical lexicography, which concentrates on earlier developments. As Béjoint (2010: 176) notes, "it is not clear whether signposts were invented by LDOCE or by CIDE" (CIDE, *Cambridge International Dictionary of English*, was later renamed *Cambridge Advanced Learner's Dictionary*). Béjoint notes the advantages of signposts, and also some of their drawbacks: "[...] they assume that the users have some idea of the meaning of the word they are looking for, [...] they are heterogeneous in nature (collocates, synonyms, hypernyms, names of domain, etc.)." He also notes, importantly in our view, that signposts are particularly important in electronic dictionaries because the amount of information a user can see is limited by the screen and consequently a summary of the information is useful.

Preliminary analysis of signposts are actually of several types—they may be a superordinate of the headword, a paraphrase or brief definition of the headword, a synonym of the headword, or an expression resembling a subject field label. This finding in itself is surprising, given that internal coherence and display of systematic patterns are highly considered values in professional lexicography (Landau 2001). Some signposts refer to an external element which is not strictly part of the sense's definition, but is essential for understanding the use of the sense; i.e., they may be used to indicate what Seco (1987) called the "*contorno*" ('environment', our translation). In fact, some signposts in monolingual learner's dictionaries are reminiscent of contextual information included in large bilingual dictionaries to disambiguate senses. The "mixed-bag" nature of signposts may be seen in the following entry for the verb *pass* taken from the *Oxford Advanced Learner's Dictionary* (7th ed.), in which the seventeen signposts have been represented here in capital letters and marked within a box to facilitate identification²:

MOVE 1 to move past or to the other side of somebody/something

2 to go or move in the direction mentioned

3 to make something move in the direction or into the position mentioned

GIVE 4 to give something to somebody by putting it into their hands or in a place where they can easily reach it

BALL 5 (in ball games) to kick, hit or throw the ball to a player of your own side

AFTER DEATH to be given to another person after first belonging to somebody else, especially after the first person has died

BECOME GREATER 7 (of an amount) to become greater than a particular total

CHANGE 8 to change from one state or condition to another

TIME 9 when time passes, it goes by

10 to spend time, especially when you are bored or waiting for something

END 11 to come to an end; to be over

TEST/EXAM 12 to achieve the required standard in an exam, a test, etc.

13 to test somebody and decide that they are good enough, according to an agreed standard

- LAW/PROPOSAL** 14 to accept a proposal, law, etc. by voting
- HAPPEN** 15 to be allowed
16 to happen; to be said or done
- NOT KNOW** 17 [to say that you do not know the answer to a question, especially during a quiz
- NOT WANT** 18 to say that you do not want something that is offered to you
- SAY/STATE SOMETHING** 19 to say or state something, especially officially
- BELIEF/UNDERSTANDING** 20 to go beyond the limits of what you can believe, understand, etc.
- IN CARD GAMES** 21 to refuse to play a card or make a bid when it is your turn
- FROM THE BODY** 22 to send something out from the body as or with waste matter

Figure 1. Signposts and partial entry of *pass*, OALD7.

The first signpost used, *move*, could be considered a superordinate of *pass*, while the second, *give*, could be considered a synonym. The next two signposts, *ball* and *after death*, are clearly of a different sort; note that neither of these signposts are verbs. In relation to the verb *pass*, *after death* describes when certain things can be passed to someone else; this is a good example of *contorno*. Of the seventeen signposts or guidewords listed in this entry, eight do not belong to the same grammatical class as the word being defined, and thus these cannot be considered brief definitions. The signpost *law/proposal* contains both a subject label (*law*) and an external element to which the verb *pass* is applied (*proposal*).

The use of signposts in this entry suggests, then, that they belong to one of four types (superordinate, synonym, information on the context used, and subject label). Clearly, more entries in more dictionaries must be analyzed to determine if this variation within a single dictionary entry is exceptional, or if it is commonplace.

2.2 Characterization of data from four advanced learner's dictionaries of English

In order to obtain a more precise idea of the nature of signposts, fifteen entries for nouns and 10 entries for adjectives were analyzed in four advanced learner's dictionaries of English. The entries were taken from the following four dictionaries in print form: *Cambridge Advanced Learner's Dictionary* (CALD3), *Longman Dictionary of Contemporary English* (LDOCE4), *Macmillan English Dictionary for Advanced Learners* (MEDAL2), and *Oxford Advanced Learner's Dictionary* (OALD7). All these dictionaries include signposts, although that terminology is not used by all. LDOCE4 refers to *signposts*, whereas CALD3 calls them *guidewords*, OALD7 calls them *short cuts*, and MEDAL2 provides a menu for words with 5 or more senses and the words in the menu are not given a specific label.

The words studied were chosen at random by looking for entries for nouns and adjectives for which there were more than three signposts in at least two of the four dictionaries. The search was limited to nouns and adjectives because one of the main objectives of this study is to propose signposts for noun and adjective entries in the DAELE. Verb entries in the DAELE have signposts that are short definitions, as described in Battaner (2010).

We will turn to nouns first. Although some entries contain more than six signposts, only the first six in the entry have been characterized into one of the four previously identified

classes. The signposts are listed for the order of senses given in each dictionary. Since the dictionaries order senses differently, signpost 2 for the word *field*, for example, may not refer to the same sense in all four dictionaries. Our main purpose in compiling these data is to see if there any particular pattern in the nature of signposts, and not to study the order of senses with specific entries. The data are shown in Tables 1-4.

Table 1. Characterization of signposts used in CALD3, sample nouns.

	No. of signposts	Signpost 1	Signpost 2	Signpost 3	Signpost 4	Signpost 5	Signpost 6
Word (noun)							
<i>call</i>	5	context	context	synonym	superordinate	synonym	
<i>cap</i>	5	superordinate	superordinate	context	context	synonym	
<i>case</i>	5	synonym	superordinate	synonym	superordinate	context	
<i>entry</i>	3	synonym	superordinate	context			
<i>field</i>	5	superordinate	context	synonym	synonym	context	
<i>fire</i>	3	synonym	context	context			
<i>heart</i>	5	superordinate	context	synonym	synonym	superordinate	
<i>hour</i>	0						
<i>iron</i>	4	superordinate	context	context	superordinate		
<i>mark</i>	6	superordinate	superordinate	context	synonym	context	context
<i>moment</i>	3	synonym	synonym	context			
<i>nerve</i>	4	context	synonym	synonym	synonym		
<i>net</i>	2	superordinate	context				
<i>period</i>	3	context	context	superordinate			
<i>print</i>	4	context	superordinate	superordinate	context		

Table 2. Categorization of signposts used in LDOCE4, sample nouns.

	No. of signposts	Signpost 1	Signpost 2	Signpost 3	Signpost 4	Signpost 5	Signpost 6
Word (noun)							
<i>call</i>	6	context	superordinate	superordinate	superordinate	superordinate	context
<i>cap</i>	6	superordinate	superordinate	superordinate	context	context	context
<i>case</i>	8	synonym	superordinate	superordinate	context	synonym	context
<i>entry</i>	7	synonym	context	synonym	context	superordinate	context
<i>field</i>	6	context	superordinate	context	context	synonym	context
<i>fire</i>	7	synonym	synonym	superordinate	context	synonym + context	context
<i>heart</i>	9	superordinate	context	context	superordinate	synonym	synonym
<i>hour</i>	6	synonym	context	context	synonym	context	superordinate
<i>iron</i>	4	superordinate	context	context	superordinate		
<i>mark</i>	8	superordinate	superordinate	superordinate	context	synonym	context
<i>moment</i>	3	synonym	synonym	context			
<i>nerve</i>	4	context	context	superordinate	synonym + context		
<i>net</i>	5	context	context	context	context	superordinate	
<i>period</i>	6	superordinate	context	context	superordinate	context	context
<i>print</i>							

Table 3. Characterization of signposts used in MEDAL2, sample nouns.

	No. of signposts	Signpost 1	Signpost 2	Signpost 3	Signpost 4	Signpost 5	Signpost 6
Word (noun)							
<i>call</i>	13	synonym	synonym	synonym	synonym	superordinate	superordinate
<i>cap</i>	8	superordinate	synonym	synonym	synonym	synonym	context

<i>case</i>	7	synonym	synonym	synonym	synonym	context	synonym
<i>entry</i>	0						
<i>field</i>	7	superordinate	synonym	synonym	synonym	synonym	synonym
<i>fire</i>	5	synonym	synonym	synonym	synonym	superordinate	
<i>heart</i>	7	superordinate	synonym	synonym	synonym	synonym	synonym
<i>hour</i>	6	synonym	synonym	synonym	synonym	synonym	context
<i>iron</i>	0						
<i>mark</i>	8	synonym	synonym	superordinate	synonym	synonym	synonym
<i>moment</i>	0						
<i>nerve</i>	0						
<i>net</i>	0						
<i>period</i>	0						
<i>print</i>	6	synonym	synonym	synonym	synonym	synonym	synonym

Table 4. Characterization of signposts used in OALD7, sample nouns.

	No. of signposts	Signpost 1	Signpost 2	Signpost 3	Signpost 4	Signpost 5	Signpost 6
Word (noun)							
<i>call</i>	8	context	superordinate	synonym	synonym	context	context
<i>cap</i>	6	superordinate	context	context	synonym + context	context	context
<i>case</i>	8	synonym	synonym	context	synonym	synonym	context
<i>entry</i>	5	synonym	synonym	context	synonym	synonym	
<i>field</i>	7	superordinate	synonym	context	context	context	subject label
<i>fire</i>	4	synonym	context	context	synonym		
<i>heart</i>	8	context	context	context	synonym	synonym	context
<i>hour</i>	0						
<i>iron</i>	4	superordinate	superordinate	context	context		
<i>mark</i>	10	synonym	synonym	superordinate	synonym	synonym	context
<i>moment</i>	0						
<i>nerve</i>	0						
<i>net</i>	0						
<i>period</i>	4	synonym	synonym	context	subject label		
<i>print</i>	6	synonym	context	synonym	superordinate	synonym	context

We note that there are several differences across the dictionaries. MEDAL2 uses signposts less because there must be at least five senses to warrant the presence of a menu at the beginning of an entry. OALD7 employs classifying superordinates the least and does use, although sparingly, subject labels as signposts. Taking note of a single example will make this clearer: whereas OALD7 primarily uses synonyms to identify the senses of *mark*, LDOCE4 primarily uses signposts that are superordinates and CALD3 primarily uses signposts that indicate what context the sense is used in. MEDAL2, which is the only one of these dictionaries to place the signposts in a menu introducing the entry, often uses a phrase that we have classified as a synonym in a context in which other dictionaries use an expression that we have classified as a superordinate. For example, the sense of *call* referring to a short visit, typically at someone's home, has been classified as a synonym in MEDAL because the signpost given is *short visit* (because a *call* is a *short visit*); this same sense carries the signpost *visit* in CALD3, which is classified as a superordinate (because a *call* is a kind of *visit*).

We now turn to adjectives. Ten highly polysemous adjectives were chosen. The data are shown in Tables 5-8.

Table 5. Characterization of signposts used in CALD3, sample adjectives.

	<i>No. of signposts</i>	<i>Signpost 1</i>	<i>Signpost 2</i>	<i>Signpost 3</i>	<i>Signpost 4</i>	<i>Signpost 5</i>	<i>Signpost 6</i>
Word (adjective)							
<i>fat</i>	2	synonym	synonym				
<i>foul</i>	0						
<i>heavy</i>	5	synonym	synonym	synonym	context	synonym	
<i>high</i>	6	context	synonym	synonym	context	synonym	context
<i>long</i>	3	context	context	synonym			
<i>negative</i>	6	synonym	synonym	synonym	context	synonym	context
<i>odd</i>	4	synonym	synonym	context	synonym		
<i>open</i>	7	synonym	synonym	synonym	context	synonym	synonym
<i>tight</i>	6	synonym	synonym	synonym	synonym	synonym	context
<i>unsettled</i>	2	synonym	synonym				

Table 6. Characterization of signposts used in LDOCE4, sample adjectives.

	<i>No. of signposts</i>	<i>Signpost 1</i>	<i>Signpost 2</i>	<i>Signpost 3</i>	<i>Signpost 4</i>	<i>Signpost 5</i>	<i>Signpost 6</i>
Word (adjective)							
<i>fat</i>	4	context	context	context	context		
<i>foul</i>	3	context	context	context			
<i>heavy</i>	14	context	synonym	synonym	synonym	context	context
<i>high</i>	12	context	context	synonym	synonym	synonym	context
<i>long</i>	8	synonym	synonym	synonym	context	context	context
<i>negative</i>	7	synonym	synonym	synonym	context	context	context
<i>odd</i>	3	synonym	synonym	synonym			
<i>open</i>	13	context	context	synonym	synonym	context	synonym
<i>tight</i>	18	context	synonym	synonym	synonym	synonym	context
<i>unsettled</i>	7	context	context	context	context	context	context

Table 7. Characterization of signposts used in MEDAL2, sample adjectives.

	<i>No. of signposts</i>	<i>Signpost 1</i>	<i>Signpost 2</i>	<i>Signpost 3</i>	<i>Signpost 4</i>	<i>Signpost 5</i>	<i>Signpost 6</i>
Word (adjective)							
<i>fat</i>	0						
<i>foul</i>	6	synonym	synonym	superordinate + context	context	synonym	synonym
<i>heavy</i>	17	synonym	synonym	synonym	synonym + context	synonym	synonym
<i>high</i>	10	synonym	synonym	synonym	synonym	superordinate	context
<i>long</i>	8	synonym	synonym	context	context	context	context
<i>negative</i>	6	synonym	synonym	synonym	synonym	context	synonym
<i>odd</i>	6	synonym	synonym	synonym	synonym	synonym	synonym
<i>open</i>	6	synonym	synonym	synonym	synonym	synonym	synonym
<i>tight</i>	14	synonym	context	synonym	synonym	synonym	context
<i>unsettled</i>	0						

Table 8. Characterization of signposts used in OALD7, sample adjectives.

	<i>No. of signposts</i>	<i>Signpost 1</i>	<i>Signpost 2</i>	<i>Signpost 3</i>	<i>Signpost 4</i>	<i>Signpost 5</i>	<i>Signpost 6</i>
Word (adjective)							
<i>fat</i>	0						
<i>foul</i>	0						
<i>heavy</i>	17	synonym	synonym	synonym	context	synonym	context
<i>high</i>	13	context	context	synonym	synonym	context	synonym

<i>long</i>	4	context	context	context	context		
<i>negative</i>	7	synonym	synonym	synonym	context	context	context
<i>odd</i>	8	synonym	synonym	synonym	synonym	context	synonym
<i>open</i>	13	synonym	synonym	synonym	synonym	context	context
<i>tight</i>	14	synonym	context	context	synonym	synonym	context
<i>unsettled</i>	0						

We note, again, that there are notable differences across dictionaries. MEDAL2 displays a clear preference for signposts that are synonyms, as opposed to the other three dictionaries, all of which use both synonyms and contextual information in signposts, albeit to differing degrees (CALD3 uses context the least, whereas LDOCE4 uses context the most).

3. Discussion

The nature of signposts is not independent from other characteristics of dictionary entries and therefore the data shown in section 2 must be put into context. Dictionaries that prefer definitions containing a substantial amount of contextual material may be able to use signposts that are synonyms more often, because the context in which the sense is used is made explicit in the definition. Although clearly more entries have to be analyzed before making any definitive claims, we were unable to determine any particular pattern related to a specific semantic type of headword. For adjectives, there seems to be strong preference for synonyms, and a secondary preference for context. For nouns, rather surprisingly given the hierarchical nature of the traditional description of nouns in dictionaries, signposts are often not superordinates. This may be due to the fact that the lexicographer felt that the superordinate would be too general for the purpose of a signpost, although it works quite well in the definition.

A recurrent problem with signposts is that they often repeat the information given in the definition. This is a problem for the paper format, in which space is always at a premium, but is inconsequential for on-line dictionaries, in which the signpost may lead the user to another screen in which the definition is provided.

The observations on signposts in English dictionaries are interesting to those currently developing new dictionary projects. In her discussion of verb entries in the DAELE, Battaner (2010) suggests that signposts for verb entries should all be short definitions, and argues that their use helps lexicographers to group together senses within an entry. Although some signposts in the four English dictionaries cover several senses, the evidence suggests that signposts are currently not used for the purpose of grouping senses together; rather, signposts appear to have been used primarily to facilitate access. Although access to the correct sense is obviously important, we feel that semantic order of senses is desirable in a learner's dictionary (Mahecha and DeCesaris 2011), and as such, signposts can be used to group senses together. In the DAELE, verb senses are organized according to semantic criteria so that the core meaning is given first, and each group of senses has a signpost.

The DAELE project is currently turning its attention to adjective entries. Signposts, as with the verb entries, are short definitions that attempt to both differentiate among several senses and at the same time group similar senses together. All signposts for adjectives begin with the complementizer *que*, which allows us to use a verb to describe the effect on the noun produced by the adjective. An important aspect of signposts in the DAELE is that they may be somewhat longer than the signposts in the English dictionaries studied, because the DAELE is an online dictionary. In addition, signposts are provided for all headwords with more than one sense, unlike the practice observed in the English dictionaries, in which signposts generally occur in highly polysemous entries.

An example of our proposal is the entry in Figure 2 for *ciego* ‘blind’, in which three main senses are identified³. Note that under the first signpost there is an adjective sense and then a noun use of the adjective, and in the third sense there are two subsenses, corresponding to a human subject (3a) and an inanimate subject (3b).

ciego *m ciega f* Pl: *ciegos m ciegas f* / (adjective/sustantivo)

1 QUE NO PUEDE VER

- Una persona o un animal es o está **ciego** cuando no puede ver, es decir, cuando no tiene el sentido de la vista
- [sustantivo] Un **ciego** es una persona que no puede ver, es decir, que no tiene el sentido de la vista

2 QUE NO PUEDE DARSE CUENTA

Alguien es o está **ciego** cuando no puede comprender o darse cuenta de algo que es evidente

3 QUE ESTÁ DOMINADO POR ALGO

a Alguien está **ciego** de un sentimiento o pasión intensos y es incapaz de tener claridad mental

b Un sentimiento es **ciego** cuando se experimenta con mucha fuerza o sin límites

Figure 2. Sample entry for adjectives in the DAELE: *ciego* ‘blind’.

4 Conclusion

Our analysis of signposts in English advanced learner’s dictionaries confirms our initial feeling that the nature of signposts is not predictable on the basis of the semantic type of the word. The data studied for fifteen common nouns and ten adjectives not only shows that practice concerning signposts varies substantially from dictionary to dictionary, but also shows that any single word may have senses with different types of signpost. This lack of systematicity is odd in dictionaries, and perhaps dictionary editors might want to rethink their policy concerning signposts. It does not seem impossible to decide upon one type of signpost—synonym, for example—and use it throughout the dictionary.

Rather than using signposts only to facilitate access to a sense of very polysemous words, the DAELE attempts to use signposts to group meanings together. As the project progresses, it remains to be seen if this function for signposts proves useful.

Notes

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² Examples and other information, such as the grammatical labels ‘transitive’ and ‘intransitive’, the grammatical pattern, and synonyms, have been removed to save space.

³ Examples have been removed to save space.

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