

The Lexical Conceptual Specification (LCS) and Lexical Conceptual Elimination (LCE) Principles in Contronymy

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1. Introduction

1.1 Contradicting Senses in Contronymy

It is cross-linguistically true that one or the same lexical item may have two or more different senses, with “the context only showing what is meant in each particular case” (Jespersen, 1942, p. 93). This linguistic phenomenon is termed polysemy. As a commonplace example of polysemy in English, *can* in (1) below refers to the subject’s “mental ability to do something,” while *can* in (2) below indicates the subject’s “physical ability to do something” (Hopper & Traugott, 2003, p. 77). Despite their semantic difference, the two senses of *can* in (1) and (2) share a common conceptual core, that is, a person’s “ability to do something.” Thus, just as Hopper and Traugott conclude, the multiple senses of a polysemous word “share conceptually related meanings” (2003, p. 77), which is termed Lexical Conceptual Core (LCC) in this research.

- (1) I can read German.
- (2) I can swim a mile.

(Hopper & Traugott, 2003, p. 77)

There are extreme examples of polysemy in which one sense of a lexeme is so distinct from another sense of the lexeme that the two senses of the same lexeme are even opposite or contradict each other. To avoid potential confusion, this study terms such unique lexical items “contronyms,” as in Karaman (2008) and Fu (2020). Fu (2020) is a case study of contronymy in English, *dust*, analyzing its syntactic, semantic, and pragmatic features in their respective contexts. In Fu, *dust* in (3) is of Remove Type meaning “to take dust, dirt, or the like away from something,” whereas *dust* in (4) is of Cover Type describing an opposite action, “to put powder or the like onto something.”

- (3) His desk was dusted clean, revealing reflections on the varnished wooden surface.
- (4) Lightly dust bronzing powder on your forehead, cheeks and browbone, anywhere

the sun would hit.

(Fu, 2020, p. 95)

1.2 Distribution of Contradicting Senses in Contronymy

On the one hand, we tend to deem the Remove Type use of the contronym *dust* to be the majority, i.e., the unmarked use, and the Cover Type use of *dust* the minority, i.e., the marked use, which is claimed and supported in Jespersen (1942), Fu (2021), and multiple English-English and English-Japanese dictionaries. Without excluding such uses as *dust a cake with sugar*, Jespersen (1942) states that “*to dust* generally means ‘to free from dust’” (p. 93), which “has the directly opposite sense” (ibid.) *to dust a cake with sugar*. Corpus data in Fu (2021) show that roughly speaking, the Remove Type examples of *dust* outnumber the Cover Type examples of *dust*. Dictionaries also begin the meaning list of the contronym *dust* with the Remove Type use followed by the Cover Type (refer to LEXICO, OALD Online, Youth Progressive, and Genius for details).

On the other hand, Clark and Clark (1979) notice a contradicting linguistic phenomenon with the above, pointing out that “[i]t is noteworthy that there are many locatum verbs for the positive prepositions (especially for the elementary prepositions *in*, *on*, and *at*), but only a few for the negatives *not-on* and *not-in*” (p. 771). Clark and Clark’s locatum verbs semantically with the preposition *on*, viz., the unmarked use such as *blanket* in (5) and (6), are similar to the Cover Type verbs in this research and Fu (2020), whilst the locatum verbs semantically with the negatives *not-on* or *not-in*, viz., the marked use such as *stone* in (7), *bone* in (8), and *milk* in (9), correspond to the Remove Type verbs in this research.

(5) Jane blanketed the bed.

(6) Jane did something to cause it to come about that [the bed had one or more blankets on it.]

(Clark & Clark, 1979, p. 769)

(7) stone the dates

(8) bone the fish

(9) milk the cow

(Clark & Clark, 1979, p. 771)

This research assumes that the superficially contradicting senses of a contronym share a common semantic core at the lexical level. Therefore, the first purpose of this study is to elaborate upon how the contradicting senses of a contronym are conceptually related through a thorough examination of specific examples of

contronymy based on the LCC and LCS principles in Section Two. Furthermore, this paper claims that Clark and Clark's convention on the innovative interpretation of denominal verb senses, with some minor improvements proposed in this study, applies to a contronym's multiple senses. Thus, the second purpose of this research is to verify what is unique about the contronym *dust* in its semantic distribution in Section Three, compared with Clark and Clark's convention on locatum verbs.

2. Lexical Conceptual Core (LCC) and Lexical Conceptual Specification (LCS)

In this research, the semantic analysis of a word falls into Lexical Conceptual Core (LCC), which is obligatory or exclusive of any modification, and Lexical Conceptual Specification (LCS), which is optional or inclusive of further specific details in context. LCCs are usually defined or partially defined in dictionaries and are resistant to any major changes over time. In contrast, LCSs involve various possible events, actions, processes or states, varying from context and context. For example, the noun *price*, with "the amount of money expected, required, or given in payment for something" (LEXICO) as its LCC, is open to further details, even contradicting details, in various contexts. Thus, although *high* is opposite to *low* in semantics in (11), the example (11) with both *high* and *low* is grammatical because *price* itself is neutral at the LCC level and open to various LCSs, such as being high and low in (11) and being reasonable in (10).

- (10) In that case, Section 2305 (1) (c) provides that when the price is to be fixed in terms of some agreed market or other standard and, for whatever reason, it is not so set or recorded, the applicable price becomes a reasonable price to be determined at the place and time of each monthly delivery.
- (11) Of course, the monopolist would prefer to sell at a high price to those consumers willing to pay it, and at a low price to those who are willing to pay only the low price.

(Google Books, retrieved in July, 2021)

Similarly, the LCC and LCS principles apply to the conflicting Remove Type and Cover Type uses of the contronym *dust*. *Dust* in (3) in Section One above is of the Remove Type reading, whereas *dust* in (4) in Section One above bears the Cover Type reading. Despite their oppositeness in the moving direction of dust or the like, a closer observation demonstrates that the common conceptual core of these two uses is the motion of dust or the like. *Dust* denotes the motion of dust or the like only at the LCC level, without further requiring details such as the direction of the motion at the LCS level. The LCS enables two possible contradicting senses in the moving direction of

(17) *sanction* (v.) = [make an official decision] (for or against)
LCC LCS

(18) As a result, more and more medical societies have begun to sanction members with penalties like suspension or revocation of their society membership.

(Fu, 2020; Retrieved on March 8th, 2020, from <https://www.lexico.com/>)

(19) Training will commence just as soon as the GAA Club has sanctioned permission, as the Ladies Club will need to use this pitch.

(LEXICO)

3. Contronyms and Denominal Verbs

From an evolutionary perspective, languages are constantly changing over time, and such changes are motivated by reanalysis and generalized by analogy (Hopper & Traugott, 2003, p. 39). Among those changes, innovative denominal verbs, i.e., understandable “expressions we never heard before” (Clark & Clark, 1979, p. 767), are a specific example of semantic changes from nouns to verbs without affixation motivated by reanalysis, one of the methods of grammaticalization. The sense of an innovative denominal verb has strong semantic relation with its parent noun (Clark & Clark, 1979; Buck, 1997), yet “[i]t is difficult to give a general definition of the sense-relation between substantives and de-substantival verbs” (Jespersen, 1942, p. 93). The reason for the difficulty is that “[t]he verb may designate any action or state that bears a relation to the substantive in question” (ibid.).

There are certain restraints on the interpretation of innovative denominal verbs, as summarized in Clark and Clark’s “the innovative denominal verb convention” in (20) below. As for the conditions (20a-e) in coping with the semantic conflict in contronymy, Buck (1997) asserts similar required conditions, but employs a different and more general term, “the world knowledge” (p. 5), concluding that “[i]t is clear that the semantics of these verbs is relational rather than inherent” (p. 5).

- (20) In using an innovative verb sincerely, the speaker means to denote
- a. the kind of situation
 - b. that he has good reason to believe
 - c. that on this situation the listener can readily compute
 - d. uniquely
 - e. on the basis of their mutual knowledge
 - f. in such a way that the parent noun denotes one role in the situation, and the remaining arguments of the denominal verb denote other roles in the situation.

(Clark & Clark, 1979, p. 787)

3.1 Operation in Lexical Conceptual Specification (LCS)

To simplify the conventions, as mentioned above, and efficiently specify a situation, such as a state, process, or action, denoted by a contronymy verb, we propose a holistic method, the LCC and LCS principles mentioned earlier. These principles and (12) above can detail the two contradicting senses of *dust*, as in (21) and (22). (22) is of the Cover Type use; virtually, at the LCS level, there is almost no constraint on the NP since everyone can sprinkle dust-like substance on nearly everything in the world we live in. However, (21) is of the Remove Type use; at the LCS level, the NP must be covered with dust or dust-like substance simply because one cannot remove dust or the like from an NP free from dust or the like.

(21) *dust* NP = [move dust or the like] from NP (covered with dust)

(22) *dust* NP = [move dust or the like] onto NP

In (23) below, which is a briefly rewritten situation in (3) for the sake of convenience, the NP, *his desk*, without any particular context, is not enough to designate the situation since *his desk* could be either covered with or free from dust or the like. However, the immediate context in (3), “revealing reflections on the varnished wooden surface,” clears this ambiguity, thereby excluding the Cover Type reading and specifying the situation as the Remove Type reading.

(23) *dust his desk*

The situation in (7) above, a denominal verb example, can be illustrated in (24) according to the LCC and LCS principles. (24) is grammatical even with the tiniest information, *the dates*, in the context. The “mutual knowledge” between the speaker and the listener in Clark and Clark (1979) and “the world knowledge” in Buck (1997) can be briefly categorized in the LCS principle in this research. The LCS justifies the Remove Type reading in (24) and invalidates the Cover Type reading in (25). Similarly, in another example of a denominal verb, *bone* in (8), the LCS plays a crucial role in designating the situation in (26), which is grammatical, and excluding the situation in (27), which is not acceptable. The denominal verb, *milk* in (9), can mean both (28) and (29) theoretically; (29) is unacceptable simply because it is against the LCS principle. Specifically, it is difficult for the reader of (29) to define a situation of moving milk to the cow, in other words, feeding the cow with milk at LCS level.

(24) stone the dates = [move a stone, stones, or the like] from the dates (with a stone or stones)

- (25) * stone the dates = [move a stone, stones, or the like] into the dates
- (26) bone the fish = [move a bone, bones, or the like] from the fish (with a bone or bones)
- (27) * bone the fish = [move a bone, bones, or the like] into the fish
- (28) milk the cow = [move milk] from the cow
- (29) ?milk the cow = [move milk] to the cow

3.2 Operation in Lexical Conceptual Elimination (LCE)

Diachronically, the change in the parts of speech of a particular lexical item can motivate various changes in the syntactic and semantic features of the lexeme under the mechanism of reanalysis. Jespersen (1942) points out that denominal verbs “may designate any action or state that bears a relation to the substantive in question” (p. 93); theoretically, most denominal verbs can have contradicting senses. However, contronymy is an extreme example of denominal verbs and remains a limited number due to the LCE principle in this research. Contrary to the LCS principle in Section Two and Section Three, which defines a specific situation denoted by a lexeme, the LCE principle functions to eliminate or exclude some confusing or unacceptable readings of denominal verbs. The LCE principle in this study is holistic, i.e., an improved principle of Clark and Clark’s “the principle of pre-emption by synonymy,” as in (30) below.

- (30) If a potential innovative denominal verb would be precisely synonymous with a well-established verb, the innovative verb is normally pre-empted by the well-established verb, and is therefore considered unacceptable.

(Clark & Clark, 1979, p. 798)

The LCE principle differs from Clark and Clark’s pre-emption in the limitation on “being precisely synonymous” in (30) above. Clark and Clark (1979, p. 799) verify the point in (30) using examples of the nouns, such as *hospital* in (31) and *prison* in (32) below, whose denominal verbs, (31b) and (32b), are ungrammatical because of the presence of other related verbs *hospitalize* in (31c) and *imprison* in (32c) created from their respective parent nouns.

- (31) a. hospital (n.)
b. *hospital (v.)
c. hospitalize (v.)
- (32) a. prison (n.)
b. *prison (v.)
c. imprison (v.)

(Clark and Clark, 1979, p. 799)

In this research, the LCE principle applies to a denominal verb which is approximately synonymous with another verb and is not obligatorily created from the same parent noun. Therefore, we posit that synchronically, as shown in Table 1 below, denominal verbs *powder* and *flour*; sharing approximately similar meaning with *dust*, only have the Cover Type reading since their Remove Type readings are not required or could be confusing due to the presence of another denominal verb *dust*, which denotes the Remove Type reading. Consequently, more Remove Type uses of *dust* contribute to converting Remove Type use of *dust* into the unmarked use.

Table 1. Competition Among *dust*, *flour*, and *powder*

Noun	Denominal Verb	
	Remove Type	Cover Type
dust	dust	dust
flour	*flour	flour
powder	*powder	powder

Secondly, the LCE principle also applies to a case in which the similar senses of different denominal verbs tend to compete with each other, resulting in an increase or decrease in the number of uses of related denominal verbs. As shown in Table 1 above, we posit that after losing its competition against *power* and *flour*, the denominal verb *dust* exhibits fewer uses of the Cover Type, which partially accounts for the contradiction between the marked and unmarked uses of *dust* mentioned in Section One.

4. Conclusion

As discussed so far in Sections Two and Three above, the two conflicting senses of a contronym, especially of a locatum verb, are conceptually related, which has been proved by the LCC and LCS principles proposed in this research. Thus, the two opposite meanings of a contronym share a common core at the LCC level, which is obligatory or exclusive of any modification, and differs at the LCS level, which is open to further specific details in context.

The LCS principle specifies and decides a particular situation from two potential situations inherently denoted by a contronym; however, the LCS principle alone is not enough to designate a situation and avoid other possible misunderstandings. On the contrary, the LCE principle functions to exclude and abandon an unacceptable

situation from two or more potential situations inherently denoted by a contronym. Thus, this combining operation of the LCS and LCE principles functions systematically in contronymy. The LCE principle also partially accounts for why the unmarked use, the Cover Type, of locatum verbs has become the marked use, the Cover Type, of the contronym *dust*.

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Data and Resources

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