

# A Cognitive Approach to Usage Environment of English Light Verb Constructions

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## Abstract

This study aims to describe the motivation for using light verb construction, comparing with cognate object (CO constructions) construction and simple verb construction within a framework of cognitive grammar (Langacker 1987). Furthermore, I show the usage environment of a light verb construction in *British National Corpus* to examine the observation that light verb constructions tend to carry an overtone of friendliness and intimacy (Dixon 1991: 337).

## 1. Introduction

Generally, *give*, *have*, *take*, and *make* are classified as light verbs. Light verb constructions are sometimes called “composite predicate” (Cattell 1984). In this construction, meaning of direct noun strongly contributes to the meaning of the whole construction, and meaning of verb is construed just schematically.

- (1) a. Joe gave him a ride.
- b. I had a look at the textbook.
- c. The couple took a walk around the park.
- d. They made an important decision at the meeting.

The first purpose of this paper is to show the motivation for using *give a* construction such as (2a) instead of cognate object construction and simple verb construction.

- (2) a. Emma gave a warm smile.     [*Give a* Construction]
- b. Emma smiled a warm smile. [Cognate Object Construction]
- c. Emma smiled warmly.       [Simple Verb Construction]

Many previous researchers have pointed out semantic differences between (2a) and (2b), (2a) and (2c), and (2b) and (2c). However, the distribution of the three constructions remains unclear. To clarify the distribution of the three constructions, I theoretically analyze *give a* construction, comparing the construction with cognate object construction (CO constructions) and simple verb construction.

The second aim is to statistically show the usage environment *give a* construction. I use *British National Corpus* [BNC] and residual test to examine a research done by Dixon (1991): light verb constructions are found far more frequently in colloquial than in formal types styles of English. I investigate whether Dixon's intuition can be applied to the usage environment of *give a* construction.

## 2. A Theoretical Framework

### 2.1 Cognitive Grammar

Before I start a discussion, I summarize essential perspectives of Cognitive Grammar, advocated by Langacker (1987, 2005a).

- (3) (i) Constructions are the primary objects of description.
- (ii) The frameworks are non-derivational.
- (iii) Lexicon and grammar are not distinct components, but form a continuum of constructions.
- (iv) Constructions are form-meaning pairings.
- (v) Information structure is recognized as one facet of constructional meanings.
- (vi) Constructions are linked in networks of inheritance.
- (vii) Regularities take the form of constructions that are schematic relative to instantiating expressions.
- (viii) Apart from degree of specificity/schematicity, expressions and the patterns they instantiate have the same basic character.
- (ix) Linguistic knowledge comprises vast numbers of constructions, a large proportion of which are "idiosyncratic" in relation to "normal", productive grammatical patterns.
- (x) A framework that accommodates "idiosyncratic" constructions will easily accommodate "regular" patterns as a special one.
- (xi) Well-formedness is a matter of simultaneous constraint satisfaction.
- (xii) Composition is effected by "unification".

(Langacker 2005a: 102)

From these perspectives, I investigate the motivation of the constructions.

### 2.2 *Give* in Various Constructions

The verb *give* is a prototype verb in ditransitive construction (Goldberg 1995) and takes various things as objects. In addition, ditransitive construction can be paraphrased into dative construction.

- (4) a. Henry gave her a {present/dog/house}. [Ditransitive Construction]  
b. Tim gave a {bag/flower/ring} to his wife. [Dative Construction]

However, *give a* construction, in which *give* functions as a light verb, takes only a derivational noun as a direct object and cannot be paraphrased into dative construction.

- (5) a. Sally gave the child a {carry/punch/push/kiss/look}.  
b. \*Sally gave a {carry/punch/push/kiss/look} to the child.

From (4b) and (5b), you will notice that the possibility of paraphrasing into dative construction differs in the constructions. Therefore, we should consider *give a* construction separately from ditransitive construction.

*Give a* construction can be divided into two constructions, according to the necessity of indirect object. Look at the direct objects in (6). The presence of indirect object influences the acceptability in the construction (6c). Basically, direct objects are essential in any *give a* constructions, but indirect objects are not essential but optional.

- (6) a. Bill gave a {smile/sigh/laugh}.  
b. Bill gave her a {smile/sigh}. [Ditransitive Light Verb Construction]  
c. \*Bill gave her a laugh.

In this paper, I focus on *give* construction with a single object, that is, *give a* construction such as (6a). I do not investigate the cause of unacceptability of ditransitive construction as in (6c).

### 3. A Cognitive Approach to *Give a* Construction

To describe semantic relations between *give a* construction and cognate object construction, I focus on *give a* construction that has the following characteristics.

- (7) *Give a* construction that takes  
a. a single object (e.g. *Linda gave a laugh.*)  
b. a non-inflectional derivational noun  
especially derived from CORPOREAL and SHOUT verbs

I show syntactic, semantic, conceptual, and pragmatic characteristics of *give a* construction in the following sections.

### 3.1 Syntax of *Give a Construction*

I point out two essential syntactic characteristics of *give a construction*. *Give* often takes double objects and so *give* is categorized as a prototype verb of ditransitive construction. In contrast, as I mention in section 2.2, when *give* takes a derivational noun, indirect object becomes optional.

(8) Nancy gave a {smile/giggle/yawn}.

However, the construction requires indirect object when *give* accompanies non bodily emission nouns (e.g. *life, death, sleep*) and non derivational nouns (e.g. *book, ticket, cup*). In such constructions, without indirect objects, we feel that something is missing. The whole construction becomes a little unnatural<sup>1</sup>.

- (9) a. #Tom gave a {life/death/sleep}.  
b. #Tom gave a {book/ticket/cup}.

Thus morphological and semantic aspects of object noun influence syntax of the construction. I further discuss the property of object noun in the next section.

Next, I point out another important syntactic characteristics of *give a construction*. As in (10), modifier for direct object is optional.

- (10) a. Tom gave a ({gigantic/tremendous/loud}) sneeze.  
b. Sally gave a ({sardonic/sarcastic/soft}) laugh.  
c. Bill gave a ({hoarse/horrified/joyous}) cry.

The acceptability of the constructions does not change even without modifiers. Therefore modifier is optional in this construction. On the contrary, modifier is essential in cognate object construction. I discuss the difference in optionality of modifier in the two constructions in section 5.

I summarize the syntactic characteristics of *give a construction* in (11).

- (11) a. Indirect object is optional in *give a construction*.  
(Indirect object becomes obligatory in the constructions in which a direct objects is a non derivational nor corporeal noun.)  
b. Modifier is optional.

Thus, the necessity of indirect object depends on meaning of direct object. I analyze the semantics of direct object in the next section.

### 3.2 Semantics of *Give a Construction*

In this section, I analyze the semantic properties of object nouns and the whole

construction. As I discussed in the last section, *give a* construction has the following characteristics (Dixon 1991).

- (12) a. construed as one unit of activity
- b. emissions from the body
- c. derived from verbs without inflection

The nouns that have the characteristics (12a) are called episodic nominal (Langacker 1991: 364-365). The noun is a nominalization of a verb and indicates a single episode of an activity. Episode is identified with a specific event profiled by a verb. Thus the nouns in *give a* construction are construed as one unit of activity.

Nouns derived from the verbs in (13) show the characteristics of (12b, c).

- (13) beam, chuckle, cough, cry, frown, giggle, grimace, grin, howl, laugh,  
      sigh, smile, smirk, sneeze, sniff, snore, sob, weep, whistle, yawn

(Levin 1993: 95)

The verbs in (13) can be also categorized as CORPOREAL and SHOUT verbs (Dixon 1991). All the verbs indicate bodily activities, especially the activity that humans emit something from the body. The verbs in (13) should be motivated by the following schema.

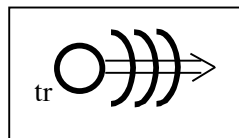


Figure 1. Langacker (2005a: 149)

A circle in figure 1 indicates a subject (trajector, tr) and an arrow indicates the emission force. The diagram suggests the emission of sound, air, and microbes. A verb itself does not have a landmark (object). When a verb takes a landmark and the landmark and an object noun correspond to each other, they composite a cognate object construction. I show a further generation mechanism of CO construction in section 4.2.

Next, I show a semantic characteristics of the whole construction, comparing *have a* construction.

- (14) a. Rally gave a laugh.
- b. Rally had a laugh.
- (15) a. Emily gave a cry.

b. Emily had a cry.

(14a) indicates that Rally laughed for a second. In (14b), Rally laughed for a minute. The duration time of laughing is different in the constructions. Similarly, (15a) means that Emily cried for a second. In (15b), Emily cried her heart out for a while. Thus, the activity indicated by a derivational noun in *give a* construction is construed as one unit of activity (Dixon 1991: 348).

The syntactic and semantic structures of *give a* construction are as follows.

- (16) Indirect objects and modifiers are optional in *give a* construction in which direct objects are derived from the verbs indicating the activity construed as one unit.

*Give a* construction takes indirect objects and modifiers optionally. Therefore the whole construction profiles the physical activity that something comes from inner body to outside the body. The construction does not always profile property of the emissions nor recipients (indirect objects). The bodily activity is construed as one unit of activity through summary scanning (Langacker 1987).

### 3.4 The Usage Environment of *Give a* Construction

In this section, I show the usage environment of *give a* construction, using *British National Corpus* [BNC] and residual test. Dixon (1991: 337-338) mentions that light verb constructions tend to carry an overtone of friendliness and intimacy and are found far more frequently in colloquial than in formal styles of English. However, in BNC, *give a* construction never appears in spoken corpus. Instead, *give a* constructions are used more frequently in written corpus. However, in written corpus, the constructions appear more frequently in informal context than formal context.

I statistically analyzed the usage environment of *give a* construction in BNC in the following procedures. BNC consist of 14 sub corpus shown in figure 2. Since *give a* construction never appears in the spoken corpus, I picked up the constructions from the written corpus.

<b>Spoken</b>	Context-governed	Business	<b>Written</b>	Applied Science	
		Educational		Arts	
		Institutional		Belief and Thought	
		Leisure		Commerce and Finance	
	Demographic	Imaginative			
					Leisure
					Natural and Pure Science
					Social Science
					World Affairs

Figure 2.

Dixon mentions the possibility that formality of context will influence the frequency of the construction, and so, according to formality of context, I divide the written corpus into two corpus: formal writing corpus and informal writing corpus.

<b>Written Corpus</b>	
<b>Formal Context</b>	<b>Informal Context</b>
[55,246,776 words]	[44,185,128 words]
Applied Science	Arts
Commerce and Finance	Brief and Thought
Natural and Pure Science	Imaginative
Social Science	Leisure
World Affairs	

Figure 3.

I classified news, scientific, and business context as formal writing and non scientific context (arts, brief and thought, imaginative, and leisure) as informal writing.

Next I focused on *give a* construction that takes nouns derived from twenty verbs in (13) and counted the number of *give a* construction in the two corpus, including all inflected forms of *give*<sup>2</sup>. After counting the constructions, I examined the significance of the frequency of the construction by residual test (Saito, *et al.*: 2005). Figure 4 is the result of residual test. Asterisks and sighs in the right columns represent the results of

residual test.

(17) n.s.

\* p < 0.05

+ over-use

\*\* p < 0.01

- under-use

\*\*\* p < 0.001

	Written formal	Written informal	Residual	Written formal	Written informal
Laugh	2	370	10.309	-***	+***
Smile	6	303.75	17.093	-***	+***
chuckle	0	30	5.5391	-***	+***
Cry	4	87.5	8.7914	-***	+***
Sniff	0	11.25	3.3918	-***	+***
Snort	0	41.25	6.4955	-***	+***
Grin	6	50	5.8864	-***	+***
Sigh	159	7.5	10.429	+***	-***
cough	19	3.75	2.8602	+**	-**
frown	0	7.5	2.7693	-**	+**
grimace	0	10	3.1978	-**	+**
Beam	1	3.75	n.s.	n.s.	n.s.
giggle	8	2.5	n.s.	n.s.	n.s.
Howl	0	2.5	n.s.	n.s.	n.s.
whistle	7	2.5	n.s.	n.s.	n.s.
Yawn	4	2.5	n.s.	n.s.	n.s.
Sob	1	6.25	n.s.	n.s.	n.s.
Song	0	2.5	n.s.	n.s.	n.s.

Figure 4.

The result shows that *laugh*, *smile*, *chuckle*, *cry*, *sniff*, *snort*, *grin*, *cough*, *frown*, and *grimace* are overused in informal written context. However, *sigh* and *cough* are overused in formal context. The rest of the verbs do not appear frequently enough so that we cannot examine the significance of the frequency by residual test. In conclusion, I find out that Dixon's intuition can be applied to nine derivational nouns.

About *sigh* and *cough*, we need to further investigate the pragmatics of the constructions. For the rest of the verbs, we should investigate the usage environment of the constructions theoretically.

#### 4. Conceptual Structure of Cognate Object Construction

##### 4.1 Syntax and Semantics of CO Construction

As we see in section 3, in *give a* construction, semantic property of object noun determines syntax of the construction. Similarly, in CO construction, semantic aspects of object noun determine the necessity of modifier.

In previous studies (Quirk *et al.* 1985, Schibsbye 1970, Rice 1988, Dixon 1991), they argue that modifiers for cognate objects are essential.

(18) “The object in these cases cannot be the substantive in question without the addition of a qualification...” (Schibsbye 1970: 4)

(19) “It would be not usually be felicitous to use a cognate NP that did not include some adjectival modification. (Dixon 1991: 118)

(20) “The noun is generally modified.” (Quirk *et al.* 1985: 750)

Without modifiers, the whole construction are unacceptable.

(21) a. \*He smiled a smile.  
b. \*Willy sneezed a sneeze. (Rice 1988: 209)

However, in constructions as (22), modifiers are optional.

(22) a. We don't live life forever. (Macfarland 1995: 89)  
b. I dreamed a dream last night. (Takami and Kuno 2002: 151)

Look at the cognate objects of (21) and (22). *Smile* and *sneeze* are motivated by the schema as in figure 1, but that *life* and *dream* are not. Thus the optionality of modifiers should be determined by whether the nouns are motivated by the schema as in figure 1.

I do not discuss what causes the acceptability of (22) in this paper, but to describe the motivation of CO construction and *give a* construction, I focus on the construction as (21), which takes modifier obligatorily.

##### 4.2 Conceptual Structure of CO Construction

In this section, I show the way how the verbs (13) take a landmark and form a CO construction, even though the verbs have only a trajector (agent) and do not have a landmark (object).

Cognate objects are nominalized from verbs that indicate a single episode of an activity. First, we scan an activity by summary scanning. Then the verb nominalizes into a cognate object, and the cognate object is construed as a *thing* (Langacker 1987). When a modifier profiles a cognate object, the object becomes salient and the landmark of the verb evokes. The object and the landmark correspond to each other and finally composite into CO construction, illustrated in figure 5.

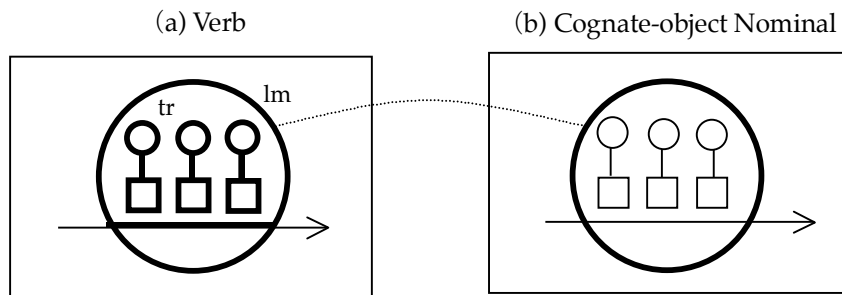


Figure 5. Langacker (1991: 364)

Thus CO construction has the similarity to *give a* construction: meaning of a verb is schematic and meaning of object noun strongly contributes to the meaning of the whole construction.

### 5. Motivation of the Constructions

Based on the discussions in the previous sections, I illustrate the motivation of three constructions.

- (23) a. Emma gave a warm smile. (=2(a))  
 b. Emma smiled a warm smile. (=2(b))  
 c. Emma smiled warmly. (=2(c))

Speakers conceptualize an event from various perspectives, and linguistic expressions reflect their perspectives. Therefore different constructions profile different aspects of activity in different ways.

First simple verb construction. This construction accompanies adverbs, and the construction profiles manner of activity. I can summarize the characteristics of this construction as in (24).

- (24) Simple Verb Construction profiles manner of activity

Second *give a* construction. The whole construction profiles the physical activity

that something comes out of the body. The bodily activity is construed as just one unit of activity by summary scanning. Indirect object and modifier are optional. Thus the construction does not always profile the property of the emissions or recipients. Note that the construction does not accompany with manner adverbs.

- (25) a. He gave a sigh \*{silently/weakly/deeply}.  
b. He gave a smile \*{warmly/happily}.

Manner adverb profiles the manner of verbs by sequential activity (Langacker 1987). *Give a* construction profiles a summary scanned event, and so the construction cannot take manner adverb, which profiles a manner of an event sequentially. The characteristics of the construction can be summarized as in (26).

- (26) *Give a* construction profiles:  
a. emissions from the body that can be scanned as one unit of activity  
b. property of the emissions optionally,  
but never profiles manner of the activity

Third CO construction. In CO construction, modifier is obligatory, and objects are derived from the verbs in (13) without any inflection. This construction seldom takes manner adverb. However, even though the construction takes an adverb, the construction does not become much awkward.

- (27) a. ?He sighed a long sigh {silently/weakly/deeply}.  
b. ?He smiled a delight smile {warmly/happily}.

The characteristics of this construction can be summarized as in (28).

- (28) Cognate Object construction profiles:  
a. emissions from the body that can be scanned as one unit of activity  
b. property of the emissions

The frequency of almost all the CO constructions is zero or less than five times in BNC, and so we cannot statistically investigate the usage environment of CO construction by corpus. Until the size of BNC grows enough, we should continue to analyze the usage environment of CO construction theoretically.

Before concluding remarks, I suggest a possibility: why the frequency of CO construction is low, compared with *give a* construction. Many researchers point out that CO constructions are used mainly in religious context and novels. However, any researchers have not explained the reason why the use of this construction is strongly restricted. But, the discussions in this paper can suggest the possibility: the specificity

of (the schema of) CO construction restricts context and decreases the frequency.

CO construction always profiles property of bodily emissions. Compared with *give a* construction, it profiles an activity more closely. So the specificity of the construction is higher, and the scope (range) of profiling is more restricted. Therefore, CO construction cannot be frequently used in various contexts and the frequency stays low. On the other hand, *give a* construction does not require modifiers. The construction does not have to profile property of activity. So the specificity of the construction is low, but instead the schematicity is higher. The activity that *give a* construction profiles is more schematic than that of CO construction. Therefore *give a* construction is used in various contexts and the frequency is higher. In fact, the frequency of *give a* construction is higher in BNC.

Construction, which profiles an event closely, shows high specificity. The frequency of such construction is low, whereas the construction that schematically profiles an event shows high frequency. This difference in frequency is observed in the usage of words. For instance, meanings of *do*, *be*, *have* are schematic. However, these three verbs appear the most frequently in spoken corpus of BNC. Therefore, the frequency of schematic expressions tends to be high and this tendency is observed in the usage of sentences. Moreover, this study should verify the validity of a perspective of Cognitive Grammar: words and sentences form a continuum.

## 6. Conclusion

Comparing the semantic structures of the three constructions, I show the motivation for using *give a* construction, cognate object construction, and simple verb construction. In addition, using BNC and residual test, I examine the observation of Dixon (1991) and statistically show the usage environment of *give a* construction. If we can use bigger corpus, we can examine the usage environment of various constructions.

## Notes

1. If we can identify what indirect object is according to context, (9) becomes acceptable.
2. *Sneeze* and *weep* do not appear in *give a* construction in BNC. Therefore I did not examine these two verbs in this paper.

## References

- Carlson, G. (1977) *Reference to Kinds in English*. Doctorial dissertation, University of Massachusetts.
- Cattell, R. (1984) *Composite Predicates in English*. New York: Academic Press.
- Dixon, R.M.W. (1991) *A New Approach to English Grammar, on Semantic Principles*. Oxford: Oxford University Press.
- Goldberg, A. (1995) *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago/London: University of Chicago Press.
- Hayase, N. and Horita, Y. (2005) *Ninch Bunpou no Shintenkai: Kategorika to Youhou Kiban Moderu (Categorization and Usage Based Model)*. Tokyo: Kenkyusya.
- Jespersen, O. (1933) *Essentials of English Grammar*. London: George Allen and Unwin.
- Jones, M. (1988) Cognate Objects and the Case Filter. *Journal of Linguistics* 24: 89-110.
- Langacker, R. (1987) *Foundations of Cognitive Grammar, Vol.1*. Stanford: Stanford University Press.
- Langacker, R. (1991) *Foundations of Cognitive Grammar, Vol, 2*. Stanford: Stanford University Press.
- Langacker, R. (2005a) 'Construction Grammars: Cognitive, Radical and Less So', in M. Francisco and M. Celvel (eds.) *Cognitive Linguistics: Internal Dynamics and Interdisciplinary Interaction*, pp. 101-159. Berlin/New York: Mouton de Gruyter.
- Langacker, R. (2005b) 'Integration, Grammaticization, and Constructional Meaning', in M. Fried and H. C. Boas (eds.) *Grammatical Constructions: Back to the Roots*, pp.157-189. Amsterdam/Philadelphia: John Benjamins Publishing
- Levin, B. (1993) *English Verb Classes and Alternations*. Chicago: The University of Chicago Press.
- Levin, B. and Rappaport M. (1995) *Unaccusativity: At the Syntax-Lexical Semantic Interface*. Massachusetts: MIT Press.
- Macfarland, Talke. (1995) *Cognate Objects and the Argument/Adjunct Distinction in English*. Doctorial dissertation, Northwestern University.
- Massam, D. (1990) 'Cognate Objects as Thematic Objects', *Canadian Journal of Linguistics* 35: 161-190.
- Perlmutter, D. (1978) 'Impersonal Passive and the Unaccusative Hypothesis', *BLS* 4: 157-189.
- Quirk, R., S. Greenbaum, G. Leech and Svartvik, J. (1985) *A Comprehensive Grammar of*

- the English Language*. London: Longman.
- Rice, S. (1988) 'Unlikely Lexical Entries', *BLS* 14: 202-212.
- Saito, T., and Akano, I. and Nakamura J. (2005) *Eigo Kohpasu Gengogaku* (English Corpus Linguistics). Tokyo: Kenkyusya.
- Schibsbye, Knud. (1970) *A Modern English Grammar*. 2<sup>nd</sup> edition. Oxford: Oxford University Press.
- Takami, K. and Kuno, S. (2002) *Nichi Eigo no Jidoushi Koubun* (Transitive Construction in Japanese and English). Tokyo: Kenkyusya.