

English Cognate Object Constructions
and Related Phenomena:
A Lexical-Constructional Approach

A Dissertation

Submitted to the University of Tsukuba

In Partial Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in Linguistics

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2010

Acknowledgments

This doctoral dissertation is a product of the incredibly stimulating and open intellectual environment of the University of Tsukuba, where I have been privileged to study as a graduate student for the past seven years. My profound thanks go to many people who have helped me in countless ways during the period to complete the dissertation. In the writing of the dissertation, I have had the great support and encouragement by them. Their help meant a lot more to me than just taking scholarly advice.

First of all, I am most deeply indebted to Yukio Hirose, my supervisor and the chair of my dissertation committee, for reading the entire preliminary version of this dissertation and giving me invaluable comments, thereby eliminating many substantial errors and inadequacies in advance of this final version. Without his help, even half of the present work would not have been made possible.

I would also like to extend my sincere thanks to the other members of my committee: Nobuhiro Kaga, Toshiaki Oya, Masaharu Shimada, and Naoaki Wada. Each of them gave me many insightful comments and constant encouragement. Their constructive comments helped to deepen the discussion in the present study.

Special thanks go to Seizi Iwata, who had a great influence on my thinking and reasoning, not only in the present dissertation but also in my academic life, and who has always been a constant source of wisdom and insight. His influence, both direct and indirect, will be evident on many pages of this dissertation.

At various stages of working on the materials dealt with in this study, I have benefited greatly from many other teachers and colleagues: Hiromitsu Akashi, Ronald

Craig, Kristin Davidse, Katsuya Fujikawa, Yasuaki Fujiwara, Ryuta Fukui, Hiroyuki Iwasaki, Tan Lok, Taro Kageyama, Yurika Kambe, Masaru Kanetani, Yuko Kobukata, Momoko Kodaira, Tetsuya Kogusuri, Hiroaki Konno, Manabu Kusayama, Paul Chris McVay, Suguru Mikami, Ignazio Mauro Mirto, Yuichi Murakami, Minoru Nakau, Yoshiki Nishimura, Toshio Ohori, Masao Okazaki, Ikuko Okugawa, Takeshi Omuro, Naoyuki Ono, Mai Osawa, Shigeru Sakahara, Ken-ichi Seto, Rebecca Smollett, Kazuho Suzuki, Koichi Takezawa, Toshihiro Tamura, Atsuro Tsubomoto, Norio Yamada, Shoichi Yamada, Minoru Yasui, Nobukatsu Yoshida, Dandan Wang, Ryuichi Washio, Shin Watanabe, and John Whitman.

I am also deeply grateful to Oliver Hayden and Robert Snelling. They not only acted as informants patiently, but also answered my endless questions about English so kindly. Discussions with them via e-mail gave me a lot of interesting and important data. Without their insight, the present work would be much the poorer.

Special mention should be made of a teacher who has laid the earlier groundwork for my linguistic career since I was an undergraduate student at Chuo University. My deep indebtedness goes to Ryoji Kasai, who aroused my initial interest in linguistics and has considerably influenced the direction my work has taken, as well as its present content.

Last but not least, a crucial debt is owed to my family, Toshio, Takako, and Yasuko Kitahara for their consistent loving support, and to Chie Kodaira for always being there. This dissertation is dedicated to them all.

Tokyo

June 2010

Ken-ichi Kitahara

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Chapter 1

Introduction

1.1. Aim

The aim of this thesis is to propose a comprehensive analysis of constructions as exemplified by the following examples:

- (1) a. Sam smiled a silly smile.
- b. Sam died a heroic death.

The sentences in (1) share at least two idiosyncratic characteristics: First, the verb, which is normally regarded as an intransitive verb, takes an overt object complement. Second, the object is morphologically or semantically related to the verb itself. In general, objects such as *a silly smile* and *a heroic death* have been known as *cognate objects* (henceforth, COs). The word ‘cognate,’ from Latin *cognatus*, which means ‘related by blood’, is used here to refer to the morphological or semantic relation that holds between the main verb and the object complement (cf. Höche (2009)).¹ In the literature, constructions involving COs have been called *cognate object constructions* (henceforth, COCs), which many linguists have explored in their own approaches.

As Quirk et al. (1985:750) point out, COCs, though they tend to convey a rather orotund style, are widely used in English. However, with respect to the nature of the “widely used” constructions, there remain many unresolved issues. Different linguists have challenged these issues and at the same time have provided insightful analyses of the complex nature of the constructions. But, in my view, none of them provides any

explanation which seems entirely satisfactory.

This thesis adopts a lexical-constructional approach (cf. Boas (2003), Iwata (1998a, 2006a, 2006c, 2008a)) and aims to give a comprehensive and coherent account of various properties of COCs which have not been adequately addressed in previous studies, then demonstrating that the proposed analysis can be applied to other linguistic phenomena which have not been correlated with the constructions.

1.2. Definitions of COCs in Descriptive/Reference Grammars

Traditional grammarians have already alluded to various issues associated with COCs since more than one hundred years ago. Before beginning the main discussion, it would be worthwhile to examine how the constructions are defined in descriptive/reference grammars of English.²

As Höche (2009) mentions, Henry Sweet's work *A New English Grammar* (1891) plays a pioneering role in linguistic studies on COCs. Many modern linguists who deal with the constructions cite Otto Jespersen's account in *The Philosophy of Grammar* or *A Modern English Grammar*, without referring to Sweet's work, which had been published more than thirty years earlier.³ However, it is worth noting that Sweet already points out many of the key notions that are hotly debated in more recent studies on COCs.

Sweet's description of COCs is as follows:

- (2) Sometimes an intransitive verb is followed by a noun in the common form which repeats the meaning of the verb, as in *sleep the sleep of the just*, *fight a good fight*, where the noun is simply the verb converted into a noun, and in *fight a battle*, *run a race*, where the noun repeats the

meaning but not the form, of the verb. Such object nouns are called cognate objects. A cognate object must essentially be an abstract noun.

(Sweet (1891:91))

COCs, according to the above definition, share three noticeable features. First, in a COC, it is an intransitive verb that takes the CO. Second, there is a strong semantic relationship between the verb and the CO in that the meaning of the latter is a repetition of the former. Third, the meaning of the CO is rather abstract or intangible.

One of the most characteristic properties of intransitive verbs is that they do not take any overt complements (cf. Felser and Wanner (2001)). However, in COCs, intransitive verbs take overt object complements. It seems somewhat unusual that object complements follow intransitive verbs, even though they function as abstract nouns.

As for the meaning of COs, Jespersen (1924, 1927) takes the same view as Sweet:

- (3) Its purpose [The purpose of the CO] cannot be fully understood if we start from such examples as “I dreamed a dream” (Onions, AS 35) or “servitorem servire,” for such combinations are, to say the least, extremely rare *in actual speech*, for the simple reason that such an object is inane and adds nothing to the verbal notion. (Jespersen (1924:138))

Jespersen mentions that COs do not add any new information to the verbal notion and thus unmodified COs are rarely used in actual speech. He further elaborates on the nature of COs in more detail than Sweet does:

- (4) These examples make it clear that the nexus substantive [CO] is simply introduced to give us an easy means of adding some descriptive trait in the form of an adjunct which it would be difficult or impossible to tack on to the verb in the form of a subjunct (cf. also “fight the good fight,” which is different from “fight well”). (Jespersen (1924:138))

In a nutshell, Jespersen reduces the use of a CO to a means to add new information to the verbal notion. Noting that “to fight a good fight” is not the same thing as “to fight well” and in English there is no adverb corresponding to *good* in this sense, he claims that the main function of a CO is to make up for a lexical gap which the language has in not offering an appropriate adverb to describe an action represented by the verb (Höche (2009:12)).

Jespersen maintains that the meaning of COs themselves is inane. On the other hand, he describes a category of COs as a subdivision under ‘the object of result.’ Likewise, Quirk et al. (1985) state that COs and resultant objects are semantically similar to each other:

- (5) A cognate object is similar to a resultant object in that it refers to an event indicated by the verb. [...] In this type of object, the noun head is semantically and often morphologically related to the verb. The object can therefore not be considered a participant. Its semantic function is to repeat, wholly or partially, the meaning of the verb. Most cognate objects tend to convey a rather orotund style. The noun is generally modified. The verb and the object are then equivalent to the verb and a corresponding adverbial. (Quirk et al. (1985:750))

Unfortunately, the difference between COs and resultant objects remains unexplained. Instead, Quirk et al. emphasize the correspondence between COs and manner adverbials:

- (6) a. They fought a clean fight.
b. They fought cleanly.

(Quirk et al. (1985:750))

Jespersen also remarks on parallels between COs and manner adverbials. But he makes clear the difference in meaning between them, i.e. *fight the good fight* vs. *fight well*, besides discussing that COs make up for lexical gaps the English language might have. On the other hand, Quirk et al. do not point out any differences between the alternating sentence pairs in (6). According to them, (6a) expresses the same meaning as (6b). They do not explain where the equal status of COs and manner adverbials comes from.

Both Jespersen and Quirk et al. make no comment on whether the verbs occurring in COCs are intransitive or transitive. Jespersen observes that combinations of this kind are found with verbs that are otherwise intransitive (*live*) just as well as with verbs that are otherwise transitive (*fight; fight the enemy*). However, he does not state how in COCs the verbs function. He writes as follows:

- (7) It is customary to divide verbs into *transitive* and *intransitive*. But in English at any rate, it is impossible to make a sharp distinction between two *classes*, and we should rather speak of a transitive and an intransitive *use* of verbs, for many verbs which are generally transitive, i.e. take an

object (or two objects), are very often used without any object, and other verbs, which are as a rule intransitive, may at times be connected with an object. (Jespersen (1927:319))

Huddleston and Pullum's *Cambridge Grammar of the English Language* (2002), on the other hand, clearly suggests that COCs are classified into multiple subtypes, based on whether the main verb functions as intransitive or transitive. As far as I know, the classification of COCs by Huddleston and Pullum is more detailed than those by any other traditional grammarians. Huddleston and Pullum state as follows:

- (8) A cognate object is one where the head noun is a nominalisation of the verb, as *death* is of *die*, and so on. In some cases the selection of a cognate object is of no syntactic significance: *They built a hideous building* and *I can smell an appalling smell* belong to the same construction as *They built a mansion* and *I can smell rotting meat*. *Sing* is arguably basically intransitive, but it allows many objects besides the cognate *song* [...]. But there are also verbs where the cognate object is not freely replaceable by a non-cognate one:

[...] i *cough grin laugh sigh snore yawn*

ii *die dream live sleep think*

[...] *He grinned a wicked grin. She always dreams the same dream. He lives a life of drudgery. She slept the sleep of the just. He was thinking lewd thoughts.*

The semantic role might again be said to be factitive. Modification of the noun is just about obligatory. *?He died a death; ?He grinned a grin*. It is

semantically comparable to modification of the verb (cf. *He died slowly and agonisingly; He grinned wickedly*).

(Huddleston and Pullum (2002:305))

They focus attention on the transitivity of the main verbs as an important concept to explain the class of COCs. Following (8), COCs are divided into three types of constructions: (i) the construction in which a transitive verb (ex. *build* or *smell*) takes a CO (ex. *building* or *smell*) from a wide range of direct objects; (ii) the construction where a basically intransitive verb (ex. *sing*) functions as transitive verb involving a CO (ex. *song*); and (iii) the construction in which an intransitive verb take COs only.

Moreover, Huddleston and Pullum assign the semantic role ‘factitive’ to COs. According to their definition, ‘factitive’ denotes particular kinds of themes that come into existence by virtue of the process expressed. This viewpoint reflects Jespersen’s and Quirk et al.’s suggestions that COs are closely related to resultant objects.

Along with Jespersen and Quirk et al., Huddleston and Pullum argue that COs require adjectival modification so as to have the same kind of function as manner adverbials or perform the function as a means to make up for the absence of them in the language:

- (9) [...] a. *She fought a heroic fight*. b. *He died a long and agonising death*.

A cognate object is one where the head noun is a nominalisation of the verb: *fight* and *death* are nominalisations of the verbs *fight* and *die*. As the head noun itself is already implied by the verb it does not normally occur on its own: #*He died a death*. Rather, the noun is modified in some way, as by the adjectives in these examples. And these adjectives typically

describe the process expressed in the clause and thus have the same kind of function as a manner adverb. Thus [example (a)] means essentially the same as *She fought heroically*; [example (b)] likewise describes the manner of his dying but in this case there is no adverb *longly* available to express the same meaning in a manner adjunct.

(Huddleston and Pullum (2002:673))

The properties of COCs defined in the above descriptive/reference grammars are summarized as follows: First, COCs are classified into at least two main types, the construction in which a transitive verb selects a CO from a wide range of object complements and the one in which an intransitive verb takes a CO only. The former includes the type where a normally intransitive verb behaves as a transitive verb followed by a CO. Compared with the former type, the latter type has an idiosyncratic property in that an intransitive verb can take an overt object complement. Second, the modification of the CO is defined as obligatory because it refers only to the event indicated by the main verb and adds nothing to the meaning of the whole sentence. Third, a modified CO expresses the same meaning as the corresponding manner adverbial. Fourth, a modified CO can function as a means to make up for a lexical gap which the English language might have in not offering an appropriate adverb to describe the manner of action denoted by the verb.

Here, four main questions arise: First, why are COCs classified into two types? Second, why is it possible that in one type of COCs the intransitive verb takes an overt object complement, i.e. CO? Third, where does the equal status of the CO and the corresponding manner adverbial come from? Fourth, how are the two types of COCs related to each other? Traditional grammarians never give explicit answers to these

issues. In order to elucidate the nature of COCs, we need to provide definitive answers to them.

Intransitive verbs take overt object complements which can alternate with the corresponding manner adverbials. Such properties are theoretically interesting for modern linguists, especially, those working in the Chomskyan paradigm. Thus, as will be briefly reviewed in the next chapter, much attention has been paid to the syntactic status of COs. Some argue that COs are adjuncts (Jones (1988), Moltmann (1989), among others), whereas others argue that they are arguments (Massam (1990), Macfarland (1995), among others). However, because of the contrasting behaviors of COs, there is no consensus of opinion as regards whether they are adjuncts or arguments (cf. Pereltsvaig (1999)).

On the other hand, in order to explain why intransitive verbs can take object complements, discourse-functionalists propose some functional constraints on the use of the CO, taking into consideration its semantic function and discourse factors (Takami and Kuno (2002), Kuno and Takami (2004), among others). Unfortunately, even such analyses provide no reasonable explanation for various properties of COCs (Kitahara (2005, 2006, 2007, 2008, 2009)).

Last but most importantly, many of previous studies do not try to examine why COCs consist of multiple types and how they are related to each other.⁴ In accordance with the transitivity of the verbs occurring therein, they divide the COC from the non-COC. They define the COC as a construction in which an intransitive verb takes as its object only a noun cognate with it. Therefore, the construction where a transitive verb takes a CO is treated differently from the COC.⁵ This division cannot, however, be applied to all cases. For the COCs where the same verb occurs do not show the same syntactic and semantic behavior.

As will be discussed later, what is missing in most previous studies is the contribution of constructions themselves to the potentiality of linguistic expressions.⁶ To elucidate the complex nature of COCs, it is necessary to make use of the basic principles of construction grammars (Lakoff (1987), Langacker (1987, 1991, 1999), Fillmore, Kay, and O'Connor (1988), Goldberg (1995, 2006), Iwata (1998a, 2006a, 2006c, 2008a), Hirose (1996, 1999), Croft (2001, 2003), Michaelis (2003, 2004), Goldberg and Jackendoff (2004), among others).⁷ In this thesis, I demonstrate that the proposed constructional approach gives a highly coherent account for various properties of COCs, providing answers to the unresolved issues associated with the constructions, ultimately revealing that there are striking parallels between the constructions and other linguistic phenomena, resultative constructions and the *that*-clause complements accompanying manner-of-speaking verbs, which have not been discussed yet.

1.3. Overview of the Thesis

This thesis is organized as follows. Chapter 2 briefly reviews how English COCs have been analyzed within different linguistic frameworks, especially the generative paradigm and the functional paradigm, pointing out several problems with representative previous studies (Jones (1988), Moltmann (1989), Massam (1990), Macfarland (1995), Takami and Kuno (2002), and Kuno and Takami (2004)).

Chapter 3 outlines basic tenets and common goals of construction grammars and introduces those concepts, assumptions, and descriptive devices which will be useful for the description of COCs in the remaining chapters. Then, I point out some problems with the Goldbergian construction grammar approach (Goldberg (1995, 2006)), and present an alternative, namely a lexical-constructional approach which takes a fundamentally usage-based perspective (cf. Boas (2003, 2005), Iwata (2006a, 2006c,

2008a, 2008b)).

Chapter 4 is basically of a descriptive nature. Focusing on the syntax and semantics of COCs, I argue from a lexical-constructional perspective that the constructions should be divided into two types, the event-dependent COC and the event-independent COC. My claim is supported by typological data from other languages (Pereltsvaig (1999)), cognitive linguistic accounts (Langacker (1991), Höche (2009)), and historical evidence (Yamakawa (1980), Osaki (1998)).

Chapter 5 tackles the four questions given in this chapter. To give definitive answers to these questions, we need to shift our focus to lower-level constructions (cf. Iwata (2006c, 2008a)). I introduce verb-class-specific constructions and verb-specific constructions and make full use of these lower-level constructions in accounting for the complex nature of English COCs. At the same time, through a detailed examination of cognitive linguistic analyses of COCs (Horita (1996), Höche (2009)), it is shown that my description of the constructions can provide a more comprehensive and coherent account of several issues associated with them, such as constructional homonymity, idiomaticity, the argument/adjunct distinction, the unergative/unaccusative distinction, and the transitivity continuum.

Chapter 6 focuses on a comparison of COCs with other related constructions such as light verb constructions (Fillmore (1968), Dixon (2005), Mirto (2007), Höche (2009) etc.), reaction object constructions (Yasui (1982), Mirto (2007), Kogusuri (2009c), etc.), resultative constructions (Iwata (2006a, 2006b, 2008b), Kitahara (2007, 2008), etc.), and the *that*-clause complements accompanying manner-of-speaking verbs (Kogusuri, Kitahara, Yoshida, and Kodaira (2007), Kogusuri (2009a, b), Kitahara (2009), etc.). I will demonstrate that COCs have no relation with light verb constructions and reaction object constructions, but rather they have close parallels with resultative constructions

and manner-of-speaking complements.

Finally, Chapter 7 gives a summary and conclusion of this thesis and comments on future perspectives.

Notes to Chapter 1

^{1.} Höche (2009) points out that the notion of ‘cognate’ has been the source of controversies about the types of defining relations that hold between verb and object, and hence the types of object that can be recognized as cognate forms. According to Höche, many linguists who research COCs try to single out syntactic, morphological, and semantic criteria for the definition and delimitation of the category of ‘cognate objects,’ while adopting the idea of one single COC-type. As a result, they are not concerned with some forms which should be considered COs. The alternative that Höche proposes is to depict a family of different, but related types of COCs, incorporating into analysis forms which have so far not been considered COs. As will be explained in the course of this investigation, my analysis shares a number of fundamental assumptions with that of Höche. See Chapters 4 and 5 for details.

^{2.} For the convenience of discussion, I examine Sweet (1891), Jespersen (1924, 1927), Quirk et al. (1985), and Huddleston and Pullum (2002) as representatives of descriptive/reference grammars of English, since they abandon purely prescriptive grammar in favor of descriptive approaches to the language, as summarized in the following citation from Jespersen (1909):

- (i) It has been my endeavour in this work to represent English Grammar not as a set of stiff dogmatic precepts, according to which some things are correct and others absolutely wrong, but as something living and developing under continual fluctuations and undulations, something that is founded on the past and prepares the way for the future, something that

is not always consistent or perfectible – in one word, human.

(Jespersen (1909:v))

Additionally, Quirk et al. and Huddleston and Pullum (2002) might be called “modern traditional grammars” in that they take account of the progress that has been made in the description of English grammar in more recent theories (Höche (2009)).

^{3.} Otto Jespersen’s *The Philosophy of Grammar* and *A Modern English Grammar on Historical Principles, Part. III*, which contain the sections on COCs, were published in 1924 and 1927, respectively.

^{4.} Macfarland (1995), on the other hand, does not divide COCs into some types, but rather treat them all together. However, as will be discussed later, there are some serious problems with her analysis. See Chapter 2.3.2 for details.

^{5.} Many previous studies identify the non-COC with the transitive construction (Yasui (1982), Jones (1988), Massam (1990), Takami and Kuno (2002), Kuno and Takami (2004), to name a few). They use syntactic diagnostics such as passivization, *it*-pronominalization, and topicalization, etc. in order to examine whether a COC belongs to the COC or the transitive construction. See Chapter 2 for details.

^{6.} See also Kitahara (2005, 2006, 2007, 2008, 2009).

^{7.} The use of the plural form “construction grammars” is deliberate, since various analyses have been proposed under the name of Construction Grammar. See Chapter 3 for details.

Chapter 2

Previous Studies

2.1. Introduction

This chapter briefly reviews how COCs have been treated in different linguistic frameworks of modern linguistics. As mentioned in the preceding chapter, the constructions show some idiosyncratic properties. First, in the constructions, the object nouns are morphologically and semantically related to the main verbs. Second, the constructions are divided into multiple types, including the one in which an intransitive verb is followed by an overt object complement. Third, the object NP means essentially the same as the corresponding manner adverbial.

Why do overt object complements accompany the verbs that are generally considered intransitive? Why are they semantically equivalent to manner adverbials? Many linguists have tackled these issues. In the paradigm of Generative Grammar, some argue that the object NPs function as adjuncts, while others argue that they function as arguments. The adjunct analysis is advocated by Jones (1988) and Moltmann (1989), while the argument analysis is favored by Massam (1990) and Macfarland (1995).

In the paradigm of Functional Grammar, on the other hand, linguists pay much attention to semantic-discourse constraints on the use of the COC, rather than to the argument/adjunct distinction of COs (Halliday (1967, 1984), Takami and Kuno (2002), Kuno and Takami (2004), among others). In particular, Takami and Kuno argue that the COC is a marked construction and thus its use must be conventionally and contextually justifiable.

In what follows, we review these three types of analyses as representatives of modern linguistic description of COCs, pointing out serious problems with them.¹

2.2. Adjunct Analysis of COs

With respect to COCs, a contentious issue has been whether the COs are adjuncts or arguments. In this and the following sections, we review Jones (1988) and Moltmann (1989), which advocate the adjunct analysis of COs, and Massam (1990) and Macfarland (1995), which favor the argument analysis.

2.2.1. Jones (1988)

Jones (1988) defines COCs as constructions where a normally intransitive verb occurs with what appears to be a direct object NP whose head noun is the event or state nominalization of the verb. Following this definition, the examples in (1) are fairly clear examples of COCs:

- (1) a. John died a gruesome death.
b. Harry lived an uneventful life.
c. Bill sighed a weary sigh.

(Jones (1988:89))

On the other hand, in English there are cases such as *dance a dance*, *dream a dream*. Jones argues that such examples resemble COCs, but they are more properly analyzed as genuine transitive constructions in that the verbs involved allow a wider range of direct complements than is provided for by his definition:

- (2) a. Sam danced a jig/a piece from Swan Lake/something involving lots of pirouettes.
- b. Bill dreamed a most peculiar thing/that he was a crocodile.

(Jones (1988:89))

To put this differently, the COs in (1) are ‘true’ COs, whereas the objects in *dance a dance* type constructions are treated separately as ‘superficial’ COs.

Within the Government and Binding theory as presented in Chomsky (1981), examples like those in (1) pose two serious problems, which can be formulated in terms of the θ -criterion and the Case-filter:

- (3) θ -criterion

Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument. (Chomsky (1981:36))

- (4) Case-filter

*NP if NP has phonetic content and has no Case. (Chomsky (1981:49))

These two basic principles impose a requirement that every NP which is phonetically realized and has semantic content must be assigned both Case and a θ -role, either directly or via a trace which it binds.

The first problem is concerned with Case-assignment. The only Case which could be assigned to the postverbal NPs in (1) is Objective Case. But, as Chomsky (1981:170) suggested, this Case is only assigned when the verb governing the NP is a transitive verb. According to Jones, in COCs, the verbs involved are considered intransitive. Unless we introduce an alternative mechanism for assigning Case to NPs

governed by intransitive verbs, no Case will be assigned to the postverbal NPs in (1).

The second problem is that there is no obvious way of assigning θ -roles to these postverbal NPs since the verbs involved are all one-place predicates which assign their only θ -role to the NP which appears in subject position. Hence, examples like those in (1) should be excluded both by Case-filter and by the θ -criterion.

To overcome these problems, Jones proposes an alternative approach, which is to deal with COs as adjunct-predicates, not as typical direct objects. He pays attention to the fact that the COs in (1) fail to passivize as in (5), in contrast with the ‘superficial’ COs in (6):

- (5) a. *A gruesome death was died by John.
b. *An uneventful life was lived by Harry.
c. *A weary sigh was sighed by Bill.

(Jones (1988:91))

- (6) a. Sam danced a merry dance.
b. A merry dance was danced by Sam.

(Jones (1988:91))

Jones explains that the unacceptability of passives in (5) should be attributed to the function of COs as modifiers of the VP, on a par with the manner adverbs in (7):

- (7) a. John died gruesomely.
b. Harry lived uneventfully.
c. Bill sighed wearily.

(Jones (1988:93))

Jones adds that the difference between (1) and (7) is more a matter of style than meaning.

Zubizarreta (1982) claims that manner adverbs, along with adnominal adjectives and other types of adverbs, constitute a class of adjunct-predicates. Adjuncts of this type are not assigned a θ -role by the governing element, but function as predicates which modify the constituent in which they occur. The difference from manner adverbs is that COs cannot derive their adjunct-predicate status from their syntactic category. With these considerations in mind, Jones argues that, unlike adverbs and adnominal adjectives, the adjunct-predicate status of COs is determined by the close semantic relation which holds between the head noun and the main verb. Specifically, the head noun (i.e. CO) acts as a surrogate for the verb, with the result that the modification relation assigned to the NP by the adjective or other modifier is transferred to the VP at the level of LF or Semantic Representation.^{2,3}

Nevertheless, the problem of Case assignment still remains since the Case-filter does refer explicitly to the category NP. Instead of trying to devise a means of assigning Case to COs, Jones proposes to modify Case theory so that such NPs are not required to be Case-marked:

(8) Revised Case-filter

$$\begin{array}{c}
 *NP \\
 \left(\begin{array}{c}
 \alpha \theta\text{-role} \\
 -\alpha \text{ Case}
 \end{array} \right)
 \end{array}$$

(Jones (1988:98))

The symbol α is used here as a variable over plus and minus values (presence/absence

of a Case-feature or θ -role). Revised Case-filter requires that a phonetically realized NP should have Case if and only if it has a θ -role. In conformity with (8), Jones explains that COs are assigned no Case since they do not have any θ -roles.

2.2.2. Moltmann (1989)

As with Jones (1988), Moltmann (1989) differentiates ‘true’ COs as in (9) from ‘superficial’ COs as in (10), which behave as arguments of the verb:

- (9) a. John died a painful death.
b. John screamed a terrifying scream.

(Moltmann (1989:300))

- (10) a. Mary danced this dance very often.
b. Mary said these words.

(Moltmann (1989:300))

Moltmann claims that the COs in (9) are optional predicates over the event argument of the verb. In his account, (9a) is semantically represented as in (11):

- (11) $\exists e$ die (e, John) & painful death (e) & PAST (e)

(Moltmann (1989:300))

Two types of evidence support this analysis. According to Moltmann, COs exhibit characteristic properties of both adjuncts and predicates. Let us examine the characteristics of COs as adjunct. First, COCs are in general optional, as shown in the correlates of (9) in (12):

- (12) a. John died.
b. John screamed.

(Moltmann (1989:300))

Notice also that COs disallow passivization as in (13):

- (13) a. *A painful death was died by John.
b. *A terrifying scream was screamed by John.

(Jones (1989:301))

In addition, Moltmann points out that COs do not affect the *have/be* alternation in a language such as German. In German, direct objects require the auxiliary *have*. If COs were arguments, they would require the auxiliary *have* rather than *be*. However, this is not the case:

- (14) a. Hans ist/*hat gestorben.
'John is/has died.'
b. Hans ist/*hat einen qualvollen Tod gestorben.
'John is a painful death died.'
c. Maria ist/*hat gesprungen.
'Mary is/has jumped.'
d. Maria ist/*hat einen weiten Sprung gesprungen.
'Mary is/has a wide jump jumped.'

(Moltmann (1989:301))

In (14), the presence of COs allows auxiliary *be*. These data are immediately explained if COs are taken as adjuncts rather than arguments of the verbs.

Next, the predicative status of COs is supported by the fact that they exhibit the indefiniteness effect and disallow topicalization:

(15) a. *A death occurred today in this clinic. It was John who died that death.

b. *John screamed *this* scream/*every* scream we heard today.

(Moltmann (1989:301))

(16) a. This man, John saw *t* today.

b. *A painful death, John died *t*.

c. *A shrill scream, John screamed *t*.

(Moltmann (1989:301))

As shown in (15) and (16), COs cannot co-occur with strong determiners and cannot undergo topicalization.

Interestingly enough, certain adverbial event predicates and obligatory controlled clauses also cannot be topicalized:

(17) a. *Slowly, John ate the cake.

b. *Beautifully, Mary sang the song.

c. *PRO to go to school, John intends.

d. *PRO to study Linguistics, John persuaded Mary.

(Moltmann (1989:301))

Syntactic predication, according to Williams (1980), requires that subjects c-command

their predicate. Examples (17c, d) indicate that such predication relation must hold even after topicalization. From the point of view of Davidsonian event-semantics (Davidson (1967, 1968)), Moltmann concludes that, insofar as adverbial event predicates or COs are predicated over the event argument of the verb, the verb functions as its subject, since the event argument is not expressed syntactically by any other constituent.⁴

2.2.3. Summary and Discussion

The adjunct analysis is right in stating that COs can have predicative status on a par with the corresponding manner adverbials. However, the adjunct analysis raises some problems.

First, if Revised Case-filter were right, there would not exist non-argument NPs in languages in which all NPs are assigned Case (Matsumoto (2001)). It is arguable whether such prediction is on the right track.

Moreover, we cannot find any clear basis for differentiating COCs from *dance a dance* type constructions. For example, Jones argues that true COs function as modifiers of the VP, whereas ‘superficial’ COs in *dance a dance* type constructions function as normal direct objects. However, there are examples in which ‘superficial’ COs can also function as modifiers of the VP. For example, consider (18):

- (18) a. Sam danced a merry dance.
b. Sam danced merrily.
c. A merry dance was danced by Sam.

Jones points out in a footnote that (18a) can have a reading roughly equivalent to (18b)

and this reading should not be possible in (18c). However, he does not explain the reason why ‘superficial’ COs can have the interpretations of manner adverbials and behave like adjunct-predicates. To answer this question, Jones needs to provide an explanation of how constructions including superficial COs are related to constructions which include true COs. The same can be said about Moltmann’s analysis.

As an aside, Moltmann’s argument seems quite unconvincing in claiming that in COCs the verbs function as subjects of the COs. It is clear that more research is necessary to establish the validity of this ambitious proposal.

2.3. Argument Analysis of COs

Jones (1988) and Moltmann (1989) argue that COs are not arguments, but rather are adjuncts. On the other hand, Massam (1990) and Macfarland (1995) favor the argument analysis of COs. In what follows, we review Massam’s and Macfarland’s refutations of the adjunct analysis.

2.3.1. Massam (1990)

Massam (1990) contends that COs are best characterized as syntactic direct objects which receive patient θ -roles from the verbs. Initially, she points out that the term ‘cognate object’ is sometimes used to refer to two kinds of constructions, following discussion of Jones (1988). First, there is a group of what she calls “transitivizing object constructions,” as follows:

- (19) a. Bernadette danced the Irish jig.
- b. Tosca sang an aria.
- c. My clairvoyant dreamt the most unusual thing.

(Massam (1990:163))

According to Massam, the objects in these sentences display the syntactic characteristics of regular objects, as observed in (20):

- (20) a. The Irish jig was danced by Bernadette Dooley.
b. The Irish jig, nobody danced.
c. I sang the aria then Tosca sang *it/one*.
d. Fred danced the slow number.
e. What did Tosca sing?
f. She sang a song.

(Massam (1990:164))

As shown above, the objects of *dance* and *sing* need not be morphological cognates of their verbs. In addition, they behave as regular direct objects with respect to passivization, topicalization, *it*-pronominalization, definiteness, and questionability, as exemplified in (20a-e). Notice also that such objects are acceptable without modifiers which refer to events, as in (20f).

The true COs in (21), on the other hand, do not have such syntactic characteristics, as shown in (22):

- (21) a. Henleigh smiled a wicked smile.
b. St. Dymphna died a miserable death.
c. Rosamond cried a good long cry, then she felt better.

(Massam (1990:164))

- (22) a. *A silly smile was smiled (by Ethel).
b. *A silly smile, nobody smiled.
c. *Maggie smiled a silly smile, then her brother smiled *it*.
d. ?She smiled *the* happy smile.
e. *What did he die?
f. *He died a death.

(Massam (1990:164-165))

As reviewed in section 2.2, Jones and Moltmann treat true COs as adjunct-predicates. Massam, however, argues that they should be regarded as syntactic and semantic arguments of the main verbs. She points out that, in spite of the fact that true COs do not behave like other direct objects, there are also ways in which they do not behave like other modifiers. For example, as shown in (23), COs cannot co-occur with direct objects, unlike normal adverbials:

- (23) a. *Mordred killed the knight a gruesome kill.
b. *Ethel moved her lips a slight move(ment).
c. Mordred killed the knight gruesomely.
d. Ethel moved her lips slowly.
e. Alice will read the book tomorrow.

(Massam (1990:166))

Moreover, COs must be adjacent to the verbs, unlike adverbials, including nominal adverbials:

- (24) a. Ben always runs (quickly) that way.
b. Let Ben run (*quickly) a little run.
c. Ben sneezed (*that way) a glorious sneeze.

(Massam (1990:166))

As shown in (24), adverbials are not allowed to intervene between the verbs and the COs. This fact seems to support her claim that COs need Case.⁵

Moltmann, who favors the adjunct analysis, claims that COs cannot undergo topicalization because of their predicative status. Massam, on the other hand, points out that there are examples where COs can be topicalized:

- (25) a. The big cherry smile, Fran smiled: it was Elsie who smiled the insipid smirky smile.
b. Such a crazy whooping laugh, Norma would never laugh; so there must have been someone else in the room.

(Massam (1990:181))

Massam argues that it is possible to topicalize COs if they contain new information which is what is really being topicalized. On the basis of these properties, she claims that COs are structural objects of the verbs.

Massam, furthermore, argues that COs are referential and not predicational by examining their behavior with respect to several syntactic tests for the referentiality of NPs laid out in Doron (1988). According to Doron, predicational NPs can appear with non-restrictive relative clauses with *which* if and only if they have a gap in predicate position as in (26a, b), unlike referential NPs as in (26c):

- (26) a. John is a considerate man, which is a rare thing to be.
b. *The Jollyboat is a row boat, which is not very expensive.
c. John is Mr. Smith, who I was telling you about.

(Massam (1990:168))

Notice that true COs can occur with non-relative clauses with the gap in a non-predicate position, as shown in (27):

- (27) a. Mona smiled a sarcastic smile, which John photographed.
b. Elsie prayed a prayer, which my father wrote.
c. Kate sneezed a 20 decibel sneeze, which is a rare thing to hear.

(Massam (1990:168))

Moreover, like referential NPs, COs can be referred to in a later sentence by the pronoun *it*. Observe the following:

- (28) a. Rose hit the ball. The dog caught *it* and chewed *it* up.
b. Mona smiled a tantalizing smile. Penelope noticed *it* and decided immediately that that she would photograph *it*.

(Massam (1990:168))

Doron mentions that certain quantifiers (i.e. strong determiners) do not appear in predicate positions. Massam points out that COs, like regular objects, may contain these quantifiers, thus arguing that they are not predicate nominals:

- (29) a. *Chrisanne is/They are/ *every* member of the club.
 b. *Libby is/They are/ *many* women that I met that day.
 c. Tom sneezed *every* sneeze that we heard that day.
 d. Zack screamed *many* screams before we quieted him down.
 e. Fred ate *every* pudding in the house.

(Massam (1990:168-9))

All these examples seem to indicate that normally intransitive verbs take COs which are not predicate nominals. In order to explain the reason why COCs as well as transitivizing object constructions involve referential arguments rather than adverbials or predicates, Massam assumes that there is a lexical redundancy rule which Levin and Rapoport (1988) call Lexical Subordination.⁶ This lexical process takes the Lexical Conceptual Structure (LCS, hereafter) of a verb and adds a level of meaning so that the new verb has an argument which undergoes a change of state/location/existence. The original predicate is then lexically subordinated under this as a means clause (Massam (1990:170)). For example, the transitivizing object in (30b) is formed by means of the lexical rule as shown in (31):

- (30) a. Tosca sang.
 b. Tosca sang an aria.

(Massam (1990:171))

- (31) a. [x *verb*]
 b. [x CAUSE [y BECOME EXPRESSED]] BY [x *verb*]

(Massam (1990:171))

Notice here that the change of state in (31b) is one of expression, though it involves creation. Massam says that with verbs of artistic verbs such as *dance* and *sing* the term “expression” is appropriate, since one does not create Swan Lake by dancing it, but rather one gives it a particular instantiation.

On the other hand, true COs also arise through the process of Lexical Subordination. For example, the CO in (32b) is formed by means of (33):

- (32) a. Henleigh smiled.
b. Henleigh smiled a wicked smile.

(Massam (1990:172))

- (33) a. [x *verb*]
b. [x CAUSE [y_i BECOME EXIST]] BY [x *verb*]_i

(Massam (1990:173))

There is a very important difference between transitivizing object constructions and COCs. Unlike (31b), the CO in (32b) is not the art created or expressed by the action, but is rather the event itself which is created by the action. Thus, in (33b), the y variable (patient) is co-indexed with the event of [x *verb*].

The lexical rule in (33) explains some unusual properties of COCs. As is often pointed out, the agent of the CO should be coreferential with the agent of the matrix verb, as shown in (34):

- (34) a. Let Bathsheba dream a/her/*his dream.
b. Gabriel sneezed a/his/*her hefty sneeze.

(Massam (1990:173))

According to (33), the CO is a copy of the lexically embedded event. Hence, it is natural that the variables within that event, which is here the agent, must be coreferential with the agent of the entire event.

Massam further argues that her lexical subordination analysis is supported by the behavior of the modifiers of true COs. In COCs, the modifiers can be of manner, or subject-oriented, but they cannot be speaker-oriented:

- (35) a. Henleigh smiled an unkind smile. (subject oriented, manner)
b. *Hans smiled an evident smile. (speaker oriented)

(Massam (1990:174))

In (35a), the modifier *unkind* is embedded inside the object of the clause and its scope is not higher than the event denoted by the object. However, since the modifier *evident* is speaker-oriented, it cannot be embedded inside object of the clause and thus its scope cannot be lower than the event denoted by the object. Hence the unacceptability of (35b).

Finally, Massam explains that the unpassivizability of COs is not related to their non-argument status, but rather to the fact that the lexical item from which they are projected involves a bound variable inside the object variable. This explanation is supported by the fact that other direct objects which involve a necessarily bound element as in (36) cannot undergo passivization:

- (36) a. *Her thanks were smiled by Rilla.
b. *Grateful thanks were smiled by Rilla.

(Massam (1990:180))

2.3.2. Macfarland (1995)

Macfarland, for her investigation, defines COCs as involving verb-noun pairs which are either zero-related or which share a root morpheme and are not derived by means of affixation.⁷ In addition, she invalidates the claim that COs must be modified, by using the following example:

(37) Fascism is dying a death 16 years after Franco.

(Headline in *The European*; cited in Mittwoch (1993:4))

As Visser (1963) points out, unmodified COs, as well as modified COs, are attested. Thus, Macfarland does not include a modification constraint in her definition of COCs.

Next, in order to clarify the status of COs as arguments, Macfarland (1995) argues along the lines of Jespersen and Quirk et al. that the CO is a result object, which is brought into existence as a result of the action denoted by the verb. According to her examination of a corpus of COCs, the verbs have a creation verb reading and the nouns have a result object interpretation. For example, a verb like *smile* has an activity interpretation when it occurs outside of the COC, but a creation interpretation when it occurs in the COC. On the basis of the observation that the verbs occurring in COCs get a creation verb reading, Macfarland includes in her analysis both verbs that are generally dealt with as intransitive (e.g. *smile*, *die*) and those that are generally considered transitive (e.g. *dance*, *sing*).

With regard to the definition of COs as result objects, Macfarland answers the question whether COs can be accompanied by definite determiners. The use of definite (strong) determiners usually presupposes the existence of the entity denoted by the noun. Thus, if the CO is interpreted as something which is only created by the

event described by the verb, i.e. an object of result, it cannot co-occur with these types of determiners. Macfarland, on the other hand, claims that COs are inherently definite:

- (38) Even if definiteness is understood in the pragmatic sense of invoking a previously mentioned discourse entity (see Birner (1992), Chafe (1976), Prince (1992), Rando and Napoli (1978), among others), cognate objects must be considered to be definite. In the cognate object construction, the verb evokes the following object: there is no smile without the action of smiling, no dance without the action of dancing, no thought without the action of thinking. Thus, whether cognate objects occur with definite/strong determiners or with indefinite/weak determiners, they must be considered definite. (Macfarland (1995:22))

This view is supported by the following data:

- (39) a. She smiled *her* sarcastic smile.
(W. Just, *The Translator*, 216; cited in Macfarland (1995:21))
- b. Diane Keaton smiles *that* infinitely fetching smile and elucidates: “But you know, mean, I say, hey, look, yeah, O.K.”
(M. Dowd, *New York Times*, 1; cited in Macfarland (1995:21))
- c. Scarlett giggled when she saw her aunts dancing *every* dance, even Eulalie’s usually sorrowful face was alight with pleasure.
(A. Ripley, *Scarlett*, 293; cited in Macfarland (1995:21))
- d. *All* intelligent thoughts have already been thought; what is necessary is only to think them again.

(J. W. v. Goethe, *Proverbs in Prose*; cited in Macfarland (1995:21))

- e. ...when the Giants announced Phil Simms as their first-round draft pick in 1979, I say: *The last laugh has now been laughed*, and was it ever a long one!

(D. Hickman, New York Times January 31, 1987, 26; cited in Macfarland (1997:3))

The COs in (39a-e) occur not only with the definite article, but also with other strong determiners such as the possessive *her*, the demonstrative *that*, and the quantifier *every* and *all*. Additionally, examples (39d, e) indicate that COs can occur as the subjects of passive sentences.

Macfarland uses further diagnostic tests as a means to demonstrate argument characteristics of COs: *though*-movement, VP-preposing, *do-so* copying, and long *wh*-movement. Citing Reinhart (1983), she argues that, since an argument, such as *that book* in (40a), is part of the VP, it can be preposed by means of *though*-movement, as in (40b) (cf. Ross (1973)):

- (40) a. I read that book_{ARGUMENT}.
b. Read that book though I did, (I didn't understand it).

(Macfarland (1995:103))

On the other hand, an adjunct is not regarded as part of the VP. For example, the adjunct *that day* in (41a) cannot be preposed along with the verb by *though*-movement, as shown in (41b):

- (41) a. I read that day_{ADJUNCT}.

- b. *Read that day though I did, (I didn't understand anything).

(Macfarland (1995:103))

According to Macfarland, *though*-movement can prepose COs. As is the case with *that book* in (40b), *a happy smile* in (42a) and *a slow dance* in (43a) can be preposed by *though*-movement, as shown in (42b) and (43b):

- (42) a. Chris smiled a happy smile.

- b. Smile a happy smile though Chris did, (everyone could see that her happiness was forced).

(Macfarland (1995:103))

- (43) a. Chris danced a slow dance.

- b. Dance a slow dance though Chris did, (no one questioned her energy).

(Macfarland (1995:103))

Similarly, according to Reinhart, VP-preposing moves an entire VP. The argument *that book* in (44a) can undergo VP-preposing since it is part of the VP. On the other hand, the adjunct *that day* in (44b) is not part of the VP. Therefore, it cannot undergo VP-preposing:

- (44) a. I wanted Chris to read that book on vacation, and read that book she did on vacation.

- b. *I wanted Chris to read that day on vacation, and read that day she did on vacation.

(Macfarland (1995:103))

Macfarland takes up the examples in which COs can readily be preposed:

- (45) a. I wanted Chris to smile a happy smile that day, and smile a happy smile she did that day.
- b. I wanted Chris to dance a slow dance at the ball, and dance a slow dance she did at the ball.

(Macfarland (1995:104))

As shown in (45a, b), *a happy smile* and *a slow dance* can undergo VP-preposing like the argument *that book* in (44a).

With respect to *do-so* copying, Macfarland cites Jackendoff (1977). Jackendoff proposes that *do so* functions as a proform for V-bar (cf. Lakoff and Ross (1966)). Thus, when *do so* is used as a substitute, it must stand for the verb and all its arguments. (46b) is not grammatical because *do so* does not stand for the verb and all its arguments:

- (46) a. I gave Chris a book, and John did so, too.
- b. *I gave Chris a book, and John did so a magazine.

(Macfarland (1995:104))

Adjuncts, on the other hand, may but need not be substituted by *do so* as in (47):

- (47) a. Chris arrived that morning_{ADJUNCT}, and John did so, too.
- b. Chris arrived that morning, and John did so at that afternoon.

(Macfarland (1995:104))

According to Macfarland, COs again pattern with arguments in that *do so* must include the verb and its CO, as shown in (48) and (49):

(48) a. Chris smiled a happy smile, and Mary did so, too.

b. *Chris smiled a happy smile, and Mary did so a sarcastic smile.

(Macfarland (1995:105))

(49) a. Chris danced a slow dance, and Mary did so, too.

b. *Chris danced a slow dance, and Mary did so a fat dance.

(Macfarland (1995:105))

She explains that examples (48b) and (49b) are ungrammatical since the COs are not substituted by *do so*.

Moreover, as is discussed in Cinque (1990) and Rizzi (1990), arguments allow long *wh*-movement. The argument *that book* in (50a) can be moved to initial position for a question, as in (51a). In contrast, the adjunct *that day* in (50b) cannot undergo such movement, as in (51b):

(50) a. Chris wondered [whether Lee read that book_{ARGUMENT}].

b. Chris wondered [whether Lee read that day_{ADJUNCT}].

(Macfarland (1995:105))

(51) a. ?What book_i did Chris wonder [whether Lee read t_i]?

b. *What day_i did Chris wonder [whether Lee read t_i]?

(Macfarland (1995:105))

Macfarland argues again that COs should be thought of as arguments rather than

adjuncts, since long *wh*-movement of COs is not ungrammatical. Observe the following:⁸

- (52) a. Chris wondered [whether Lee smiled a happy smile].
b. Chris wondered [whether Lee danced a slow dance].

(Macfarland (1995:105))

- (53) a. ?[What kind of smile]_i did Chris wonder [whether Lee smiled t_i]?
b. ?[What kind of dance]_i did Chris wonder [whether Lee danced t_i]?

(Macfarland (1995:106))

Long *wh*-movement is not impossible with the COs in (53a, b). From the above discussion, Macfarland concludes that COs are not adjuncts but arguments.

Macfarland relates the assumed argument status of COs to aspectual properties of COCs. Citing Olsen's (1994) classification of aspectual classes (State, Activity, Accomplishment, Semelfactive, Stage-Level-State), she claims that COCs belong to the class of Accomplishment, which carries the aspectual features [+telic], [+dynamic], [+durative]. For example, activity verbs such as *laugh*, *smile*, *sing* have the feature [+dynamic, +durative]. The addition of a CO to these verbs is assumed to express telicity of the event.

Macfarland's analysis predicts that stative verbs such as *know*, *remain*, *have*, which have the feature [-dynamic], are unlikely to appear in a COC. Indeed, Macfarland reports that these verbs are not found in her corpus.

Verbs such as *bark*, *bow*, *kiss* are, on the other hand, marked for the feature [+dynamic] only. Thus, these verbs are assumed to belong to the class of Semelfactive, which express the momentary and single occurrence of an action. The addition of a

CO assigns the features [+durative]:

(54) He bowed a bow/a little bow/his correct little bow.

- a. #but not for any amount of time/#but it was instantaneous
- b. #and not instantaneously/#?and it took time

(Macfarland (1995:144))

According to Macfarland, each CO in (54) describes one event of bowing that goes on over time. Macfarland mentions that her claim is supported by the fact that this meaning cannot be canceled without contradiction or reinforced without redundancy.

Finally, Macfarland examines the case of the verb *die*. In the literature, the verb *die* is often cited as an achievement verb (Dowty (1979), Pustejovsky (1992), Smith (1991), Tenny (1994), Van Valin (1990), Vendler (1957, 1967), among others). According to Olsen, achievement verbs have the features [+dynamic, +telic]. It is true that these features are compatible with the verb *die*. However, Macfarland argues that the verb *die* has the feature [+durative] and therefore belongs to the class of Accomplishment. Macfarland seeks support for her claim not only in the fact that the verb *die* is one of the most common verbs in COCs, but also in the fact that it allows both durative and momentary interpretations:

- (55) a. His father died instantly.
- b. His father died slowly, over a period of months.

(Olsen (1994:55))

The above observation leads her to conclude that the verb *die* is very similar to

other accomplishment verbs such as *build*. Compare the verb *die* with *build*. Each verb expresses the activity that leads to a change. For example, in building a house, the activity of building leads to a change which brings into existence the house. On the other hand, in dying, the activity of dying leads to a change which brings into existence a death. Therefore, Macfarland claims that the verb *die* is not a change-of-state achievement verb but a creation verb with a possible result object, *death*.

It has been often argued that achievement verbs tend to be unaccusative and thus the verb *die* should be unaccusative (cf. Levin and Rappaport Hovav (1995)). If Macfarland's analysis is correct, it might be concluded that the verb *die* is unergative rather than unaccusative.

2.3.3. Summary and Discussion

One of the major achievements of the argument analysis of COs has been to draw attention to the fact that there are examples where COs show argument-like properties, which appears to be similar to the properties resultant objects show.⁹ However, the argument analysis has some unsolved problems.

Massam contends that COs are structural objects of the verbs based on the following evidence: (i) COs cannot co-occur with direct objects; (ii) adverbials must not intervene between verbs and their COs; and (iii) COs undergo topicalization if they contain new information. However, we find serious problems with the data which she provides.

First, in (23), Massam presents examples where the CO cannot co-occur with the direct object. But, indeed, the expressions *a gruesome kill* and *slight move* are completely ungrammatical, because the verb *kill* and *move* never allow COs

(Matsumoto (1996)):

- (56) a. *Mordred killed a gruesome kill.
- b. *Ethel moved a slight move(ment).

(Matsumoto (1996:203, fn.5))

It would be overhasty to verify the argument status of COs on the basis of such dubious evidence.

Second, we should notice that there are examples in which COs are not adjacent to the main verbs, as follows:

- (57) a. When the President of the Board of Trade, in full court costume, appeared upon the scene, in the midst of the very realistic long-haired sea-ladies, the audience was half shocked for a moment by the utter incongruity of the situation; but after a while they began to discover that the incongruity was part of the joke, and they laughed quietly a sedate and moderate laugh of suspended judgment.

(Grant Allen, *Philistia*)

- b. I have dreamed just now a strange dream.

(Peter G. Beidler, *Masculinities in Chaucer*)

Note that the COs in (57a, b) do not satisfy the adjacency condition (cf. Stowell (1981)).

Third, Massam explains that the topicalized COs in (25) contain new information. However, note that all of them show the definiteness effect. As is well known, the use of definite articles indicates old information. The topicalization of COs could be used

to argue that definite COs can undergo topicalization, whereas indefinite COs cannot.

Fourth, there may be a serious problem with the Lexical Subordination process which creates the LCS of COCs. Let us consider the following example:

- (58) a. [x CAUSE [y_i BECOME EXIST]] BY [x *verb*]_i (= (33b))
b. Mr. Spock bleeds green blood. (Rice (1988:208))

In Massam's proposal, y_i is considered to be the event itself which is created by the action. However, not all COs denote events. According to Matsumoto (1996), the CO in (58b) denotes not an event but the object created by the physiological process. If the above lexical rule were on the right track, *green blood* would be equivalent to bleeding. Massam's argument does not seem convincing unless these problems are solved.

Macfarland, on the other hand, uses some diagnostic tests in order to demonstrate the argument status of COs. She argues that COs, like regular direct objects, can be preposed by *though*-movement and VP-preposing, while temporal adverbials such as *that day* cannot. Unfortunately, she misinterprets the adjunct analysis. The adjunct analysis never claims that the adjunct status of COs is equivalent to that of temporal adverbials. Rather, to support her refutation to the adjunct analysis, Macfarland should show the difference of behavior between COs and manner adverbials. Interestingly enough, VPs involving manner adverbials can readily be preposed by *though*-movement and VP-preposing, as follows:

- (59) a. Smile happily though Chris did, everyone could see that her happiness was forced.

- b. Dance slowly though Chris did, no one questioned her energy.
- (60) a. I wanted Chris to smile beautifully, and smile beautifully he did that day.
- b. I wanted Chris to dance slowly at the ball, and dance slowly he did at the ball.

Examples (59) and (60) are all perfectly acceptable. The above evidence indicates that *though*-movement and VP-preposing are useful not for supporting the argument status of COs, but rather for emphasizing the correspondence between COs and manner adverbials.

Likewise, *do-so* copying and long *wh*-movement do not serve as useful tests to demonstrate the argument status of COs. Macfarland argues that *do so* must stand for the verb and its arguments. According to her analysis, (61b) and (62b) are ungrammatical since *do so* does not stand for the verb and its CO as an argument:

- (61) a. Chris smiled a happy smile, and Mary did so, too.
- b. *Chris smiled a happy smile, and Mary did so a sarcastic smile.
- (= (48))

- (62) a. Chris danced a slow dance, and Mary did so, too.
- b. *Chris danced a slow dance, and Mary did so a fat dance.
- (= (49))

However, one might think that COs such as *a happy smile* and *a slow dance* can be analyzed as adjunct which adjoin to the V-bar headed by the verb. Radford (1988) provides an example in which the pro V-bar *do so* replaces an adjunct:

- (63) a. John will [put the book on the table], and Paul will *do so* as well.
 b. *John will [put the book] on the table, and Paul will *do so* on the chair.

(Radford (1988:234))

As shown in (63), *do so* can only replace the whole string [*put the book on the table*], not the substring [*put the book*], suggesting that the former and not the latter is a V-bar constituent. If in the COC the combination of the verb and its CO is treated as a unit, the unacceptability of (61b) and (62b) are not any longer attributed to the argument status of the COs.

Furthermore, Macfarland argues that COs pattern with arguments rather than adjuncts since long-*wh* movement of a CO is not ungrammatical:

- (64) a. ?[What kind of smile]_i did Chris wonder [whether Lee smiled t_i]?
 b. ?[What kind of dance]_i did Chris wonder [whether Lee danced t_i]?

(= (53))

However, long *wh*-movement for COs is marked “?” since it incurs a subjacency effect (Chomsky (1973)). It seems highly dubious whether such a syntactic test is based on the authentic language data Macfarland compiled.

Lastly, the argument analysis does not explore parallels between COs and manner adverbials in detail. According to the adjunct analysis, the COs which the verbs normally considered intransitive takes can mean the same as the corresponding manner adverbials. Furthermore, as pointed out in section 2.2.3, even the COs which the verbs considered transitive takes often perform the same function as manner adverbials. In identifying the nature of COCs, we should not ignore such instances.

2.4. Discourse-Functional Analysis of COCs

Both the adjunct analysis and the argument analysis conform to the essential principles of Generative Grammar, in which language is described in a strictly algorithmic fashion and independent of matters of actual usage. Discourse-functional analysis, on the other hand, focuses on the social and communicative functions of the linguistic system. In this subsection, to examine how COCs are dealt with by the discourse-functional analysis, let us review Takami and Kuno (2002), and Kuno and Takami (2004), due to their comprehensiveness.

2.4.1. Takami and Kuno (2002), and Kuno and Takami (2004)

Takami and Kuno (2002), and Kuno and Takami (2004) analyze the nature of COCs in connection with a discussion of the unergative/unaccusative distinction of intransitive verbs. Perlmutter, who first proposed to recognize the unergative/unaccusative distinction among intransitive verbs, provides the following examples of English unergative and unaccusative verbs (Perlmutter (1978), Perlmutter and Postal (1984)):

- (65) a. Unergative verbs
- (i) verbs describing willed or volitional acts, taking agents as their subjects (e.g. *smile, fight, laugh, dance, whisper*)
 - (ii) verbs describing certain involuntary bodily processes, taking experiencers as their subjects (e.g. *cough, belch, sleep, sneeze*)
- b. Unaccusative verbs
- (i) verbs whose subjects are semantically themes or patients (e.g. *burn, drop, tremble, float*)

- (ii) verbs of existing and happening (e.g. *hang, remain, happen, occur*)
- (iii) aspectual verbs (e.g. *begin, start, continue, end*).

Levin and Rappaport Hovav (1995), Massam (1990), Larson (1988), Keyser and Roeper (1984), Omuro (1990), Macfarland (1995), and Miyamoto (1999) argue that it is not unaccusative verbs but only unergative verbs that can take COs, from the contrasting examples such as those given in (66) and (67):

- (66) a. Mary laughed a sad laugh.
- b. Bob grinned a sideways grin.
- c. The wolf howled a long howl.
- d. Sue slept a sound sleep.
- e. Jack sneezed the tremendous sneeze I had ever heard.

(Takami and Kuno (2002:133))

- (67) a. *The glass broke a crooked break.
- b. *The apples fell a smooth fall.
- c. *Phyllis existed a peaceful existence.
- d. *She arrived a glamorous arrival.
- e. *Karen appeared a striking appearance at the department party.

(Takami and Kuno (2002:134))

The verbs *laugh, grin, howl, sleep, and sneeze* in (66) are unergative verbs describing volitional actions of their subject referents or involuntary bodily processes. On the other hand, *break* and *fall* in (67a, b) take subjects that are semantically themes or patients, and *exist, arrive, and appear* in (67c-e) are verbs of existence or appearance.

The verbs in (67) are all taken as unaccusative verbs. Therefore, the following restriction is proposed:

(68) Unergative Restriction on the Cognate Object Construction:¹⁰

Only unergative verbs can appear in the cognate object construction. No unaccusative verbs can. (Kuno and Takami (2004:107))

Takami and Kuno argue that the Unergative Restriction on the COC in (68) is incorrect and consider from a discourse-functional perspective the reason why sentences such as (66) are acceptable, whereas sentences such as (67) are not.

The starting point for their analysis is examples of the COC which involve verbs that have been assumed to be unaccusative verbs:

- (69) a. Mark Twain died a gruesome death. (Takami and Kuno (2002:140))
b. The tree grew a century's growth within only ten years.
c. The stock market dropped its largest drop in three years today.
d. The stock market slid a surprising 2% slide today.
e. Stanley watched as the ball bounced a funny little bounce right into the shortstop's grove.
f. The apples fell just a short fall to the lower deck, and so were not too badly bruised.

(Takami and Kuno (2002:142))

The verb *die* in (69a) is dealt with as a typical example of unaccusative verbs, taking a theme subject, since it represents a nonvolitional event concerning its subject referents.

Likewise, the verbs *grow*, *drop*, *slide*, *bounce*, and *fall* in (69b-f) are typical unaccusative verbs because they denote nonvolitional events and take theme subjects. The Unergative Restriction predicts that the examples in (69) should all be unacceptable. However, contrary to this prediction, they are perfectly acceptable. Hence, the authors claim that the Unergative Restriction is fatally flawed.

Instead of maintaining the Unergative Restriction, Takami and Kuno propose an alternative functional account of the requirements that the COC must satisfy. First, they argue that the verbs occurring with COs should be classified into intransitive verbs or transitive verbs. By their definition, the COC is a construction in which an intransitive verb takes a CO. Constructions in which transitive verbs take COs are dealt with not as examples of the COC but rather as ordinary transitive sentences that happen to have objects cognate with the verbs. To put it simply, the property of the main verb determines whether the sentence belongs to the COC. The authors introduce three criteria for this classification: passivization, *it*-pronominalization, and modification. Let us consider the following examples:

- (70) a. *A silly smile was smiled by Sam.
 b. A merry dance was danced by Sam.
 (Jones (1988:91))

- (71) a. Mona smiled a tantalizing smile. *Rose smiled *it*, too.
 (Horita (1996:243))
 b. Mary danced an exotic dance. She danced *it* to show us her experiences
 in Asian countries. (Takami and Kuno (2002:149))

- (72) a. *She smiled a smile. (Horita (1996:243))
 b. She danced a dance. (Horita (1996:222))

As shown in examples (70)-(72), the CO of the verb *smile* cannot undergo passivization and *it*-pronominalization, and further it needs modifiers, in contrast with the CO of the verb *dance*. Thus, Takami and Kuno class the verb *smile* as an intransitive verb and the verb *dance* as a transitive verb. Likewise, from the above criteria, they propose that the verbs *laugh* and *die* are intransitive verbs, whereas the verbs *live* and *scream* are transitive verbs. Therefore, the constructions where the verbs *smile*, *laugh*, and *die* occur are looked on as examples of the COC, while those where the verbs *dance*, *live*, and *scream* occur are dealt with as ordinary transitive sentences.

Not surprisingly, the verbs *dance*, *live*, and *scream* can take a wide range of object complements, unlike the verbs *smile*, *laugh*, and *die*. Let us take the verb *live* as a first example:

- (73) a. He lived *la dolce vita*. (*la dolce vita* = the sweet life)
b. “Living *la vida loca*” (*la vida loca* = the crazy life) (the title of a popular pop song by Ricky Martin)
c. Going to New Zealand will be living a fantasy he’s had for decades.
d. She has been living a dream in LA.
e. All their married life she has been living a lie. (a lie = a life with lies)
f. She sat down on a very solid patio chair and knew she was living a nightmare.
g. He was a man who had lived a sham, lived an untrue life, assumed a lifestyle and identity and activities that were all lies.

(Takami and Kuno (2002:149))

All the object complements in the above examples refer to specific types of life (e.g.

live a fantasy = *live a life of fantasy*) and their range seems to be much wider than the range of objects that the verbs *smile*, *laugh*, and *die* can take. The same holds true for the verbs *dance* and *scream*.

- (74) a. Mary *danced* a *jig/a piece* from Swan Lake.
b. Mary *screamed* the most hysterical *shriek/holler* I had ever heard.
c. The woman *screamed curses* at me.

(Takami and Kuno (2002:154))

Examples (73) and (74) seem to further support the authors' claim that the sentences where the verb *dance*, *live*, and *scream* co-occur with COs belong not to the COC but to the transitive construction.

Moreover, Takami and Kuno pay attention to the fact that so-called achievement verbs such as *break*, *arrive*, *appear* cannot occur in the COC. Observe the following examples:

- (75) a. *The glass broke a crooked break.

(Levin and Rappaport Hovav (1995:40))

- b. *She arrived a glamorous arrival.

(Levin and Rappaport Hovav (1995:148))

- c. *Karen appeared a striking appearance at the department party.

(Levin and Rappaport Hovav (1995:150))

The verbs *break*, *arrive*, and *appear* are generally thought of as intransitive verbs. However, COCs involving these verbs are not all acceptable. Compare achievement

verbs with activity verbs such as *smile* and *laugh*, which can readily occur in the COC. The former verbs do not represent processes but endpoints or results, and therefore they are not compatible with durative temporal adverbials such as *for an hour*. In contrast, the latter verbs are compatible with durative temporal adverbials since they represent processes:

(76) a. *The glass broke *for* three minutes.

(cf. The glass broke *in* three minutes.)

b. *She arrived *for* an hour.

(cf. She arrived *in* an hour.)

(Takami and Kuno (2002:159))

(77) a. John laughed *for* three minutes.

b. John ran *for* an hour.

(Takami and Kuno (2002:159))

From the above discussion, the authors conclude that the verb occurring in the COC is intransitive, representing an activity or event involving temporal process.

Next, Takami and Kuno invalidate the claim that COs should be morphologically related to the main verbs. Baron (1971), Konishi (1981), and Massam (1990) claim that verbs which can occur in the COC take only cognate nouns as objects, and that other nouns are incompatible with these verbs:

(78) a. ?*He *smiled* a silly *grin*.

(Massam (1990:165))

b. *He *died* a glorious *end*.

(Konishi (1981:12))

However, the authors point out that counterexamples are presented by some researchers:

- (79) a. He *slept* a fitful *slumber*. (Horita (1996:241))
b. Van Aldin *laughed* a quiet little *cackle* of amusement.
(Agatha Christie, *The Mystery of the Blue Train*; cited in Omuro (1990:76))
c. “Let’s wipe our brows and *smile* a graduation *grin*,” said Ms. Ator of Reisterstown.
(T. W. Waldron, *The Baltimore Sun*; cited in Macfarland (1995:90))

As seen in the examples in (79), including authentic language data, it is impossible to argue that the objects in the COC are necessarily cognate with the main verbs.

In order to explain the unacceptability of (78), Takami and Kuno advance the traditional assumption that COs are resultant objects. According to Takami and Kuno, in the COC, the CO (the whole NP) must represent subsets of the possible results of the actions represented by the verbs. Consider examples (79). Each of the COs in (79) represents what naturally results from the action represented by the verb. In (79a), the noun *slumber* is a synonym of *sleep*, and *a fitful slumber* can readily represent a state or event resulting from the act of sleeping. In (79b), similarly, laughing can readily result in *a quiet little cackle*. The authors say that the same situation holds for (79c).¹¹

On the other hand, sentence (78a) is not acceptable. The action represented by the verb *smile* generally shows happiness, amusement, or friendliness. But *a silly grin* does not have any such property and represent what results from the action represented by the verb *smile*. Likewise, in (78b), *a glorious end* euphemistically represents the death of a person but does not represent a subset of the results of dying. Therefore, the above observation leads the authors to postulate that the CO must represent a specific

state or event that is a subset of the possible states or events resulting from the activity or event.

Finally, Takami and Kuno argue that the COC is a marked construction and its use must be justified. The authors focus on the difference of acceptability between (80a, b) and (80c):

- (80) a. *The apples fell a smooth fall. (Levin and Rappaport Hovav (1995:148))
b. ??The apples fell a short fall. (Kuno and Takami (2004:124))
c. The apples fell just a short fall to the lower deck, and so were not too badly bruised. (= (69f))

The unacceptability of (80a) is due partly to the fact that its CO describes the manner, rather than the resultant event/state, of the falling of the apples. But (80b) is still marginal, though its CO describes the resultant event/state of the falling of the apples. In contrast, (80c) is acceptable to many native speakers. According to the authors, this contrast is due to the fact that while the speaker specifically explains in (80c) why he or she has chosen to mention the resulting event (i.e. a short fall) of the apples falling by saying that the apples were not too badly bruised, there is no such additional explanation in (80a) and (80b). Accordingly, the authors hypothesize the following constraint:

- (81) [...] the speaker's specific reference to the state or event represented by the cognate object must be either conventionally or contextually justifiable. (Kuno and Takami (2004:125))

The above constraint is also taken to account for the examples where COs occur as the subjects of passive sentences. Although Macfarland (1995) already points out that there are CO passive sentences whose subjects are definite NPs (see also section 2.3), Takami and Kuno provide examples of CO passive sentences whose subjects are unmodified and indefinite NPs:

- (82) a. Pictures were taken, *laughs were laughed*, food was eaten.
b. And the crowd responded with such outpourings of enthusiasm as I have never before witnessed. *Screams were screamed, cheers cheered, sighs sighed*, underwear thrown.
c. Everyone looks back on their childhood and no one can say it was all bad or all good because it's both and that's what makes it a happy childhood. *Laughs are laughed*, and some cheeks blush, but the memoirs of our youth is what has molded us into what we are today.

(Kuno and Takami (2004:128))

As observed in (82), the agents are not overtly expressed. Takami and Kuno argue that in these examples the referents of the *by*-phrases are already understood as the people or crowd in question, and therefore their overt expressions will lead to unnatural passive sentences:

- (83) a. ??Laughs were laughed by (the) people.
b. ??Screams were screamed by the crowd.

(Kuno and Takami (2004:128))

The authors mention that the *by*-phrases in these sentences are omitted in accordance with the information structure of passive sentences. Thus, it is postulated that a passive form of the COC is used for describing as new information the fact that the action denoted by the verb were performed. In addition, what contributes further to the acceptability of CO passive sentences in (82) is the juxtaposition of agentless sentences. From the above considerations, Takami and Kuno suggest that the COs in (82) are real objects/arguments, and not adjuncts, of the verbs.

2.4.2. Summary and Discussion

One of the advantages of Takami and Kuno's work is that they suggest that the acceptability of COCs is bound to the construction's semantic function and discourse factors, not to the Unergative Restriction. In order to account for the syntactic and semantic properties of the COC, the authors propose a discourse functional analysis. Unfortunately, there are serious problems with their analysis.

First, Takami and Kuno define the COC as a construction where an intransitive verb takes a CO, while the construction where a transitive verb takes a CO is not dealt with as the COC but as the transitive construction. To classify the verbs occurring in the COC into intransitive and transitive, the authors depend on three syntactic diagnostics, passivization, *it*-pronominalization, and modification. I agree that these syntactic criteria are useful for identifying the type of a COC. However, note that the COCs where the same verb occurs do not necessarily behave uniformly in all respects. For example, Takami and Kuno classify the verb *live* as a transitive verb. This analysis predicts that the passive form of the construction where *live* occurs is always grammatical. However, this is not the case:

- (84) a. A good life was lived by Susan. (Rice (1987:210))
 b. *An uneventful life was lived by Harry. (Jones (1988:91))

As observed in (84a, b), the CO *a good life* can be passivized, while *an uneventful life* cannot.

By the same token, Takami and Kuno's analysis predicts that the CO of the transitive verb *dance* can undergo *it*-pronominalization. However, the COs which the verb *dance* takes do not necessarily behave uniformly with respect to this criterion:

- (85) a. Mary danced a traditional dance, and *it* was noticeable.
 b. ?*Mary danced a staggering/nervous dance, and *it* was noticeable.
 (Horita (1996:240))

Notice that the CO *a staggering/nervous dance* cannot undergo *it*-pronominalization in (85b), while *a traditional dance* can in (85a). The same situation holds for the verb *smile* which is normally regarded as an intransitive verb:

- (86) a. Mary smiled a mysterious smile and *it* was attractive.
 b. Mary smiled a sudden smile and *it* was attractive.
 (Matsumoto (1996:206))

According to Matsumoto (1996), *it* in (86b) can refer to the whole sentence, *Mary smiled a sudden smile*, but not *a sudden smile*, while *it* in (86a) can refer to *Mary smiled a mysterious smile* as well as *a mysterious smile*. In addition, there are examples in which the verb *smile* allows an unmodified CO:

(87) She smiled a smile, and up she hopped.

(Thomas Hardy, *Life's little Ironies*)

Takami and Kuno's analysis cannot provide a natural explanation for why the COs of the same verb do not show the same syntactic behavior. Therefore, it is quite dubious that the syntactic properties of the COC are determined by the main verb alone.

In the COC, Takami and Kuno argue, the intransitive verb must represent an activity or event involving a temporal process and at the same time the object NP must represent a specific state or event that is a subset of the possible states or events resulting from the activity or event. On the other hand, the authors add that this constraint does not apply to the cases where the verb *die* takes a CO. As seen in (88), the verb *die* is taken as an achievement verb, since it is incompatible with *for an hour*. Nevertheless, the verb *die* can frequently appear in the COC, as in (89):

(88) a. *She died *for* an hour.

b. She died *in* an hour.

(Takami and Kuno (2002:159))

(89) a. Mark Twain *died* a gruesome *death*.

b. The general *died* the *death* of a hero.

c. No one wants to *die* a horrible *death*.

(Takami and Kuno (2002:140))

Takami and Kuno argue that the COC involving the verb *die* is an exceptional construction which has historically a different derivational process from the ordinary COC. According to *Oxford English Dictionary*, the noun *death* in 'to die a (specified)

death' represented instrumental in Old English, and was used in Middle English with various prepositions such as *by*, *with*, *on*, and *in*. Additionally, in *die a death*, *a* was originally the preposition *on* and came to be treated as an indefinite article much later. Accordingly, the authors claim that the whole object NP involving *death* does not represent a result of someone's death; rather, *die a specified death* describes how someone dies (Kuno and Takami (2004:124)).

Unfortunately, there are some problems with the description of the COC involving the verb *die* in *Oxford English Dictionary*. First, the cases where the CO bears a case other than accusative are not exceptional in Old English:^{12, 13}

- (90) a. forþon þe he her on eorþan *engelice life* [DAT] *lifde*.
 (= because he lived an angelic life here on earth) (BIHom 167. 33)
- b. þa *slepon* þa mædene *swa swarum slape* [DAT].
 (= the maiden slept so heavy a sleep) (ÆLS XXXV. 68-70)

According to Yamakawa (1980), the CO in the instrumental-dative represents how the action denoted by the verb is done. Therefore, the CO in Old English does not necessarily denote a state or event resulting from the activity represented by the verb.

Second, it is not rare for the COs of the verbs other than *die* to be used with various prepositions, as exemplified in (91):

- (91) a. They shall die of grievous deaths; they shall not be lamented; neither shall they be buried; (Jeremiah 16:4)
- b. The woman laughed with a bitter laugh.
 (Edward J. O'Brien, *The Masque of Poets: A Collection of New Poems*)

c. She smiled with the inward brooding smile of a Madonna.

(Edith Wharton, *Her son*)

In (91), the prepositions *of* and *with* intervene between the verbs and the COs. Therefore, it would be pointless to claim that the COC involving the verb *die* has historically a different derivational process from the ordinary COC.

Incidentally, as in the case of the argument analysis, Takami and Kuno do not take into account the fact that COs can alternate with the corresponding manner adverbials. For they consider that COs function as either resultant objects or direct objects of ordinary transitive verbs. In my opinion, the attempt to pin down the definition of COs to such categories would be one of the factors that create confusion in the description of COCs.

2.5. Conclusion

The purpose of this chapter has been to give an overview of generative or discourse-functional accounts of COCs in the English language. To solve their somewhat problematic status with respect to their morphological, syntactic, and semantic idiosyncrasies, many linguists working in the Chomskyan paradigm pay much attention to the syntactic status of COs. They treat COs uniformly as either arguments of the verb or adjuncts. Discourse-functionalists, on the other hand, propose some functional constraints on the use of the CO, taking into consideration its semantic function and discourse factors. However, closer look at COs shows that neither of such analyses can account for differences in syntactic and semantic behavior of COs. In fact, none of the previous studies which we have examined in this chapter provide any reasonable explanation for various properties of COCs (cf. Kitahara (2005, 2006,

2007, 2008, 2009)).

The standard analysis of COCs is reductionist. The reductionist approach assumes that a construction such as the intransitive or transitive construction is made of parts, and those parts are themselves defined independently of the constructions in which they occur. For example, various clausal constructions have verbs, which are analyzed as belonging to the same part of speech, intransitive or transitive, no matter what construction they occur in. The same units occur as parts of many different constructions. Ultimately, the decomposition of a construction will lead to a set of basic or primitive elements that cannot be analyzed further, and out of which constructions are built (Croft and Cruse (2004:284)). These atomic elements include grammatical categories such as intransitive or transitive verbs.

The reductionist approach to COCs has a significant shortcoming: It does not give a definitive answer to the question of why the COCs in which the same verb occurs do not show the same syntactic and semantic behavior. In accordance with the transitivity of the verbs occurring therein, Jones, Moltmann, Massam, and Takami and Kuno divide the COC from the non-COC. They define the COC as a construction in which an intransitive verb takes as its object only a noun cognate with it. Therefore, the construction where a transitive verb takes a CO is treated differently from the COC. This division cannot, however, be applied to all cases. Adopting the reductionist approach, then a decision must be made about verbs such as *dance*, *live*, or *smile*, which can take both 'superficial' COs and true COs: Do they simultaneously belong to both constructions, the transitive construction and the COC? Or do they form a third distinct class? Additionally, these reductionists do not examine why COCs consist of multiple types and how they are related to each other. In order to elucidate the nature of COCs, we need to answer these questions.

Macfarland, on the other hand, treats COCs uniformly as constructions in which a transitive verb takes a CO as a true object. As I have already pointed out in section 2.3.3, her analysis also has serious problems, which are nicely illustrated in inconsistency and circularity in the following comment by Macfarland (cf. Höche (2009)):

- (92) If a cognate object is a true object, then the verb with which it occurs is transitive. And if the verb occurring with a cognate object is a purely transitive verb (i.e., it cannot generally appear without an object), then the cognate object must be a true object. (Macfarland (1995:12))

That is, it is claimed that the verb *smile*, for example, is regarded as a transitive verb on the basis of the fact that it occurs with a CO; it is simultaneously argued that *smile* occurs with a CO because it is a transitive verb. This is where the circularity arises.

What is missing in many previous studies is the contribution of constructions themselves to the potentiality of linguistic expressions. To elucidate the complex nature of COCs, it is necessary to introduce the basic principles of construction grammar theories. In the next chapter, I will briefly delineate basic tenets and common goals of construction grammars and introduce those concepts, assumptions, and descriptive devices of the paradigm which are to be deployed for the depiction of COCs as an assembly of form-meaning correspondences in the remaining chapters of the thesis. In addition, I will point out some problems with the mainstream construction grammar approach to argument structures, in particular Goldberg (1995, 2006), and present an alternative, namely a lexical-constructional approach.

Notes to Chapter 2

^{1.} Previous studies which we review in this chapter (Jones (1988), Moltmann (1989), Massam (1990), Macfarland (1995), Takami and Kuno (2002), and Kuno and Takami (2004)) conform to the basic tenets of Generative Grammar, especially Chomsky's *Lectures on Government and Binding* (1981), or Discourse-Functional Grammar (Kuno (1973, 1978, 1983, 1987), Kuno and Takami (1993), Takami and Kuno (2002), Kuno and Takami (2004), etc.). For the convenience of discussion, I do not include cognitive linguistic analyses of COCs (Langacker (1991), Horita (1996), Höche (2009)), which have in common with my analysis. These analyses will be examined in detail in Chapters 4 and 5.

^{2.} Jones mentions that this idea raises interesting problems of execution at the theoretical level in that it appears to involve a Binding relation between non-identical syntactic categories which does not fall within the standard principles of the Binding Principles. However, he leaves these questions unresolved.

^{3.} Höche (2009) points out that Jones' approach parallels the model of "semantically internal" and "semantically external" modification (Ernst (1981), Langlotz (2007)). Internal modification directly applies to the head noun, while external modification has adverbial function, as illustrated in the following:

- (i) a. The lady carried out a *quick* attack on the tramp.
- b. The lady *quickly* carried out an attack on the tramp.

(Langlotz (2007:32))

According to Langlotz, *quick* in (i-a) functions as an external modifier, which expresses the same meaning with *quickly* in (i-b). As will be discussed later, I agree that modified COs often perform the same function as external modifiers.

4. Zubizarreta, on the other hand, claims that the CO is an adverbial which modifies an incorporated constant. See Zubizarreta (1987) for details.

5. Examples in (24) satisfy the adjacency condition in which the case assigner and the element to which case is assigned should be adjacent. The adjacency condition on case assignment was first proposed by Stowell (1981). Recent developments of Generative Grammar cast some doubt on the application of this principle (See also Haegeman (1994)). Additionally, there are many counterexamples to Massam's claim that COs must satisfy the adjacency condition, as will be shown in section 2.3.3.

6. See also Levin and Rapoport (1988) for more details about Lexical Subordination.

7. By using the term zero-related rather than zero-derived, Macfarland avoids controversy over whether the noun is derived from the verb or vice versa. See Macfarland (1995) for details.

8. Macfarland adds in a footnote that long *wh*-movement for arguments is marked “?” since it incurs subjacency effect (Chomsky (1973)). Long *wh*-movement for adjuncts, on the other hand, is supposed to be completely ungrammatical. See Cinque (1990) and Rizzi (1990) for details.

9. Massam and Macfarland share the view that the CO is the outcome of the action specified by the verb. However, Massam consider it as an eventive object, i.e. the noun which presents the event itself.

10. The use of the generic form “the cognate object construction” might to some extent reflect the basic assumptions of construction grammars. However, Takami and Kuno clearly state that they use the term ‘construction’ as a non-technical term, meaning

simply a ‘syntactic pattern.’

^{11.} I think that it is unclear whether the CO *a graduation grin* in (79c) represents what naturally results from the action denoted by the verb.

^{12.} *BlHom* = *The Blicking Homilies of the Tenth Century*, 3 vols. ed. by R. Morris, OS 58, 63, 73, London: EETS, 1874-80.

^{13.} *ÆLS* = *Ælfric’s Lives of Saints*, 4 vols. ed. by W. W. Skeat, OS 76, 82, 94, 114, London: EETS, 1881-1900.

Chapter 3

Construction Grammar Approaches to Argument Structures

3.1. Introduction

As mentioned in the preceding chapters, this thesis aims to propose a comprehensive account of COCs from a lexical-constructional perspective. As the name “lexical-constructional” implies, my approach is another variety of Construction Grammar. Naturally, it conforms to the basic principles of construction grammar theories. Therefore, before presenting my own analysis of the constructions, it is necessary and helpful to present an overview of construction grammars. The introduction here emphasizes the commonalities among the different models of Construction Grammar and the particular points where the lexical-constructional approach I adopt will be seen to differ from the other construction grammars, in particular, Goldberg’s version of Construction Grammar (Goldberg (1995, 2006)).

3.2. From Idioms to Constructions

The word ‘construction,’ from Latin *constructio*, has been used as a grammatical term for more than two thousand years (cf. Goldberg and Casenhiser (2006)). The existence of constructions in the grammar was taken to be a self-evident fact. Traditional grammarians took it for granted that the grammar of a language could be described in terms of a collection of constructions, where each construction was a configuration of syntactic elements (like clause, noun, preposition, gerund, etc.) paired with a meaning and/or use associated with that syntactic configuration (Lakoff

(1987:467)). Even in the early stages of Transformational Grammar (Chomsky (1957, 1965)), they retained their central role, construction-specific rules and constraints being the norm (Goldberg (1995:1)). However, from the 1980's to the 1990's, the pretheoretical notion of construction has come under attack. Syntactic constructions were considered epiphenomena, arising solely from the interaction of general principles (cf. Lakoff (1987)). For the rejections of constructions in favor of such general principles was assumed to be the only way to capture generalizing across patterns (Chomsky (1981, 1995)).

In the generative paradigm, constructions would be treated as by-products, as it were, of phrase structure and transformational rules. Take the transitive construction as an example. The construction, which we may characterize as $[NP_1 V NP_2]$, emerges as the product of phrase structure rules, namely, $S \rightarrow NP VP$, and $VP \rightarrow V NP$. Lexical insertion into the phrase marker then gives us instances of the construction, such as *The farmer shot the rabbit* (Taylor (2003:223)).

Naturally, there is an immediate problem with this account. For not every NP, and not every verb is eligible to fill the nodes of the phrase marker. The sentence **The envy slept the amoeba* is not possible (Taylor (2003:223)). In order to avoid such undesirable results, it is necessary to stipulate that only a subcategory of verbs, i.e. so-called transitive verbs, can be inserted into the phrase marker. In addition, it is also necessary to appeal to selectional restrictions holding between specific verbs and their subject and object NPs. As Taylor argues, such an approach presupposes that the class of transitive verbs is clearly defined, besides resting on certain assumptions concerning the nature of semantic features. We have already had occasion to question these assumptions in the previous chapter.

Taylor (2003) argues that there are two further problems with the generative

account. First, it ignores the role of the construction itself in determining the acceptability of its instances. The general meaning of a construction, for example, may rule out certain word combinations as unacceptable. Consider expressions such as *One more beer and I'm leaving*, *Another botch-up like that and you're fired*, *Two hours and we'll be home*. According to Taylor, the syntactic and semantic commonality of these expressions is that the initial nominal names some entity suggestive of a process which, when completed, constitutes the condition for the occurrence of the process stated after *and*. In principle, any lexical item which is compatible with the semantics of the construction can be inserted in it. It is important to note that these expressions are not isolated and productive.

The second problem is that the generative account ignores the role of idiomaticity in language. Idioms, by definition, are expressions which have to be specifically learned, and they cannot be assembled in accordance with general principles. Now, if the idioms in a language were relatively few in number, and if the idiomatic could be cleanly distinguished from the regular, non-idiomatic 'rest' of a language, the existence of idioms would not be particularly troublesome. The remarkable thing about idioms, however, is how many of them there are, and the many different ways in which an expression can be idiomatic.

For example, there are idioms whose semantic properties cannot be predicted, but which are syntactically quite unremarkable. From a syntactic point of view, *kick the bucket* is a regular VP. In its idiomatic sense "die," however, the expression obviously cannot be generated by inserting items selected from the lexicon. It has to be learned as such.

Furthermore, Taylor points out that there are expressions which contain a word which occurs nowhere outside of that expression. Consider *Aback*, which is virtually

restricted to occurring in the passive construction. We can have *I was taken aback by that remark*, but the active counterpart **That remark took me aback* is not acceptable. Taylor mentions that not only does this example show that the passive cannot be derived from the active, it also shows that *aback* cannot be listed in the lexicon except as part of the passive verb phrase *be taken aback*.

The expression *kick the bucket* is syntactically normal. On the other hand, other idioms have a syntax which is unique to the idioms in question. *By and large* coordinates what looks like a preposition (*by*) with what looks like an adjective (*large*). This pattern of coordination is attested nowhere else in English. Similarly, the structures of *none the less*, *never mind*, *eggs is eggs*, *far be it from me (to criticize)*, etc. are unique to these specific expressions.

The study of idioms, therefore, has led to calls for a rethinking of syntactic representation for many years. A number of researchers have emphasized the need to represent linguistic knowledge in a construction-like fashion. In particular, in Cognitive Linguistics, these concerns led to a grammatical framework in which all grammatical knowledge is represented in essentially the same way. Such a framework is generally called *Construction Grammar*, in which different expressions of constructional idioms have been studied, such as the correlative construction, e.g., *The more carefully you do your work, the easier it will get* (Fillmore, Kay, and O'Connor (1988)) and the *What's X doing Y* construction, e.g., *What's a nice girl like you doing in a place like this?* (Kay and Fillmore (1999)).¹

A theory of grammar should of course capture the differences among idioms and their relationship to the regular lexicon and regular syntactic rules of a language. However, the need for a theory that can accommodate idioms is even more crucial for constructional idioms. Construction Grammar's great attraction as a theory of

grammar is that it provides a uniform model of grammatical representation and at the same time captures a broader range of empirical phenomena than Generative Grammar (Croft (2001:17)).

The basic tenets of Construction Grammar have been developed in Fillmore and Kay (1993), Fillmore, Kay, and O'Connor (1988), Lakoff (1987), Langacker (1987, 1991), Brugman (1988), Goldberg (1995, 2006), Iwata (1998a, 2006a, 2006c, 2008a, 2008b), Michaelis and Lambrecht (1996), Kay and Fillmore (1999), Croft (2001, 2003), among others. In my opinion, the most extensive account to date remains Goldberg's (1995) monumental analysis of argument structure constructions such as the ditransitive construction, the caused-motion construction, the resultative construction, and the *way* construction. In fact, since the appearance of Goldberg's construction grammar, more and more linguists are turning to constructions as useful tools for linguistic analysis in the field of research on argument structures (Iwata (2006c:493)). In what follows, we briefly introduce the basic assumptions of Construction Grammar. In order to clarify the view of Construction Grammar, detailed reference will be made to Croft (2001, 2003), Croft and Cruse (2004), and Iwata (2006c, 2008a).

3.3. Constructions and Construction Grammar

Construction Grammar represents a reaction to the componential model of the organization of a grammar that is found in other syntactic theories, especially Government and Binding theory. In the componential model, different types of properties of an utterance – its sound structure, its syntax, and its meaning – are represented in separate components, each of which consists of rules operating over primitive elements of the relevant types. The word is the only level where information from different components meets together. It represents conventional associations of

phonological form, syntactic category, and meaning. Correspondence at higher levels could be accommodated only by resorting to linking rules that link complex syntactic structures to their semantic interpretation or to their phonological realization (Jackendoff (1997, 2002), Culicover and Jackendoff (2005)). The componential model is illustrated as follows:

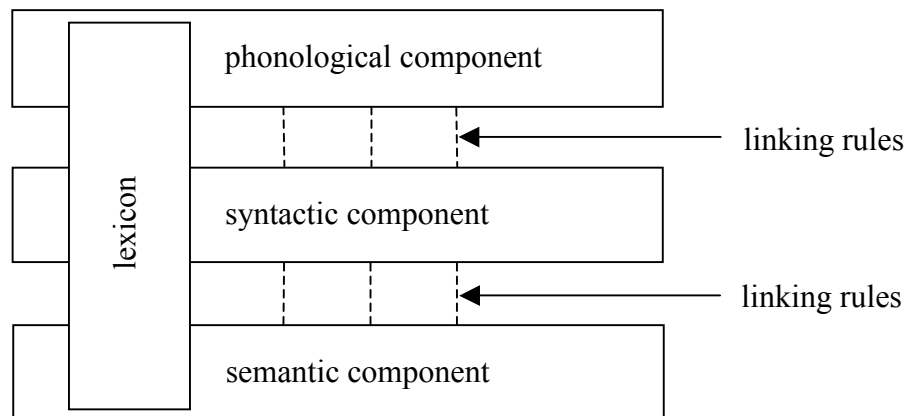


Figure 3.1. The componential model of the organization of a grammar (adapted from Croft (2001:15))

Many current theories are built upon the basic concept of the componential model as in Figure 3.1, in which grammatical properties of different types are placed in separate components, except for the lexicon. However, as already pointed out in section 3.2, there is a problematic phenomenon for the componential model, namely idioms. Idioms are linguistic expressions that are syntactically and/or semantically idiosyncratic in various ways, but are larger than words. Hence they cannot be assigned to the lexicon without some special mechanism. Idioms are often semantically idiosyncratic, which means that they do not follow general rules of

semantic interpretation. Instead, they have their own rules of semantic interpretation (Iwata (2006c:495)). Unfortunately, the form-meaning correlation at levels larger than the word cannot be captured in the componential model. As seen in Figure 3.1, form and meaning are correlated only in the lexicon.

In sharp contrast to the componential model, Construction Grammar holds that grammatical constructions, like the lexicon in other syntactic theories, consist of pairings of form and meaning that are at least partially arbitrary. Even the most general syntactic constructions have corresponding general rules of semantic interpretation. That is, constructions are fundamentally symbolic units:

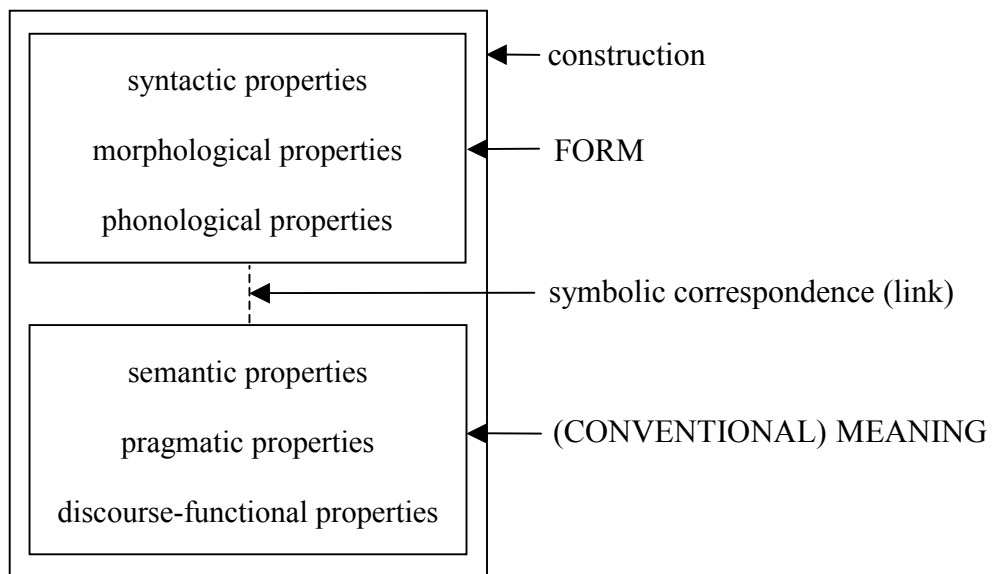


Figure 3.2. The symbolic structure of a construction (adapted from Croft (2001:18))

In Construction Grammar, the term ‘meaning’ is intended to represent all of the conventionalized aspects of a construction’s function, which may include not only

properties of the situation described by the utterance but also properties of the discourse in which the utterance is found and of the pragmatic situation of the interlocutors.

More importantly, Construction Grammar does not assume a strict dichotomy between lexicon and syntax. Instead, it is assumed that there is a continuum between the lexicon and syntactic structures. Everything from words to the most general syntactic and semantic rules like passives can be represented as constructions (Iwata (2006c:495)). Therefore, idioms and constructional idioms like those noted above can be readily accommodated within Construction Grammar.

According to Croft (2001), the central essential difference between componential syntactic theories and Construction Grammar is that the symbolic link between form and conventional meaning is internal to a construction in the latter, but is external to the syntactic and semantic components in the former (as linking rules). As shown in Figure 3.3, the componential model assumes that the various syntactic structures are organized independently of the corresponding semantic structures. Therefore, linking rules are necessary to ensure the form-meaning correspondence:

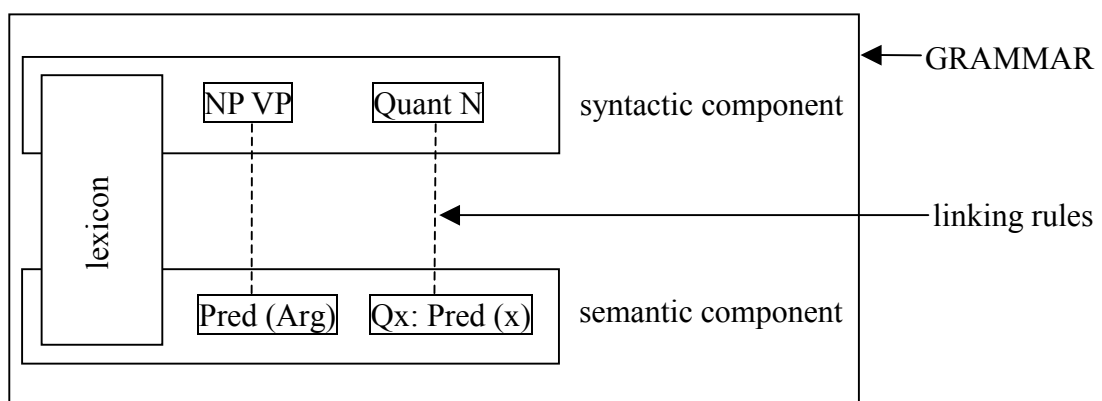


Figure 3.3. The relation between form and function in a componential syntactic

theory (adapted from Croft (2003:19))

In contrast, in Construction Grammar, the basic linguistic units are symbolic, and are organized as symbolic units, as represented in Figure 3.4:

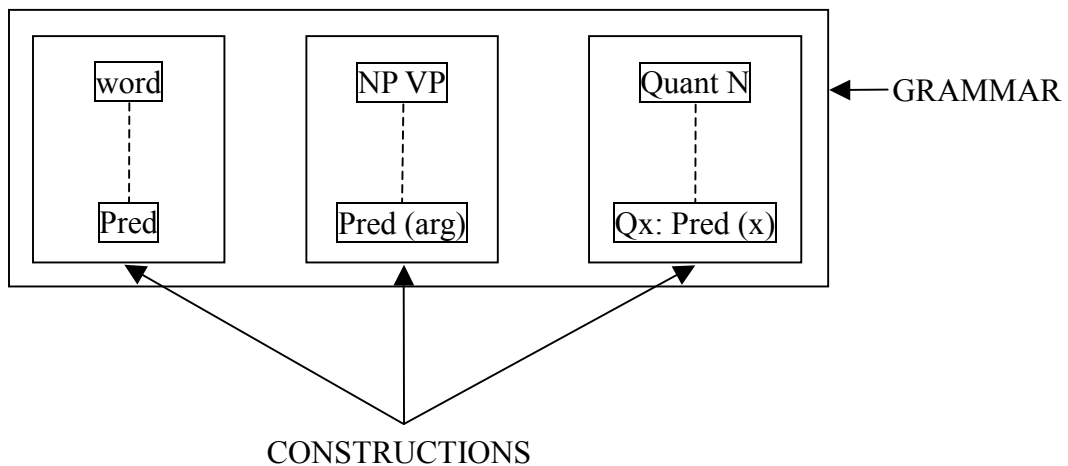


Figure 3.4. The relation between form and function in Construction Grammar (adapted from Croft (2001:19))

As a consequence, the internal structure of the basic (symbolic) units in Construction Grammar is more complex than that of basic units in the componential model.

The internal structure of a construction is the morphosyntactic structure of sentences that instantiate constructions. This difference between the componential model and Construction Grammar can be appreciated by comparing two ways of representing a simple intransitive sentence like *Heather sings*, which is regarded as an instance of the intransitive construction:

(a) Generative Grammar:

[[Heather]_{NP} [sings]_{VP}]_S

(b) Construction Grammar:

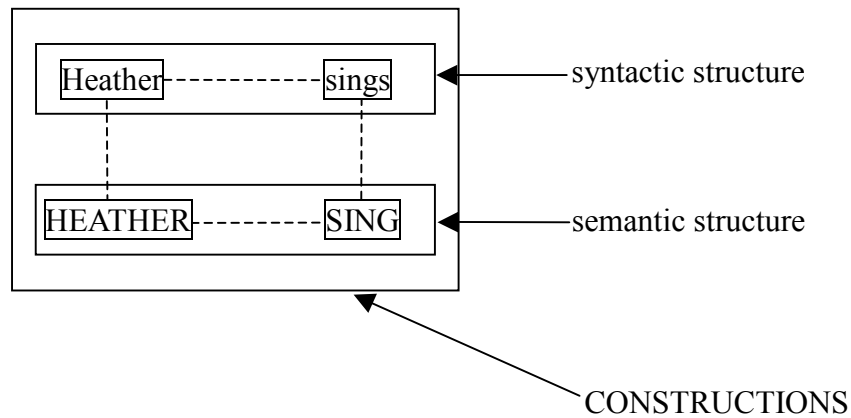


Figure 3.5. Simplified Generative and Construction Grammar representations of *Heather sings* (adapted from Croft (2001:20))

Comparing a simplified representation of *Heather sings* in Generative Grammar to a simplified representation of the same in Construction Grammar, we can see that they are actually rather similar, but crucially the Construction Grammar representation is symbolic.

Various attempts have been made in Generative Grammar to achieve the same effect as constructions. However, there is one fundamental difference between Generative Grammar and Construction Grammar. In Construction Grammar, there can be no “linking rules.” After all, form and meaning are paired from the start (Iwata (2006c:497)).

3.4. The Organization of Constructions

In general, Construction Grammar is defined as an inventory of constructions, where constructions range from morphemes, words to syntactic structures. However, constructions are not merely an unstructured list in Construction Grammar. Constructions form a structured inventory of a speaker's knowledge of the conventions of their language (cf. Langacker (1987)). This structured inventory is usually represented by construction grammarians in terms of a taxonomic network of constructions. Each construction constitutes a node in the taxonomic network of constructions.

Any construction with unique, idiosyncratic properties must be represented as an independent node in the constructional network in order to capture a speaker's knowledge of their language. For example, the idiom [SBJ *kick the bucket*] must be represented as an independent node because it is semantically idiosyncratic. The more schematic but verb-specific construction [SBJ *kick* OBJ] must also be represented as an independent node in order to specify the verb's argument structure (which corresponds to the subcategorization frame in older Generative Grammar). Finally, the wholly schematic construction [SBJ TRVERB OBJ] is represented as an independent node (corresponding to the phrase structure $S \rightarrow NP VP$ and $VP \rightarrow V NP$).

These constructions are independent but related in terms of schematicity. For example, several levels of schematicity can be represented between the idiomatic phrase *kick the bucket* and the most schematic representation of the verb phrase, as in Figure 3.6. Taxonomic relations between constructions allow construction grammarians to distinguish and yet relate the grammatical knowledge that is represented by different formal devices in the componential models of grammar. In Figure 3.6, the top two levels in the taxonomy corresponds to the phrase structure rule $VP \rightarrow V NP$ in a

componential model; the third level corresponds to the subcategorization frame *kick* [_ NP]; and the lowest level an idiomatically combining expression *kick the bucket*, which would be listed in the lexicon in the componential model.

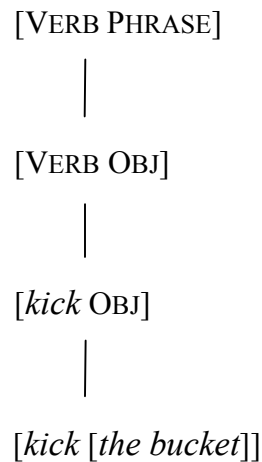


Figure 3.6. Levels of schematicity (adapted from Croft and Cruse (2004:263))

Thus, taxonomic relations complement the uniform representation of grammatical knowledge posited by Construction Grammar. Taxonomic relations allow construction grammarians to distinguish different kinds of grammatical knowledge while acknowledging the existence of the syntax-lexicon continuum.

Of course, *kick the bucket* has the same argument structure pattern as ordinary transitive uses of *kick* like *kick the habit*, and ordinary transitive uses of *kick* follow the same argument structure pattern as other transitive verb phrases like [*kiss* OBJ]. Thus, the three constructions, [SBJ *kick the bucket*], [SBJ *kick* OBJ], and [SBJ TRVERB OBJ], can be represented in a taxonomic hierarchy, as in Figure 3.7:

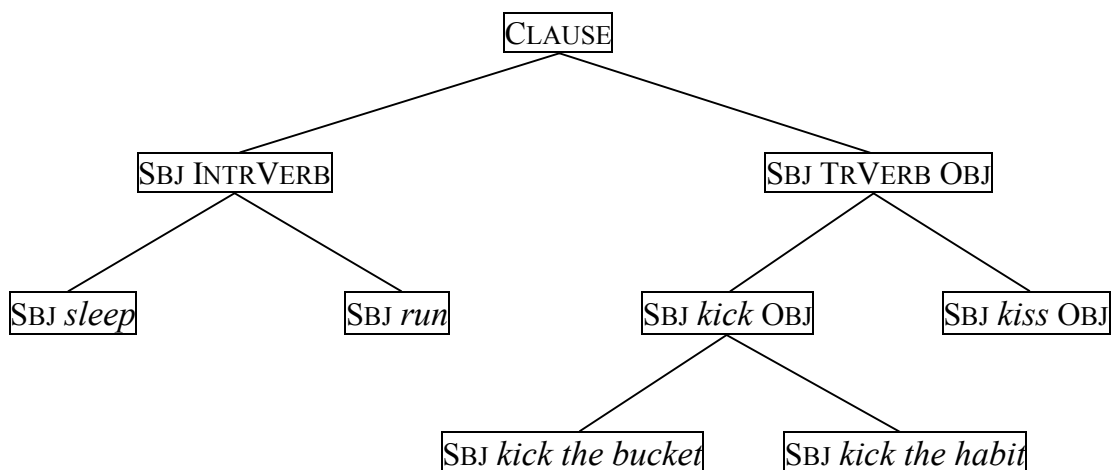


Figure 3.7. A taxonomic hierarchy of clause types (adapted from Croft and Cruse (2004:264))

However, grammatical constructions do not form a strict taxonomic hierarchy. One of the simplifications in the hierarchy of constructions in Figure 3.7 is the exclusion of tense-aspect-mood-negation marking, expressed by auxiliaries and verbal suffixes. If those parts of an utterance are included, then any construction in the hierarchy in Figure 3.7 has multiple parents. For example, the sentence *I didn't sleep* is an instantiation of both the intransitive construction and the negative construction, as illustrated in Figure 3.8:

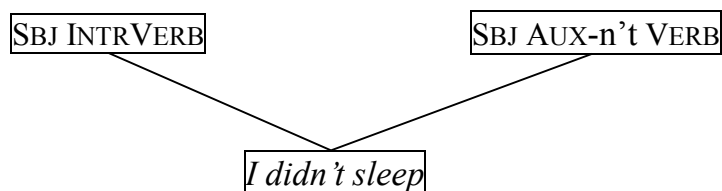


Figure 3.8. Multiple parents in a construction taxonomy (adapted from Croft and Cruse (2004:265))

As seen in Figure 3.8, the sentence *I didn't sleep* has multiple parents in the taxonomy of constructions to which it belongs. This is a consequence of each construction being a partial specification of the grammatical structure of its daughter construction(s). For example, the negative construction only specifies the structure associated with the subject, verb, and auxiliary; it does not specify anything about a verb's object (if it has one), and so there is no representation of the object in the negative construction in Figure 3.8.

Such multiple parents are the norm rather than the exception, since a construction typically provides only a partial specification of the structure of an utterance. For example, the ditransitive construction [SBJ DITRVERB OBJ1 OBJ2] only specifies the predicate and the linking to its arguments. It does not specify the order of elements. Thus both (1a) and (1b) instantiate the ditransitive construction, but the order of elements is different between the two cases, because (1b) instantiates the cleft construction as well. Similarly, (1c) and (1d) also instantiate the ditransitive construction, but they contain additional materials, which are due to other schematic constructions, namely the declarative construction and the interrogative construction:

- (1) a. He gave her a book.
- b. It was a book that he gave her.
- c. He won't give her the book.
- d. Wouldn't he give her the book?

(Croft (2001:26); cited in Croft and Cruse (2004:264-265))

Hence, any specific utterance's structure is specified by a number of distinct schematic constructions.

Another thing worth noting is that constructions display many of the same properties that lexical items show, such as polysemy and metaphorical extensions. As Croft (2003) points out, some constructions are polysemous, with multiple senses or uses. For example, the English present perfect construction exhibits both existential and “hot news” readings, as in the following:

- (2) a. President Clinton **has visited** Kosovo. [existential reading]
b. President Clinton **has announced** that America will invade Kosovo!
[“hot news” reading]
(Croft (2001:27))

Some constructions have meanings that are metaphorical extensions from their basic meaning, just as many words do. An example of a metaphorical extension of a construction is the perceptual deictic *there*-construction, illustrated in (3), which is a metaphorical extension from the central deictic *there*-construction illustrated in (4):

- (3) a. **Here comes** the beep.
b. **There’s** the beep.
(Lakoff (1987:511); cited in Croft (2001:27))
- (4) **There’s** Harry.
(Lakoff (1987:509); cited in Croft (2001:27))

According to Lakoff (1987), the perceptual deictic describes the impending (3a) or just-realized (3b) activation of a nonvisual perceptual stimulus, for example an alarm clock that is about to go off. To express this meaning, the perceptual deictic uses the

metaphor of deictic motion of a physical entity in physical space, expressed in the presentational deictic.² Thus *go* and *come* are used in this construction not to indicate motion, but to indicate activation, for example, activation of a signaling device like an alarm or activation of a pain, as in:

(5) There *goes* the throbbing in my head again. (Lakoff (1987:511))

All this indicates that constructions display many of the same properties of lexical items, such as polysemy and metaphorical extensions. More generally, constructions, like lexical items, represent categories. Therefore, Construction Grammar may well draw on cognitive theories of categorization in its modeling of construction taxonomies.

3.5. Goldberg's Constructional Approach to Argument Structures

In the early years construction grammarians tended to define their model in opposition to what was then the dominant paradigm in the discipline, namely the theory of Generative Grammar. However, Construction Grammar has developed to the point where it can be considered a mature, autonomous theory of language in its own right. Undoubtedly, one of the most important contributions in the development of Construction Grammar has come from Adele Goldberg.

In her now classic work *Constructions: A Construction Grammar Approach to Argument Structure*, Goldberg (1995) develops a systematic account of argument structure constructions as form-meaning correspondences. Argument structure constructions are described as a special subclass of constructions that provides the basic means of clausal expressions in a language.

First, Goldberg aims to explicate the semantics associated with the particular

argument structures. It has long been recognized that differences in complement configuration are often associated with differences in meaning. For example, the ditransitive verb requires that its goal argument be animate, while the same is not true of paraphrases with *to*:

- (6) a. I brought Pat a glass of water. (ditransitive)
b. I brought a glass of water to Pat. (Goldberg (1995:2))
- (7) a. *I brought the table a glass of water. (ditransitive) (Goldberg (1995:2))
b. I brought a glass of water to the table. (Partee (1965:60))

Much attention has been drawn to systematic differences in meaning between sentences with the same lexical items in slightly different constructions (Partee (1965, 1971), Jackendoff (1972, 1983, 1990), Borkin (1974), Green (1974), Oehrle (1976), Wierzbicka (1988), to name a few). Similar observations of subtle differences in meaning led Dwight Bolinger to conclude that a difference in syntactic form always spells a difference in meaning (Bolinger (1968:127); cf. Bolinger (1977)).

Goldberg assumes that systematic differences in meaning between the same verbs in different constructions are attributed directly to the particular constructions. According to her definition, a distinct construction is defined to exist if one or more of its properties are not strictly predictable from knowledge of other constructions existing in the grammar:³

- (8) C is a CONSTRUCTION iff_{def} C is a form-meaning pair $\langle F_i, S_i \rangle$ such that some aspect of F_i or some aspect of S_i is not strictly predictable from C's

component parts or from other previously established constructions.

(Goldberg (1995:4))

Constructions are taken to be the basic units of language. Phrasal patterns are considered constructions if something about their form or meaning is not strictly predictable from the properties of their component parts or from other constructions. That is to say, a construction is posited in the grammar if it can be shown that its meaning and/or its form is not compositionally derived from other constructions existing in the language.

One of the most prominent characteristics of Goldberg's theory is that it reduces the number of lexical entries of verbs, and instead considers constructions as those units which 'bring along' a meaningful distribution of arguments (Höche (2009:100):

- (9) In Construction Grammar, instead of predicting the surface form and interpretation solely on the basis of the verb's independent specifications, the lexical verb is understood to combine with an argument structure construction [...]. Verbs constrain the type of argument structure constructions they can combine with by their frame-specific semantics and particular obligatory roles, but they typically can combine with constructions in several ways.

(Goldberg (1997:70); cited in Höche (2009:100))

Goldberg observes the semantic restrictions on verbs and their fusion with particular constructions. They specify preferred argument arrangements for particular verbs based on their specifications. However, independent specifications offered by the

main verb alone are often not sufficient for the interpretation and form of a clause, but are part of the individual construction in which a verb is used. The more schematic argument structure constructions provide a direct link between surface form and general aspects of the interpretation. In the default case, the number of participants a verb is usually associated with corresponds with the number of argument roles offered by the construction. Nevertheless, there can be mismatches between the specifications of a verb and the specifications of the construction. Goldberg demonstrates with a number of cases that a construction can enrich the participant constellation conventionally associated with a particular verb. For example, the participants of *kick* are kicker and kicked, and the arguments of the ditransitive construction are agent, patient, and recipient. The ditransitive construction therefore contributes a recipient role not associated with a participant role of the verb. The roles are fused as follows:

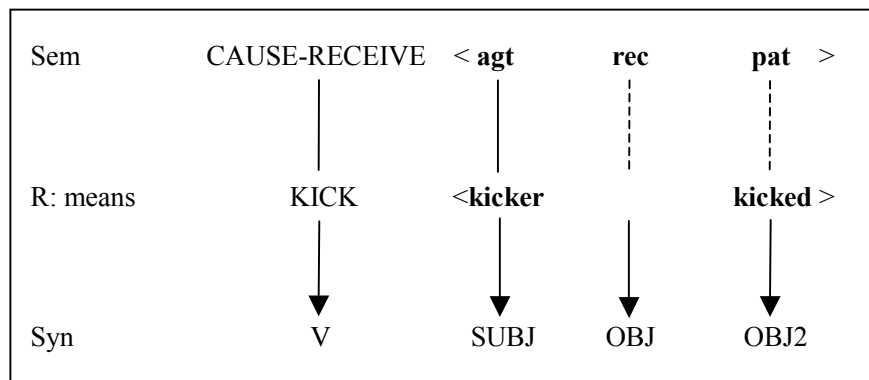


Figure 3.9. Composite Structure: Ditransitive + *kick* (Goldberg (1995:54))

CAUSE-RECEIVE <agt rec pat> is the semantics associated directly with the construction, while KICK <kicker, kicked> is that of the verb. The semantic roles associated with the construction (= argument roles) are fused with those associated with the verb (=

participant roles). Thus, the two participant roles of *kick* are put in correspondence with the argument roles. On the other hand, the recipient role is contributed by the construction. This structure yields sentences like (19):

- (10) Joe kicked Bill the ball. (Goldberg (1995:54))

Thus, argument structure constructions are regarded as meaningful syntactic assemblies which specify and even add to the semantics of verbs occurring in the particular construction.

Incidentally, while Goldberg deals with argument structure constructions as pairings of form and meaning, her emphasis is more upon the cases in which constructions superimpose their syntax and semantics upon lexical verbs, like those exemplified in (11):

- (11) a. He sneezed the napkin off the table. (Goldberg (1995:9))

b. She smiled herself an upgrade.

(Douglas Adams, *Hitchhiker's Guide to the Galaxy*; cited in Goldberg (2006:6))

c. We laughed our conversation to an end.

(Josephine Hart, *Sin*; cited in Goldberg (2006:6))

Notice also that the representation which Goldberg employs as in Figure 3.9 is suited for capturing the top-down character of constructions. Figure 3.9 visually represents that the syntax and semantics of the ditransitive construction are superimposed upon the verb *kick*.

One might think that Goldberg's constructional approach to argument structures

has already been established. Certainly, her approach is excellent. However, Goldberg (1995) is a starting point, rather than the end point, of constructional approaches to argument structure (Iwata (2008a)). In fact, her approach has some problems which remains unresolved.

One thing still needing work concerns how to represent verb meanings. Goldberg avows herself to take into consideration rich frame-semantic knowledge associated with verbs (Fillmore (1975, 1977, 1982), Langacker (1987, 1991), Lakoff (1987)).⁴ However, in her theory, the verb meaning is represented simply as a set of semantic roles. Thus, the need for a far more detailed analysis of verb meanings has been voiced by a number of scholars: Hirose (1996), van der Leek (1996), Nemoto (1998), Boas (2003), Iwata (1998a, 2006a, 2006c, 2008a, 2008b), Kitahara (2009), and so on.

Another respect in which Goldberg's theory needs to be carefully reexamined concerns levels of schematicity of the constructions posited. Goldberg (1995) argues for the following argument structure constructions:

- | | | | | |
|------|----|-----------------|------------------------|-----------------------------|
| (12) | 1. | Ditransitive | X CAUSE Y TO RECEIVE Z | Subj V Obj Obj ₂ |
| | 2. | Caused Motion | X CAUSES Y TO MOVE Z | Subj V Obj Obl |
| | 3. | Resultative | X CAUSES Y TO BECOME Z | Subj V Obj Xcomp |
| | 4. | Intrans. Motion | X MOVES Y | Subj V Obl |
| | 5. | Conative | X DIRECTS ACTION AT Y | Subj V Obl _{at} |

(adapted from Goldberg (1995:3-4))

As Iwata (2006c) points out, these constructions are quite abstract, with a skeletal syntax and a highly schematic semantics. In recent years, some construction grammarians have begun to wonder whether these abstract constructions are really

sufficient, pointing out the necessity to refer to lower level exemplars or lower level constructions: Boas (2003, 2005), Iwata (2006a, 2006c, 2008a, 2008b), among others.

Last but not least, Construction Grammar is not a theory suitable for idiom-like phenomena alone. Many linguists seem to feel that constructions are special mechanisms that aim to rescue recalcitrant, non-compositional cases like (11), which cannot be dealt with by the mechanisms that handle the form-meaning correspondences of ordinary, compositional cases. Undoubtedly, this feeling can be traced back to Goldberg's constructional approach (Iwata (2008a:28)). On the other hand, many construction grammarians commit to the constructional view readily analyze compositional cases in constructional terms (Croft (2001), Croft and Cruse (2004), Tomasello (2003), Iwata (2006c, 2008a), to name a few). Therefore, we must realize that Construction Grammar is by no means a theory limited to non-compositional cases alone.

Iwata (2008a) shows that by taking into consideration both the need for a more careful analysis of verb meanings and levels of schematicity, a theory of constructions which takes a fundamentally usage-based view will emerge (cf. Langacker (1988, 1999), Barlow and Kemmer (2000)). Such an approach is called *a lexical-constructional approach*, which is designed to account not only for non-compositional cases but also for compositional cases. In the next section, I will show what are the main features that distinguish the lexical-constructional approach adopted here from other versions of Construction Grammar, especially Goldberg (1995, 2006).

3.6. A Lexical-Constructional Approach

As mentioned above, some problems are found in the version of Construction Grammar proposed by Goldberg (1995, 2006). Therefore, instead of introducing

Goldberg's construction grammar approach, this thesis adopts a lexical-constructional approach and proposes a comprehensive account of English COCs. The present study would lead to the development of a constructional theory which overcomes a number of problems found in previous studies on the constructions. In what follows, I highlight three main features that distinguish a lexical-constructional approach from other construction grammars, in particular Goldberg's version of Construction Grammar.

3.6.1. Grammatical Categories Are Construction-Specific

Goldberg argues that one should analyze participant roles in complex events as derived from the event itself, following the principles of frame semantics.⁵ For example, the participant roles of the verb *kick* are kicker and kicked. Although the frame semantics associated with the verb is not adequately taken into consideration, this analysis of participant roles is an example of a nonreductionist representation: the complex event or situation is treated as the primitive unit of semantic representation, and the definitions of the roles in the events are derived from the situation as a whole (Croft and Cruse (2004:272)). In contrast, Goldberg's analysis of syntactic roles and relations in argument structure constructions is reductionist. Goldberg employs a set of atomic primitive grammatical relations such as subject and object, and primitive syntactic categories such as verb.

Like Goldberg (1995, 2006), most syntactic theories posit certain grammatical categories as primitives (which are allegedly universal) and use them to define grammatical constructions. William Croft, on the other hand, claims that the direction is opposite: constructions are used to define grammatical categories. In his *Radical Construction Grammar*, it is even suggested that syntactic categories are derivative of, in fact epiphenomenal to, the representation of grammatical knowledge (Croft

(2001:46)).

Grammatical categories can be defined in two different ways. Categories can be defined either construction-specifically, as the class of fillers of particular roles in a single construction, or cross-constructionally, as the class of fillers that has an identical distribution across the relevant roles for all constructions of the language, or at least some specified set of constructions in the language. That is, what is basic is the constructions, and the constructions define the categories, either individually or jointly.

According to Croft, this approach solves the problem of the lack of exclusive partitioning of lexical items into atomic primitive categories. Reductionist theories of syntax allow for an element, i.e. a category, to be part of more than one construction. For example, the part of the intransitive construction [SBJ VERB] labeled ‘Verb’ is also assumed to be a part of the transitive construction as well. However, the class of “Verbs” that can occur in the transitive construction is not the same as that of “Verbs” that can occur in the intransitive construction. After all, not all verbs that occur in the intransitive construction can occur in the transitive construction, or vice versa (Iwata (2006c:501)).

Moreover, this reasoning applies with equal force to other categories, e.g. Subject, Object, as well. Accordingly, in Radical Construction Grammar, the intransitive construction and transitive construction are represented by means of [IntrSbj IntrVerb] and [TrSbj TrVerb TrObj], respectively.⁶

Naturally, it is absolutely essential to recognize that the commonalities across the subcategories found in various constructions must be justified linguistically. If we need a justification for a category subsuming intransitive and transitive verbs, it is reasonable to posit a morphological construction of Tense-Agreement inflection because intransitive verb and transitive verb exhibit the same Tense-Agreement inflection.

However, it must be emphasized that this justification comes from outside the purview of argument structure constructions.⁷

In short, constructions come first in Croft's Radical Construction Grammar. Grammatical categories are derivative of constructions, and are not primitives. Following Croft (2001), the lexical-constructional approach adopted here assumes that there are no atomic grammatical primitives and that grammatical categories are construction-specific.

3.6.2. Heads Are Construction-Specific

Croft points out that the traditional notion of head is relatively recent. The first reference to heads by Croft is Sweet (1891):

- (13) The most general relation between words in sentences from a logical point of view is that of adjunct-word and head-word [...] *book (books)* is an adjunct-word in *book-seller, book-selling, sale of books, he sells books, he sold his books*, the corresponding head-words being *seller, selling, sale, sells, sold*. (Sweet (1891:16); cited in Croft (2001:254))

Unfortunately, Sweet does not define what a head-word is in general. The head-adjunct distinction is taken as self-evident. According to Croft, these terms evoke the syntactic asymmetry rather than any pretheoretical characterization of the "dominant" element.

As with Sweet, Jespersen (1924) focuses on the asymmetric relation, though he does not use the word 'head' and does not define what determines which is the 'dominant' one in the relationship:

(14) In any composite denomination of a thing or person [...], we always find that there is one word of supreme importance to which the others are joined as subordinates. This chief word is defined (qualified, modified) by another word, which in turn may be defined (qualified, modified) by a third word, etc. We are thus led to establish different ‘ranks’ of words according to their mutual relations as defined or defining. In the combination *extremely hot weather* the last word *weather*, which is evidently the chief idea, may be called primary; *hot*, which defines *weather*, secondary, and *extremely*, which defines *hot*, tertiary.

(Jespersen (1924:96); cited in Croft (2001:255))

Zwicky (1985) suggests a semantic definition, inspired by Jespersen. According to Zwicky, the head/modifier distinction is to be at root semantic: In a combination X + Y, X is the “semantic head” if, speaking very crudely, X + Y describes a kind of the thing described by X (Zwicky (1985:4)). As Croft (2001) points out, Zwicky’s definition describes the head as a syntactic role, that is, headhood is defined in terms of a relationship between a syntactic element and the construction as a whole. More importantly, Zwicky’s definition is also symbolic, in that it describes a relationship between a syntactic element and the semantic structure it symbolizes.

Croft argues that Zwicky’s definition of semantic head is essentially the same as Langacker’s notion of head in Cognitive Grammar (Langacker (1987)). In Cognitive Grammar, the notion of head is semantically defined. Specifically, Langacker uses the term *profile* to name the part of a semantic structure that is actually symbolized by a construction. In discussing the question of how the profile of a composite (complex) construction is related to the profiles of its component parts, Langacker claims as

follows:

- (15) For the most part, a composite structure simply inherits the profile of one of its components. The component structure whose profile is inherited will be termed the **profile determinant** of the construction.

(Langacker (1987:289); cited in Croft (2001:256))

For example, in *broken vase*, *vase* is the profile determinant because the whole phrase profiles the vase. And in *the vase broke*, *broke* is the profile determinant because the clause profiles the breaking event.

However, this does not always work. As Croft points out, in some constructions the profile of the whole is identical not to just one but both of the component profiles, like the English appositive construction (e.g. *my brother the geophysicist*). In some other constructions, no element determines the profile of the whole construction because no element has a profile that is identical to that of the whole construction. This is the case with exocentric or headless constructions, like headless relative clauses, as in (16a), and sentential complements, as in (16b):

- (16) a. [**What really bothers me**] are all of those square brackets.
b. I said [(**that**) **I was going to do it**].

(Croft (2001:256))

Another examples of an exocentric construction are coordinate constructions such as the conjoined NP *John and Yoko*. The entity denoted by the whole is a pair of people. Neither proper name denotes that composite entity, nor does the connective.

Drawing upon cases like these, Croft argues that the Zwicky/Langacker definition needs to be modified as follows:

- (17) Profile equivalent: In a combination X + Y, X is the PROFILE EQUIVALENT if X profiles/describes a kind of the thing profiled/described by X + Y.

(Croft (2001:257))

Note in (17) that the direction of determination of headhood is reversed from ‘word to construction’ to ‘construction to word.’ To put this another way, it is assumed that heads are construction-specific.

By analyzing a complex expression into its parts, one may or may not come across a single element whose profile matches that of the whole expression. If one does come across such an element, then it corresponds to what has traditionally been called ‘head’. But this need not always be the case (Iwata (2006c:509)). The notion of head is not a necessary feature of every construction (see again examples (16a, b)). This means that there is no reason to assume that argument structure must be exclusively determined by the verbal head.⁸ In my analysis of COCs, I will take the view that heads are construction-specific.

3.6.3. Constructions as Schemas

In general, Cognitive Linguistics pursues an approach to language which describes linguistic structure as arising from and interacting with actual language use. The model of linguistic representation that has been developed and promoted within this framework is a usage-based one (Langacker (1987, 1988, 1999), Barlow and Kemmer (2000)). Langacker writes as follows:

- (18) [S]ubstantial importance is given to the actual use of the linguistic system and a speaker's knowledge of this use; the grammar is held responsible for a speaker's knowledge of the full range of linguistic conventions, regardless of whether these conventions can be subsumed under more general statements. [It is a] nonreductive approach to linguistic structure that employs fully articulated schematic networks and emphasizes the importance of low-level schemas. (Langacker (1987:494))

Construction grammarians generally avow their commitment to a usage-based view of language. However, the degree of commitment differs from scholar to scholar. For example, while Goldberg acknowledges the advantage of a usage-based model (Goldberg (2006)), she virtually limits herself to schematic, abstract constructions in emphasizing the top-down character of constructions (Iwata (2006c, 2008a)). According to Croft (2001), maximally general categories and rules are highly likely not to be psychologically real. Therefore, the search for maximally general analyses may be a search for an empirically nonexistent or fictional entity. In addition, constructing a maximally general analysis inevitably leads to the ignoring of empirical fact, namely the manifold differences in distributional patterns of different constructions and categories (Croft (2001:5)).

On the other hand, the lexical-constructional approach adopted here is aligned with those that emphasize the usage-based aspects of constructions. Then, it follows that constructions are abstractions or schemas from occurrences of a given type of form-meaning pairing in context, i.e. usage events, which is to be understood as the concrete performance of a linguistic act in a particular context.

In a usage-based theory, schemas are available at varying degrees of abstraction.

Therefore, in my approach, constructions should be available at varying levels of abstraction. I follow Croft (2001, 2003) and Iwata (2006a, 2006c, 2008a, 2008b) in introducing such lower-level constructions such as *verb-specific constructions* and *verb-class-specific constructions*.⁹ A verb-specific construction handles so-called subcategorization properties and selectional restrictions, while a verb-class-specific construction captures syntactic and semantic regularities of a verb class (Iwata (2008b)). According to Iwata, this is the level that captures argument structure alternations (cf. Goldberg (2002)). The hierarchical organization of constructions is as follows:

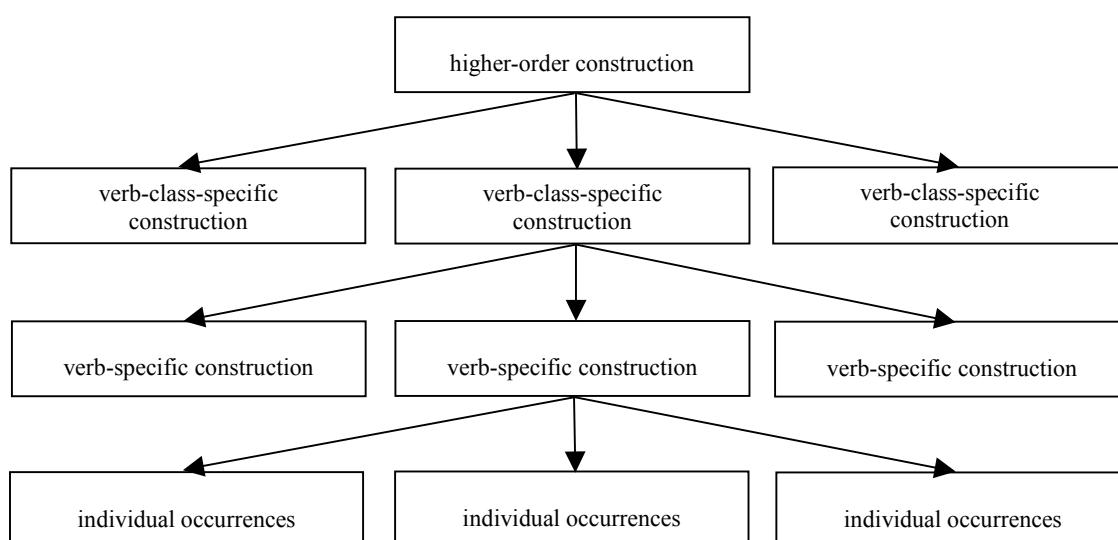


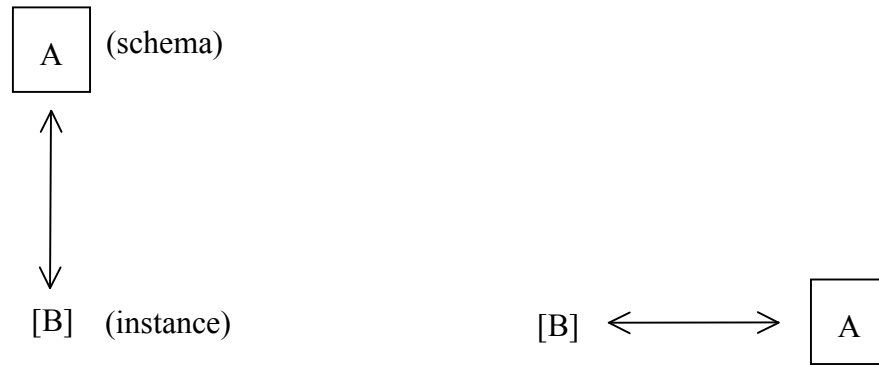
Figure 3.10. The hierarchical organization of constructions

One might think that there is much redundancy here, which formalists may well find objectionable. But in a usage-based model, there is nothing problematic about this hierarchical organization of constructions. Evidence from language acquisition supports the initial learning of verb-specific constructions. According to Tomasello

(2003), children acquire verbs first in a single argument structure construction, and then learn to apply that verb to other constructions. That is, the acquisition of constructions proceeds inductively, with the child learning specific-word combinations and gradually generalizing (“Verb Island Hypothesis”).¹⁰ Croft (2003) mentions that, in the generalization process, the more specific instances are not necessarily dropped as independent grammatical representations, even when they are completely predictable from the more general constructions (cf. Langacker (1987:374)). Just because a higher-order schema is abstracted does not mean that lower-order entities are wiped out from memory (Iwata (2008a:36)).

Constructions are now defined as schemas in the sense of Cognitive Grammar (Langacker (1987, 1991, 1999, 2008), Taylor (2002), among others). In the adopted lexical-constructional approach, constructions are nothing more than schematic form-meaning pairings abstracted over usage events. As a schema both captures the commonalities over its instances and sanctions new instances which conform with its specifications, so does a construction (Iwata (2008a:38)).

Iwata (2008a) argues that constructions and individual full expressions are related in the following manner. First, constructions as schemas sanction more concrete linguistic expressions. In a usage-based theory, newly encountered expressions are acceptable, and meaningful, to the extent that they can be associated with linguistic structures that already have unit status. There are two ways of association. On the one hand, the novel expression may count as an instance of a schema. On the other, it may be assimilated, via similarity, to an already established unit. If the novel expression fails both of these routes, then it is judged unacceptable:



(a) sanctioning by a schema

(b) sanctioning by association with a unit

Figure 3.11. Two ways of sanctioning (adapted from Iwata (2008a:38))

Second, schemas sanction the linguistic expression as a whole, not part of it. Iwata argues that whether a given verb can appear in a particular syntactic frame or not is a matter of whether *the whole string embedding the verb in that syntactic frame* can instantiate a relevant construction or not (Iwata (2008a:38)). In usage events, verbs are normally accompanied by particular syntactic frames. Verbs alone rarely constitute usage events. Hence, this view is also an automatic consequence of a usage-based theory.

3.7. Conclusion

The purpose of the preceding chapter was to present Construction Grammar as an outstanding model of linguistic description and to give an overview of those principles, concepts, and tools which are crucial for a description of COCs as an assembly of form-meaning correspondences.

Moreover, we paid special attention to a constructional approach to argument structure which has been advanced by Goldberg (1995, 2006). For Goldberg's analysis

is monumental in that she applied the principles of Construction Grammar to a variety of argument structure constructions.

Unfortunately, Goldberg's approach has some problems, which are to be solved for the development of Construction Grammar. In her theory, relevant constructions are higher-level, abstract constructions: each construction has a skeletal syntax and a highly schematic semantics. It remains unclear how to verify that these abstract constructions are psychologically real. To demonstrate the psychological reality of higher-level, abstract constructions, it is necessary to pay attention to lower-level constructions: verb-class-specific constructions and verb-specific constructions. Another problem concerns how to represent verb meanings. Goldberg represents the verb meaning as a set of minimalist participant roles. While Goldberg avows herself to take into consideration rich frame semantic knowledge associated with the verb, this view is not fully demonstrated in her analysis (cf. Nemoto (1998)). Accordingly, the interaction between verbs and constructions is captured by nothing more than matching role labels as in Figure 3.9. In my opinion, these problems have led many linguists to believe that Construction Grammar is suitable for idiom-like phenomena alone and constructions always superimpose their syntax and semantics upon lexical verbs, like those exemplified in (10) and (11). Langacker also points out as follows:

- (19) It (= Goldberg's strategy) reflects certain ghosts from our theoretical past, ghosts which we might have thought to be exorcised from cognitive linguistics [...] One is the notion that the shortest grammar is necessarily the best grammar. Another is the minimalist lexical semantics, with the expectations of monosemy and the possibility of circumscribing linguistic meanings. Yet another is the assumption that particular aspects of

meaning are exclusively assignable to particular elements, which in turn suggests, – quite erroneously – that meanings are non-overlapping (an entailment of the building-block metaphor). (Langacker (2005:151))

Now we need a new theory of constructions which takes a fundamentally usage-based view, taking into consideration both the need for a more careful analysis of verb meanings and levels of schematicity. Following Langacker (1987, 1988, 1999), Croft (2001, 2003), Iwata (2006c, 2008a), the lexical-constructional approach adopted here conforms to three basic principles: 1) Categories are construction-specific, 2) heads are construction-specific, and 3) constructions are schemas. This approach is designed to account not only for non-compositional cases but also for compositional cases.

Adopting a lexical-constructional approach, my investigation of COCs attempts at integrating at least two sources of evidence: introspective judgment for data collection and corpus investigation which is used to support my analysis. In the following chapters, I will use large-scale corpora, as well as the Google search engine, in order to find data that have been overlooked by previous studies. Cognitive linguists, including construction grammarians, often criticize the application of purely introspective methods. However, one cannot neglect or even deny the importance of introspection for the development of Cognitive Linguistics and Construction Grammar in general and for the analysis of conceptual/semantic structure in particular (cf. Talmy (2007), Höche (2009:3)). Of course, linguists' intuitions do not necessarily coincide with the linguistic data as it is actually observed. However, the appropriate introspection in conjunction with actual uses in corpora could lead to findings about structures of the human conceptual system which may indeed be correct and thus psychologically plausible.

Lastly, though the adopted lexical-constructural approach takes a fundamentally usage-based view of language, it will not involve frequency counts of particular expressions in corpora. Among construction grammarians, there are scholars who dismiss constructed sentences as unreliable and useless and who talk as if only the data attested in some corpus is all that counts (Iwata (2008a)). As Iwata points out, in actual practice, they forget that they rely on their own intuitions, whether consciously or unconsciously, in appraising the reliability of the corpus. While the emergence of corpora certainly helps us to uncover data that have so far been overlooked, remember that the inherent problems of corpora can be compensated only by recourse to our intuitions, after all (Iwata (2008a:8)).

We must realize that there are four types of data: (1) possible and attested, (2) possible but not attested, (3) impossible and not attested, and (4) impossible and attested (Takizawa (2007)). According to Iwata (2008a), one serious problem of corpora as a tool for data collection is that type (2) and type (3) cannot be distinguished. After all, neither type of data can be found in a corpus. Furthermore, Iwata points out that no corpora can tell us the distinction between type (1) and type (4), even when some “attested” data are judged by everyone to be simple errors. In other words, it is quite difficult to identify type (4) data as such. This last problem becomes even more acute when one uses data drawn from the web, which contains many sentences by non-native speakers of English. Given these inherent problems of corpus data, then simply counting the frequency in a particular corpus will surely run the risk of producing a skewed picture of actual linguistic data (Iwata (2008a:7)). Even if we use large-scale corpora, these problems could not be alleviated. In the real world, no corpus can be as large as the set of all possible utterances, which are constantly being produced and thus represent an ever-evolving set. Therefore, I do not rely heavily on the frequency

counts of particular linguistic expressions in corpora.

Notes to Chapter 3

^{1.} Like idioms of the kind *by and large*, constructional idioms exhibit an unusual syntax, and cannot therefore be generated by general phrase structure rules. The main difference between idioms and constructional idioms is that the latter is productive in that their slots can be filled by different items.

^{2.} For a brief explanation of metaphor, see note 16 to Chapter 4.

^{3.} One may well get the impression that Goldberg is sometimes overemphasizing the role of constructions. But this seems not to be her intent. As Iwata (2006c) points out, Goldberg explicitly states that fully compositional expressions may count as constructions:

- (i) Construction grammar defines constructions to be any stored pairings of form and function; [...] In addition, stored (typically highly frequent) regularities between form and meaning are considered constructions even if they are fully compositional.

(Goldberg and Jackendoff (2004:533, fn.1))

- (ii) Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.

(Goldberg (2006:5))

According to Iwata, Goldberg has told him that at the time when she was working on her dissertation (Goldberg (1992)), everyone paid exclusive attention to verb meanings. Probably, Goldberg tried to swing the pendulum in the other direction by drawing attention to the top-down character of constructions (Iwata (2006c:507, fn.6)).

^{4.} Many scholars have argued that words are not exhaustively decomposable into atomic primitives (e.g. Fodor, Fordor and Garrett (1975), Fordor et al. (1980)). However, it is not necessary to conclude that meanings have no internal structure. Fillmore (1975, 1977) argues that meanings are typically defined relative to some particular background *frame* (or *scene*), which itself may be highly structured. Fillmore uses the word *frame* to designate an idealization of a coherent individuatable perception, memory, experience, action, or object (Fillmore (1977:84)). See also Fillmore (1982), Lakoff (1987), and Langacker (1987, 1991).

^{5.} Croft and Cruse (2004) elucidate the model of frame semantics developed by Fillmore, which is one of the most influential proposals in Cognitive Linguistics. Fillmore views frames not as an additional means for organizing concepts, but as a fundamental rethinking of the goals of linguistic semantics. His frame semantic model is described as a model of the semantics of understanding, in contrast to a truth-conditional semantics. Consider the difference between *land* and *ground*. *Land* is used to denote solid ground opposed to the sea, whereas *ground* also denotes solid ground but as opposed to air (Fillmore (1977)). Therefore, these terms are distinguished primarily on the basis of the frames in which they are defined. See Fillmore (1975, 1977, 1982), Goldberg (1995), and Croft and Cruse (2004) for more details.

^{6.} While this thesis assumes that grammatical categories are construction-specific, following Croft (2001), for reducing the complexity of representation, the intransitive

construction and the transitive construction are represented by [SBJ INTRVERB] and [SBJ TRVERB OBJ], respectively.

^{7.} See Croft (2001), Croft and Cruse (2004), and Iwata (2006c) for more details.

^{8.} Goldberg's constructional approach specially focuses upon cases like (11) to demonstrate the top-down character of constructions. On the other hand, this is not the primary concern of the lexical-constructional approach I adopt here. Like Croft (2001), the adopted lexical-constructional approach assumes that heads are construction-specific and that argument structure should not be exclusively determined by the verbal head. Accordingly, there is no reason to put emphasis on overriding cases like (11). My approach is intended to capture both compositional and non-compositional cases.

^{9.} As Langacker argues, lower-level schemas, expressing regularities of only limited scope, may on balance be more essential to language structure than high-level schemas representing the broadest generalizations (Langacker (1999:118)). I agree with Langacker in this respect.

^{10.} For a relevant discussion, see also Tomasello (1999).

Chapter 4

Two Types of COCs:

The Event-Dependent Type and the Event-Independent Type

4.1. Introduction

This chapter presents from a lexical-constructional perspective a comprehensive discussion of issues which are related to the syntax and semantics of COCs. As we have reviewed in Chapter 2, a central issue with respect to COCs has been whether the COs are adjuncts or arguments. Many linguists working in the paradigm of Generative Grammar favor either the adjunct analysis or the argument analysis. I have already shown that neither of these analyses can account for differences in syntactic and semantic behavior of COs. More promising is the approach taken up by Pereltsvaig (1999), who investigates COs in less familiar languages and proposes to distinguish between two types of COs: adjunct COs and argument COs. As she mentions, the endeavor to classify COs as either adjuncts or arguments fails on the basis of assuming rigid categories and restricting an item's membership to one category only. This chapter shows that COs in English can also be of both types, i.e. adjunct COs and argument COs, resulting in the complex nature of constructions involving COs.

In addition, it is argued that the syntactic status of a CO should be compatible with its semantic interpretation. Previous studies are apt to assume that the verb determines the syntactic status of the CO. In particular, in the framework of Generative Grammar or Discourse-Functional Grammar, it is the verb which is taken to be of central importance. Matsumoto (1996), on the other hand, points out that COs have some possible interpretations. According to Matsumoto, the syntactic behavior which a CO

allows corresponds to whether it has a particular kind of semantic interpretation. This means that COCs can be regarded as form-meaning pairings (Kitahara (2005, 2006, 2007, 2008, 2009)). Therefore, I claim that COCs are divided into two types of constructions, besides showing that my claim is supported by cognitive linguistic accounts (Langacker (1991), Höche (2009)) and historical evidence (Yamakawa (1980), Osaki (1998)).

4.2. Adjunct COs vs. Argument COs

As summed up in Chapter 2, the syntactic status of the CO has been a controversial issue in the history of studies on COCs. Some linguists consider it an argument, whereas others describe it as an adjunct or adverbial of the verb phrase. However, the attempt to pin down the syntactic status of the CO to either an adjunct or argument is one of the main factors that create confusion in the description of COCs.

Let us examine once again the evidence provided by previous studies. In the adjunct analysis, the focus is put on the following syntactic evidence. First, COs cannot undergo passivization. As shown in (1a, b), the COs *a weary sigh* and *a gruesome death* cannot be passivized:

- (1) a. *A weary sigh was sighed by Bill.
b. *A gruesome death was died by John.

(Jones (1988:91))

Secondly, COs are optional. For example, the CO *a painful death* in (2a) is omissible, as exemplified in (2b):

- (2) a. John died a painful death.
- b. John died.

(Moltmann (1989:300-301))

Thirdly, COs exhibit the indefiniteness effect. Example (3) shows that COs cannot occur with strong determiners. In view of the fact that predicate nominals also exhibit the indefiniteness effect (cf. Higginbotham (1987)), the adjunct analysis argues that the ungrammaticality of sentence (3) is ascribed to the predicative status, namely the adjunct status of the CO:

- (3) *John screamed *this* scream/*every* scream we heard today.

(Moltmann (1989:301))

Fourthly, COs cannot be topicalized, like certain adverbial event predicates. Note that the COs in (5) behave in the same way as the adverbial event predicates in (4):

- (4) a. *Beautifully, Mary sang the song.
- b. *To study Linguistics, John persuaded Mary.
- (5) a. *A painful death, John died *t*.
- b. *A shrill scream, John screamed *t*.

(Moltmann (1989:301))

The above four pieces of evidence indicate that COs are not arguments, but rather are adjuncts. The argument analysis, on the other hand, gives examples where COs behave as arguments. As pointed out by Macfarland (1995), there are passive

sentences containing COs that are acceptable:

- (6) Life here had been lived on a scale and in a style she knew nothing about. (Macfarland (1995:112))

In sentence (6), the CO *life* is the subject of the passive, which is perfectly grammatical.

In addition, COs occurring with strong determiners are not always unacceptable:

- (7) a. Tom sneezed *every* sneeze that we heard that day.
b. Zack screamed *many* screams before we quieted him down. (Massam (1990:169))

Contrary to the view that COs exhibit the indefiniteness effect, the COs in (7) can occur with strong determiners.

Notice also that COs pattern with arguments in that they allow topicalization (8) and long *wh*-movement (9):¹

- (8) Such a crazy whooping laugh, Norma would never laugh; so there must have been someone else in the room. (Massam (1990:181))
- (9) a. ?What book_i did Chris wonder [whether Lee read *t_i*]? (Macfarland (1995:105))
b. ?[What kind of smile]_i did Chris wonder [whether Lee smiled *t_i*]? (Macfarland (1995:106))

As is clear from the preceding data, COs exhibit different syntactic properties.

Because of the contrasting behaviors of COs, there is no consensus of opinion as regards whether COs are adjuncts or arguments. Given the examples in (1)-(9), it is wrong to treat COs uniformly as either adjuncts of the verb or arguments.

Accordingly, Pereltsvaig (1999) proposes to distinguish between two types of COs: adjunct COs and argument COs. She investigates COs in different languages, such as Russian, Hebrew, Vietnamese, and Edo, and then points out that COs of some unergative verbs (Type B) behave differently from those that occur with other types of predicates (Type A). For example, in Vietnamese, Type A COs cannot occur with strong determiners (10a), in contrast with Type B COs (10b):²

- (10) a. *Ti phebinh toi **tung** su phebinh gaygat.
 Ti criticize me every CL criticism sharp
 ‘Ti criticized me every sharp criticism.’
- b. Hien gap **tung** gap.
 Hien pick every pick
 ‘Hien picked every pick.’

(Pereltsvaig (1999:539))

Pereltsvaig mentions that the same is true of Hebrew and Edo. Note, however, that in Russian the range of determiners that are possible within CO phrase is limited to possessives:³

- (11) a. *Ulybnis’ dvumja ulybkami/etoj ulybkoy/kazhdoj ulybkoy.
 Smile:imp two smiles this smile every smile
 ‘Smile two smiles/this smile/every smile.’

- b. Ulybnis' ulybkoju svojej ...
 Smile:imp smile own
 'Smile your own smile ...'

(Pereltsvaig (1999:540))

Following Doron (1986), she assumes that the incompatibility with strong determiners is one of the characteristic properties of predicative nominals.

Another related property of Type A COs is that they cannot be pronominalized.

Pereltsvaig illustrates this with the Hebrew examples in (12):

- (12) a. Jakov kar'a et ha-sefer kria jesodit.
 Jacob read ACC the-book reading thorough
 'Jacob read the book thoroughly.'
- b. *Jakov kar'a et ha-sefer ota/ hi/ze.
 Jacob read ACC the-book her/she/it.
 'Jacob read the book it [= thorough reading]

(Pereltsvaig (1999:540))

According to her, the same is also true of Russian and Edo.

Moreover, Type A COs exhibit syntactic behavior different from that of Type B COs. For example, Type A COs cannot be passivized, as illustrated with the Vietnamese examples in (13):

- (13) a. *Mot su kinhtrong dacbiet duoc (Hien) kinhtrong.
 a CL respect special PASS (Hien) respect

‘A special respect was respected (by Hien).’

b. Mot gap duoc (Hien) gap.

a pick PASS (Hien) pick

‘A pick was picked (by Hien)’

(Pereltsvaig (1999:541))

Pereltsvaig adds that Type A COs cannot be passivized in Hebrew or Russian either.⁴

Likewise, Type A COs cannot be extracted by A-bar movement, as shown for Hebrew in (14) and (15):

(14) Relativization

*Ha- kri’a še- Dani kar’a et ha-sefer hajta jesodit.

The-reading that-Danny read ACC the-book was thorough

‘The reading that Danny read the book was thorough.’

(Pereltsvaig (1999:541))

(15) a. Cleft

*Zu hajta kri’a jesodit še- Dani Kar’a et ha-sefer.

That was reading thorough that-Danny read ACC the-book

‘It was a thorough reading that Danny read the book.’

b. Pseudo-cleft

*Ma še- Dani kar’a et ha-sefer hajta kri’a jesodit.

What that-Danny read ACC the-book was reading thorough

‘What Danny read the book was a thorough reading.’

(Pereltsvaig (1999:541))

More interestingly, Type A COs are questioned by *How?*, not *What?*, as illustrated for Vietnamese. The same is true of Hebrew, Russian, and Edo:

- (16) a. *Hien kinhtrong cha cai gi?
Hien respect her-father did what
'What did Hien respect her father?'
- b. Ti bo cai gi?
Ti bundle did what
'What did Ti bundle?'

(Pereltsvaig (1999:542))

Pereltsvaig provides evidence for the distinction between two types of COs in Hebrew, Russian, Vietnamese, and Edo. The same data also point to the adverbial status of Type A COs. As seen above, Type A COs are non-referential, non-extractable, and non-passivizable. Therefore, she proposes to treat Type A COs as belonging to a special class of manner adverbial NPs, i.e. adjunct COs. On the other hand, Type B COs are non-distinct in their properties from "normal" direct objects. That is, Type B COs are regarded as argument COs.

Following Macfarland (1995), Pereltsvaig says in a footnote that English and French COs are all of Type B, i.e. argument COs. However, as I have pointed out in Chapter 2.3.2, Macfarland's analysis has some serious problems. It seems most plausible to assume that COs in English are also divided into two types, adjunct COs and argument COs, irrespective of whether the verbs are unergative or not. Therefore, in the approach presented here, COCs are dealt with not as a monolithic category but as a complex category consisting of two types of constructions: constructions involving

adjunct COs and constructions involving argument COs.

4.3. Intransitive vs. Transitive

In order to capture the syntactic properties of COCs, it is often argued that the verbs occurring with COs should be classified into intransitive or transitive verbs. For example, Takami and Kuno (2002), and Kuno and Takami (2004) define the COC as a construction in which an intransitive verb takes a CO. The construction in which a transitive verb takes a CO is not dealt with as the COC. In short, the property of the main verb determines whether the sentence belongs to the COC. They introduce three criteria for this classification: passivization, *it*-pronominalization, and modification:

- (17) a. *A silly smile was smiled by Sam.
b. A merry dance was danced by Sam.
(Jones (1988:91))
- (18) a. Mona smiled a tantalizing smile. *Rose smiled *it*, too.
(Horita (1996:243))
b. Mary danced an exotic dance. She danced *it* to show us her experiences
in Asian countries. (Takami and Kuno (2002:149))
- (19) a. *She smiled a smile. (Horita (1996:243))
b. She danced a dance. (Horita (1996:222))

As shown in examples (17)-(19), the CO of the verb *smile* cannot undergo passivization and *it*-pronominalization, and further it needs a modifier, in contrast with the CO of the verb *dance*. Thus, Takami and Kuno class the verb *smile* as an intransitive verb and the verb *dance* as a transitive verb. Likewise, from the above criteria, they propose

that the verbs *laugh* and *die* are intransitive verbs, whereas the verbs *live* and *scream* are transitive verbs. Ultimately, they conclude that the constructions where the verbs *smile*, *laugh*, and *die* occur belong to the COC, while those where the verbs *dance*, *live*, and *scream* occur do not. Following their analysis, one might consider that the former verbs take adjunct COs, in contrast with the latter verbs taking argument COs.

This solution sounds convincing at first sight. Takami and Kuno's analysis, however, does not provide a natural explanation for many phenomena. Firstly, although Takami and Kuno classify the verb *live* as a transitive verb, the passive forms of the non-COC where it occurs are not always acceptable:

- (20) a. Harry lived an uneventful life.
b. *An uneventful life was lived by Harry.

(Jones (1988:91))

Irrespective of the fact that the same verb appears both in (6) and (20), there is a striking difference in the acceptability of each sentence.

Secondly, there are examples in which the CO of the transitive verb *dance* cannot undergo *it*-pronominalization. Observe the following:

- (21) a. Mary danced a traditional dance, and *it* was noticeable.
b. ?*Mary danced a staggering/nervous dance, and *it* was noticeable.

(Horita (1996:240))

The CO *a staggering/nervous dance* in (21b) cannot undergo *it*-pronominalization, while *a traditional dance* can in (21a).

Thirdly, we can find examples where the CO of the intransitive verb *smile* can undergo passivization and *it*-pronominalization. Consider the following examples:

- (22) a. She smiled Marilyn Monroe's smile (in "Gentlemen Prefer Blondes").
b. Marilyn Monroe's smile was smiled by Mary.
c. Mary smiled Marilyn Monroe's smile. Nancy smiled *it*, too.

(Kitahara (2006:54))

As seen in (17) and (18), the COs which the verb *smile* takes do not allow passivization and *it*-pronominalization. Thus, it can be predicted that the COCs in which the verb *smile* occurs cannot behave like the transitive construction. Contrary to the prediction, however, sentences (22b, c) are acceptable. The same situation holds true in the case of the verb *die*:

- (23) a. This clause puts as plainly as it can be put the idea that His death was equivalent to the death of all; in other words, it was *the death of all men which was died by Him*. Were this not so, His death would be nothing to them. It is beside the mark to say, as Mr. Lidgett does, that *His death is died by them rather than theirs by Him*; the very point of the apostle's argument may be said to be that *in order that they may die His death He must first die theirs*.
b. His death can put the constraint of love upon all men, only when it is thus judged that *the death of all was died by Him*.

(James Denney, *The Death of Christ: Its Place and Interpretation in the New Testament*)

In (23), the COs *the death of all men* and *His death* are the subjects of passive sentences. Besides, as observed in the expression *He must first die theirs*, the CO *the death of all men* allows pronominalization. We must realize that the COCs in which the verb *die* occurs can behave like the transitive construction.

Additionally, intransitive verbs do not always need modifiers for their COs, as illustrated in the following examples:

- (24) a. She *smiled a smile*, and up she hopped.

(Thomas Hardy, *Life's little Ironies*)

- b. As he knew it must be another bibliophile he said nothing but *smiled a smile*. (Omuro (2004:146))

- (25) a. Last night we looked back at the history of the MG, which appeared to *have died a death* when the factory at Abingdon closed in 1981.

- b. THE WAR movie *died a death* during the Gulf War.

(BNC)

In (24), the COs of the verb *smile* do not need any modifiers, unlike the example in (19a). Likewise, unmodified COs co-occur with the verb *die* which has been regarded as a representative of unaccusative verbs.

As discussed above, it is quite dubious that the syntactic properties of COCs are defined only by the main verbs. The question of why there is variation in acceptability even among the COCs of the same verb remains unanswered. In order to answer this question, it is necessary to give up maintaining the reductionist assumption.

The most remarkable thing is that the syntactic behavior of a CO is compatible with its semantic interpretation. Jones takes up the following examples, implying that

there are form-meaning pairings in COCs:

- (26) a. Sam danced a merry dance.
- b. Sam danced merrily.
- c. A merry dance was danced by Sam.

(Jones (1988:91, fn.1))

According to Jones, (26a) can have a reading semantically equivalent to (26b) and this reading should not be possible in (26c). In other words, when the CO *a merry dance* specifies the manner of how the agent Sam danced, it does not allow passivization. The CO *a merry dance* can be put in the subject position of the passive in (26c) only if it does not have the same meaning as the corresponding manner adverbial *merrily*.

What needs to be further emphasized is that the COC has some possible interpretations. Consider the following:

(27) Mary danced a beautiful dance.

(28) Reading A: *the activity of dancing is beautiful.*

Reading B: *the result of activity of dancing is beautiful.*

Reading C: *a certain type of dance, e.g. a tango, is famous for its beauty.*

(Matsumoto (1996:214))

According to Matsumoto (1996:214), sentence (27) can be interpreted in three ways: (i) she danced in a beautiful way (Reading A), (ii) she danced, which resulted in a beautiful dance (on the whole though she may have fallen onto her hands and knees)

(Reading B), or (iii) she recreates an existing beautiful type of dance, for example, tango (Reading C). Matsumoto points out that only the CO of Reading C allows passivization or pronominalization as we observe in instances of the transitive construction. This observation leads us to assume that the syntactic properties of a CO are determined not by the main verb, but rather by its semantic interpretation.

Note also that the semantic interpretation of the CO is compatible with the semantic property of the verb: in (27), while for Readings A and B the verb *dance* is intransitive, for Reading C it is transitive. Then it follows that the syntactic and semantic status of the CO determines whether the verb is intransitive or transitive. More specifically, the entire CO including its modifier functions as a semantic head of the construction. This goes fundamentally against the traditional view of headhood. In the following section, I argue from a lexical-constructional approach what determines the syntactic and semantic properties of the verb and its CO.

4.4. Two Types of COCs

In this section, I adopt a lexical-constructional approach and give a highly coherent account for various properties of COCs and for the problems with previous studies. Along with other versions of Construction Grammar, the account proposed here takes constructions as the basic or primitive elements of syntactic representation. At the same time, it takes a thoroughly nonreductionist approach to constructions, and thus rejects autonomous syntactic relations between elements in a construction. My lexical-constructional account conforms to the following principles:

- (29) a. Categories are construction-specific
- b. Heads are construction-specific

c. Constructions are schemas

In my lexical-constructional account, COCs are assumed to be pairings of form and meaning. I have already shown that it is most reasonable to distinguish between adjunct COs and argument COs. In addition, it has been argued that the syntactic properties of COCs are not defined only by the verb. With these points in mind, I propose that so-called COCs consist of two types:⁵

- (30) a. [SBJ INTRVERB_c OBJ_c^{ADJUNCT}]
b. [SBJ TRVERB_c OBJ_c^{ARGUMENT}]

The category of verb is definable only in relation to each construction. For example, the reductionist approach defines the category of the verb *dance* independently of the construction where it occurs. It cannot therefore explain the reason why the verb *dance* behaves both as an intransitive verb and a transitive verb. It is most important to capture that the verb *dance* that occurs in the former type of construction is not the same as the verb *dance* that occurs in the latter type of construction. The grammatical category of the verb *dance*, i.e. intransitive or transitive, is derivative of constructions, and is not primitive. The reason why the COs of the same verb do not show the same syntactic properties is that each type of COC specifies the properties of its components, even of the verb. Recall that the semantic head of a COC is its CO, which determines the syntactic and semantic properties of the whole construction. Since heads are construction-specific, it follows that the construction itself specifies the grammatical category of the verb.

What is more important is that each COC has its own meanings. In the

expression *Mary danced a beautiful dance*, when the CO *a beautiful dance* has Reading A or Reading B, it represents nothing but the event which the verb denotes and the adjective *beautiful* describes the manner of how the agent danced. On the other hand, when the CO specifies the type of dance which the agent chose and danced, the adjective describes the nature of a particular kind of dance. This is corroborated by the following definition of the noun *dance*:

(31) *dance* (noun)

- a. an act of dancing
- b. a series of movements and steps that are usually performed to music; a particular example of these movements and steps

(*OALD* online)

The CO of Reading A (or B) corresponds to definition (31a), whereas the CO of Reading C corresponds to (31b). That is, the CO refers either to the event denoted by the verb or to the type which the action denoted by the verb is a particular instance of. We can say that COs are divided into *the eventive CO* and *the non-eventive CO*.

However, we must realize that the nouns occurring in COCs do not necessarily have two kinds of meanings. Unlike the noun *dance*, the noun *smile* is not defined as referring to a pre-existing type replicable across many particular instances:

(32) *smile* (noun)

- an expression in which your mouth curves upwards, when you are being friendly or are happy or amused

(*LDOCE* online)

This shows that the semantic interpretations of a COC given in (28) are not reducible to the head noun alone. Whether a CO belongs to the eventive or the non-eventive depends on the semantic property of the whole construction involving the CO.⁶

According to Rice (1987), eventive COs offer little in the way of new information and they describe entities in the world that are non-salient or indistinguishable from the activity that engenders them. Since they are hardly construable as separate from the process, they can hardly be accorded separate status lexically and syntactically. Hence, I refer to constructions involving eventive COs as *the event-dependent type*.

On the other hand, the non-eventive CO is allowed to be interpreted as distinct from the activity, as uniquely referential, or as somehow already present in the world and not as a simple by-product of the activity in question.⁷ Put another way, the non-eventive CO can exist independently of the process denoted by the verb. Therefore, I call constructions involving non-eventive COs *the event-independent type*.

Each constructional schema has its own syntactic form with a schematic meaning. Two types of syntactic forms associated with the COC are proposed in (30), each of which is expected to be ascribed to the event-dependent type or the event-independent type. Matsumoto (1996) argues that the COC which behaves like the transitive construction is a construction with a CO having a semantic interpretation such as Reading C, i.e. the event-independent type. Following Matsumoto, I assume that the event-dependent COC has the syntactic form [SBJ INTRVERB_c OBJ_c^{ADJUNCT}], whereas the event-independent COC has the syntactic form [SBJ TRVERB_c OBJ_c^{ARGUMENT}].

The event-dependent COC and the event-independent COC form a complex category of “cognate object constructions.” Therefore, it is reasonable and useful for the analysis of COCs to assume that there is a higher-order construction abstracting over these two constructions. I propose the constructional hierarchy of COCs as

diagrammed in the following:⁸

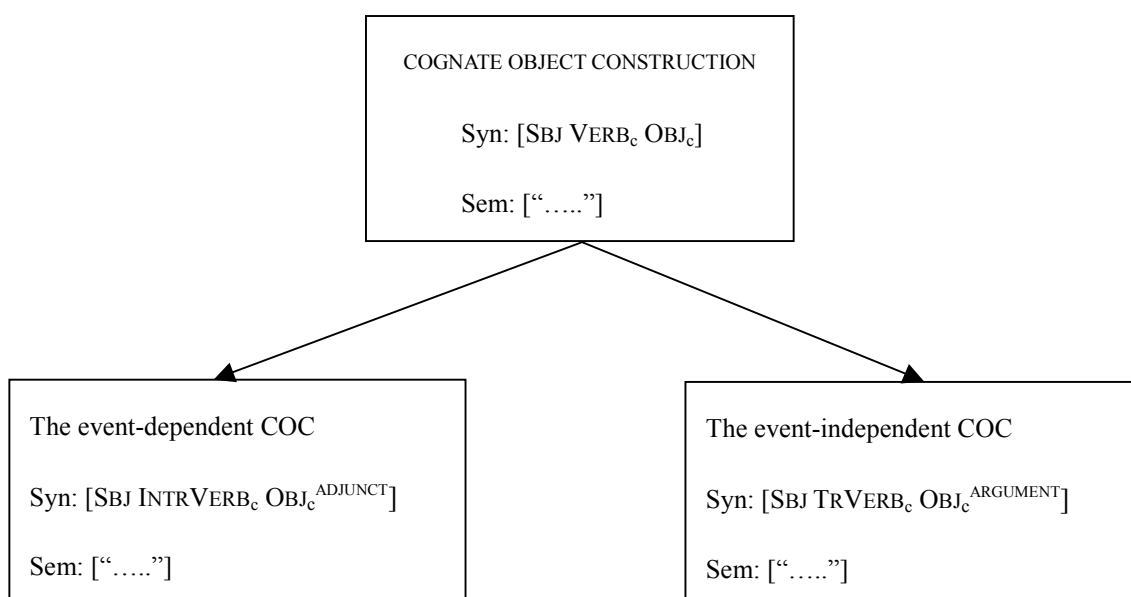


Figure 4.1. The constructional hierarchy of COCs

In Figure 4.1, the higher-order COC is named the COGNATE OBJECT CONSTRUCTION. By abstracting over the event-dependent COC and the event-independent COC, we have the COGNATE OBJECT CONSTRUCTION, which pairs the common semantics with the syntactic frame [SBJ VERB_c OBJ_c]. A closer look at the higher-order COC will help us to reveal the syntactic and semantic idiosyncrasies of the lower-level COCs. In what follows, let us focus on the form and meaning of each constructional schema, while briefly introducing Langacker’s analysis (1991) and Höche’s analysis (2009) of the phenomenon in question.

4.5. COGNATE OBJECT CONSTRUCTION as a Higher-Order Schema

In this section, we shall consider the COGNATE OBJECT CONSTRUCTION as a

higher-order schema. As for the COGNATE OBJECT CONSTRUCTION, Langacker (1991) argues that the object's head noun is a nominalization of the verb stem or at least morphologically related and designates a single episode of the process type in question. The episode is identified with the specific process instance profiled by the verb.

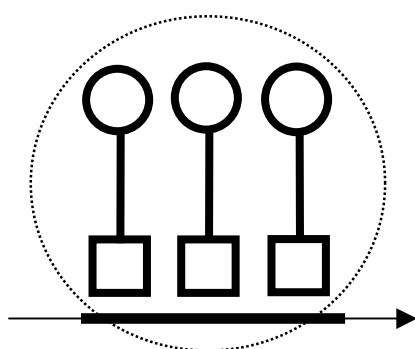
Like COs, construing actions and events as concrete objects is basic to human conceptualization (cf. Höche (2009)). Linguistic expressions reflecting this form of construal can be found easily like those in the following:

- (33) take a *walk*; make a *throw*; do an *imitation*; give out a *shout*; have an *argument*; witness an *explosion*; see a *flash*; perform an *operation*; receive a *nudge*; cop a *feel*; deliver a *kick* in the pants

(Langacker (1991:24))

In (33), each noun designates a single episode of the process represented by a perfective verb. Such episodic nominalizations are diagrammed as in Figure 4.2:

(a) Verb



(b) Episodic Noun

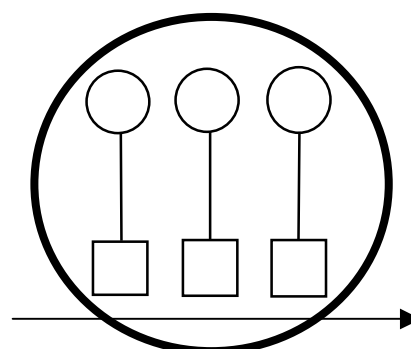


Figure 4.2. Event nominalization (adapted from Langacker (1991:24))

Langacker mentions that a verb scans sequentially through a series of temporally distributed component states (defined as ‘sequential scanning’), which in turn involve one or more participants: These are indicated by a small circle (for the trajector) and a small square (for the landmark) in Figure 4.2.⁹ Each of the component states profiles a relation which holds between the trajector and the landmark indicated by a solid line. The single component state evolves along a temporal axis represented in bold print. Now relations are entities, and scanning through them sequentially is a type of interconnecting operation.

Langacker further argues that in every verb an abstract region (i.e. a set of interconnected entities) is inherent, comprising its component states. Within the verb itself this region is only latent, so it is depicted in Figure 4.2 (a) with a broken-line ellipse. However, nothing prevents this latent region from being recognized as such, or even profiled, as shown in Figure 4.2 (b). The result is a derived noun that profiles a region whose constitutive entities are the component states of a process (Langacker (1991:25)). The relation of the event’s single component states is construed as an atemporal constellation. Such a manner of construal is defined as ‘summary scanning.’ In Figure 4.2, note that, while for verb the temporal succession of the component states is prominent, indicated by the bold bar along the time arrow, for episodic nominalization we find the characteristic shift of the profile from a process to a thing by removing any kind of temporal relations.

The same situation holds true for the COGNATE OBJECT CONSTRUCTION. In the COGNATE OBJECT CONSTRUCTION, the verb and the CO each describes the same event and invokes essentially the same conceptual content. The component states of a process constitute a set of interconnected entities and thus implicitly define an abstract region. Though usually latent, this region can be recognized as such and even profiled,

the result then being an cognate object nominal (Langacker (1991:363)):

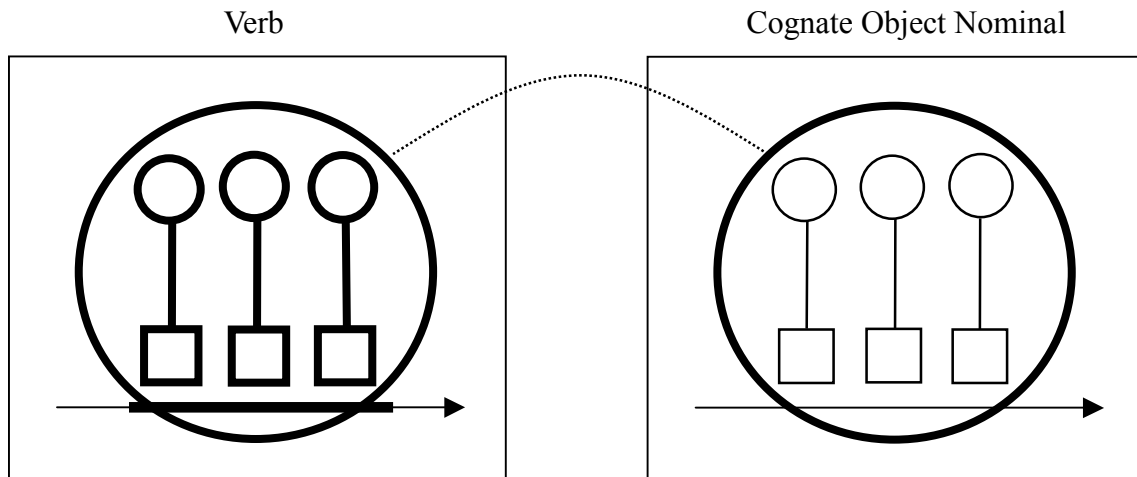


Figure 4.3. The COGNATE OBJECT CONSTRUCTION (adapted from Langacker (1991:364))

As shown in Figure 4.3, this abstract region is salient in both the verb and its object: It is profiled by the object, and the verb accords it the status of primary landmark. Langacker claims that a correspondence between the verbal landmark and nominal profile effects the integration of the two component structures.

One thing worth noting is that a certain degree of dynamicity is still inherent in the conceptualization of a CO as a thing. Langacker suggests that the CO is characterized by a complete suspension of the temporal features of the related process. However, these are still preserved in a weaker form, yet no longer figure prominently, as is the case with Readings A and B in (28). Thus I agree with Höche (2009) that Langacker's view on event nominals presented so far must be slightly adapted, to better capture the properties of the event-dependent COC.

Langacker comments on the COGNATE OBJECT CONSTRUCTION, citing it as

evidence for a speaker's flexibility of coding and construal, as follows:

- (34) We can agree that an act of yawning is most naturally coded by a verb (*Alice yawned*), and that such a verb is unlikely to be transitive (**Alice yawned Metathesis*). Yet we can perfectly well describe such an act by means of a marginally transitive expression in which the event is coded by the object noun (*Alice yawned a big yawn*). This discrepancy between the “expected” grammatical structure and the actual structure stems from two factors: our capacity for conceptual reification, which allows an event to be coded in nominal form; and the tolerance of redundancy, up to and including full overlap between the components of a complex expression.

(Langacker (1991:364))

The structure of the construction is viewed as deviating to some extent from the expected grammatical structure. According to Langacker, two factors enable such a deviation from the more ‘central,’ expected pattern: conceptual reification and the tolerance of redundancy. In fact, two lower-level COCs instantiating the construction have some idiosyncratic properties, which will be illustrated in the following sections.

4.6. The Event-Dependent COC

Let us take a closer look at the event-dependent COC. The CO of the event-dependent type functions as eventive noun, which refers to the action denoted by the verb. It follows that its modifier describes the manner of how the action denoted by the verb is done. The event-dependent COC determines the grammatical category of the main verb as intransitive. Thus, the landmark in each component state is

faded out:

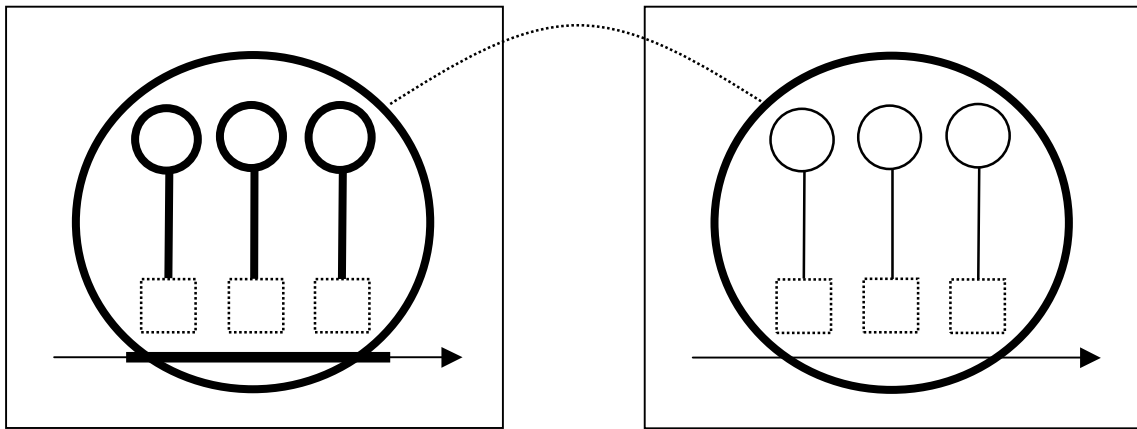


Figure 4.4. The event-dependent COC (cf. Langacker (1991:364), Höche (2009:82))

The event-dependent COC shows some intriguing syntactic and semantic properties. First, the construction cannot instantiate the passive construction and its CO does not allow pronominalization:

- (35) a. Harry lived an uneventful life.
b. *An uneventful life was lived by Harry.
(= (20))

- (36) ?*Mary danced a staggering/nervous dance, and it was noticeable.
(= (21b))

The CO *uneventful life* specifies the manner of how Harry lived. Thus, the construction *Harry lived an uneventful life* is not sanctioned by the passive construction because it is not compatible with the semantic properties of the passive construction:

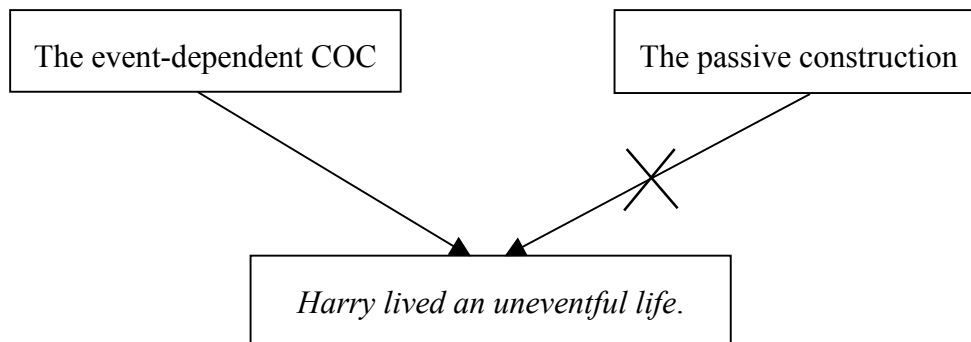


Figure 4.5. The event-dependent COC and the passive construction

Likewise, the CO *a staggering/nervous dance* expresses how Mary danced, unlike *a traditional dance*. In other words, the CO is non-referential. Thus, the construction *Mary danced a staggering/nervous dance* is incompatible with the pronominalization construction:

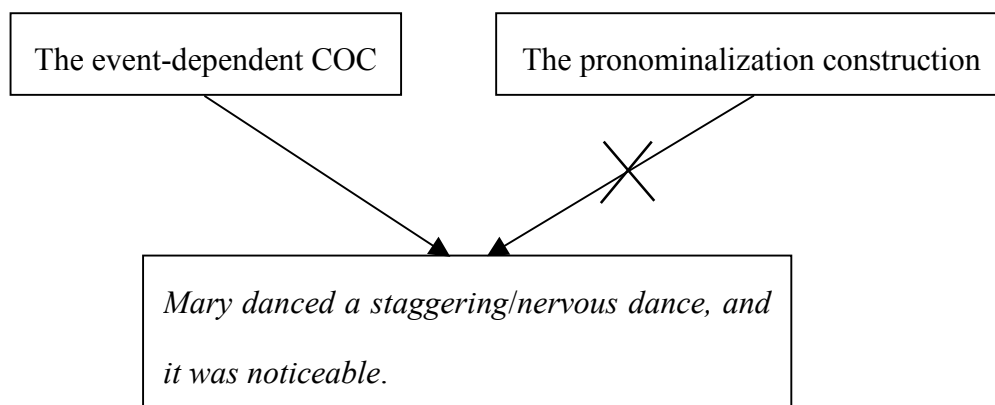


Figure 4.6. The event-dependent COC and the pronominalization construction

Second, the CO of the event-dependent type is an optional element in apposition with the sentence consisting of the subject and the verb. In fact, it can be marked off by means of a comma or a dash. Observe the following:

- (37) a. He smiled, *a nervous smile*. (Kasai (1980:12))
 b. Kitty laughed – *a laugh musical, but malicious*. (Jespersen (1924:138))
 c. They slept, *a restless sleep*, knowing their saint was gone.
 (Nicholas Rinaldi, *Cactus Dream*)

The CO of this construction functions as a predicate appositive (cf. Curme (1947), Inui (1949)) and further specifies the manner of action denoted by the verb.¹⁰ In fact, the CO of the event-dependent type can alternate with the corresponding adverb with virtually no difference in meaning (Nakau (1994)).¹¹ Consider the following:

- (38) a. Ann slept a sound sleep. (Nakau (1994:318))
 b. Mary smiled a beautiful smile. (Matsumoto (1996:199))
 c. The girls danced a nervous dance. (Horita (1996:239))

In (38), each CO further specifies the manner of action denoted by the verb, and therefore can be replaced with the corresponding adverb of manner, as in (39):

- (39) a. Ann slept soundly. (Nakau (1994:318))
 b. Mary smiled beautifully. (Matsumoto (1996:199))
 c. The girls danced nervously.

Recall here that in the event-dependent COC, the lexical semantics of the verb and its CO are not completely independent of each other. Verbs of action imply the way the activities are carried out. In this sense, the CO of the event-dependent type is just further specifying (or modifying) the notion that is implied by the verb meaning.

Furthermore, the CO of the event-dependent type shows the indefiniteness effect, which is supported by the fact that the CO with a strong determiner does not express the same meaning as the corresponding manner adverbial, as illustrated in the following:

- (40) Sam danced *the* beautiful dance/*every* beautiful dance.
≠ Sam danced beautifully.

Higginbotham (1987) argues that predicate nominals must be indefinite.¹² Following the view of Higginbotham, we can say that the CO of the event-dependent type is a kind of predicate nominal and thus it shows the indefiniteness effect. In fact, the CO of the event-dependent type co-occurs with the definite article only if it has a superlative adjective as modifier.¹³

- (41) a. It thundered *the most ear-splitting cracks of thunder* that I've ever heard. (Dixon (2005:127))
b. Maria walked over and lifted his chin with her forefinger and looked into his eyes and smiled *the most loving smile* he had ever seen.
(Tom Wolfe, *Bonfire of the Vanities*)

More interestingly, the event-dependent COC can be an answer to the question that asks how the action is done with *how*. Observe the following examples:

- (42) A: How did Miss Maple smile?
B: She smiled a deprecating smile.
(Omuro (1990:75))

(43) A: How did the girls dance?

B: The girls danced a nervous dance.

(Horita (1996:239))

As shown in (42) and (43), the event-dependent COC is acceptable as an answer to the question with *how*. Again, there is no doubt that the CO of the event-dependent type further specifies the manner of action denoted by the verb.

Moreover, even an unmodified CO can modify the notion that is implied by the verb meaning. Observe the following examples:

(44) a. Joseph dreamed a dream. (Hashimoto (1998:128))

b. He walked a walk and talked a talk well beyond his years.

(Omuro (2004:145))

Jespersen (1924) mentions that unmodified COs are rare in actual speech, for the simple reason that they add nothing to the verbal notions. Sentences (44a, b) might be then judged redundant or odd. However, it is not the case. Unmodified COs allow for intensifier interpretations (cf. Hashimoto (1998), Omuro (2004), Höche (2009)). The repeated CO has the function of intensification, which comes as a result of the re-newed reference to previously verbalized elements. In general, the intensification through repetition has two faces: an increase in quantity or quality (Moravcsik (1978)). The event-dependent COC does not express a temporally more extended event than an objectless predicate. Thus, for the construction the intensifying effect is of a qualitative nature, rather than of a quantitative nature.¹⁴ In fact, the sentence *Joseph dreamed a dream* can be interpreted as *Joseph certainly dreamed*. The reason why

COs without modification sometimes do not result in redundancy is that they are used to further specify to what degree the activities denoted by the verbs have been carried out. I class the COCs containing such COs as instances of the event-dependent COC.

From the above discussion, it is clear that the CO of the event-dependent type functions as a predicate appositive and further specifies the notion (manner or degree) implied by the verb. On the other hand, many previous studies claim that this type of CO is a resultant object (Jespersen (1924), Quirk et al. (1985), Macfarland (1995), Takami and Kuno (2002), Kuno and Takami (2004)). Consider the following:

- (45) a. John made *a box*.
b. The carpenter built *the house*.
c. I'm digging *a hole*.

(Quirk et al. (1985:750))

In sentences (45a-c), *a box*, *the house*, and *a novel* are produced only as a result of the activities denoted by the verbs *make*, *build*, and *write*, respectively. Takami and Kuno (2002) mention that the COs in (46a-c), just like the objects in (45a-c), represent results of the actions denoted by the verbs (cf. Kuno and Takami (2004)):

- (46) a. Sue slept *a sound sleep*.
b. Jack sneezed *the most tremendous sneeze I had ever had*.
c. He yawned *a jaw-cracking yawn*, finger-combed his damp hair, linked his hands behind his neck, and stretched.

(Takami and Kuno (2002:156))

Sentence (46a) says that a sound sleep resulted from Sue's sleeping; (46b) says that Jack sneezed, which resulted in the most tremendous sneeze the speaker had ever heard; (46c) says that 'he' yawned, which resulted in a jaw-cracking yawn. Takami and Kuno conclude that the COs in these examples are resultant objects whose *referents* are produced by the actions represented by the verb. As observed above, a COC allows a result reading like Reading B in (28), which describes the result of activity denoted by the verb. If the CO of the event-dependent type is taken as a resultant object, it may be reasonable to think that the result reading is ascribed to the construction.

This analysis cannot, however, answer the question why the event-dependent COC allows for an event reading like Reading A in (28), and why the CO can be replaced with the corresponding adverb of manner. Besides, Takami and Kuno ignore the fact that the CO of the event-dependent type cannot undergo *it*-pronominalization as in (36).

In this connection, Kasai (1980) offers the following insightful view:¹⁵

- (47) In the expression 'to dream a strange dream,' 'a strange dream' may be taken as a resultant object in that the result of activity of dreaming was 'a strange dream.' However, 'a strange dream' is, strictly speaking, not a resultant object. Comparing 'to dream a strange dream' with 'to dig a hole,' we readily find that the event which 'to dream a strange dream' represents is different in character from the one which 'to dig a hole' does. The verb *dream* is a self-contained verb. When we say 'to dream a strange dream,' 'to dream' and 'a strange dream' are co-extensive and unfold at the same time. By contrast, 'to dig' is not co-extensive with 'a hole.' 'A hole' is created through the activity of digging.

(Kasai (1980:5; trans.mine))

This view is consistent with the notion *range*, which Halliday (1967) introduces (cf. Nakau (1994)). According to Halliday, range is defined as the element that is co-extensive with the process and is indeed merely a nominalization of it: Range may be realized by an etymologically cognate item. The following examples show that the CO of the event-dependent type is co-extensive with the event denoted by the verb:

- (48) a. He smiled a beautiful smile.
b. At the same time as he smiled, his facial expression became beautiful.

In example (48a), ‘to smile’ and ‘a beautiful smile’ are co-extensive and unfold at the same time. Therefore, it is possible to spell out what example (48a) means explicitly by means of such a periphrastic expression as (48b).

By taking the notion *range* into account, we can explain why the event-dependent COC allows an event reading and a result reading. Two semantic interpretations of the event-dependent COC depend on how the CO highlights the event denoted by the verb. In the event reading, the CO highlights the intermediate step of the event which the verb represents. On the other hand, with respect to the result reading, the CO highlights the final, resultant state. This proposal is borne out by the following facts:

- (49) a. Mary laughed {for an hour/*in an hour}.
b. Josie danced {for an hour/*in an hour}.
c. Martha sang {for an hour/*in an hour}.

(Tenny (1994:39))

The verbs which take COs typically describe non-delimited events. When they occur

in the event-dependent COC, a delimited reading becomes available:¹⁶

- (50) a. Mary laughed a mirthless laugh {for an hour/in an hour}.
- b. Josie danced a silly dance {for an hour/in an hour}.
- c. Martha sang a joyful song {for an hour/in an hour}.

(Nakajima (2006:680))

In sentences (50a-c), the presence of each CO allows one to understand that the event of laughing, dancing, or singing progresses from beginning to end and to focus attention either on the intermediate step or on the resultant state of the event. The ambiguity strongly suggests that the CO of the event-dependent type is not a resultant object but range, which is co-extensive with the event denoted by the verb. Therefore, it is wrong to treat uniformly the CO of the event-dependent type as either an adverbial or an object of result. For the eventive CO has both an event reading and a result reading.

My claim is further supported by Höche's cognitive analysis (2009). Höche argues that the different readings of the CO as either event or result of the event are linked through construal transformations, such as end-point focus, metaphor or metonymy. The result reading is closely related to the event reading and becomes available through a conceptual 're-profiling' of the reified event: A procedure which can be described as a non-spatial equivalent of the image-schematic transformation of end-point focus enables speakers to interpret the CO as a result of the process.¹⁷

One of the most basic image schemas is that of PATH, which emerges out of our daily experience of moving from one point to another. The basic elements of the PATH schema are: a) a starting point, b) an endpoint, and c) a sequence of connected,

intermediate locations:

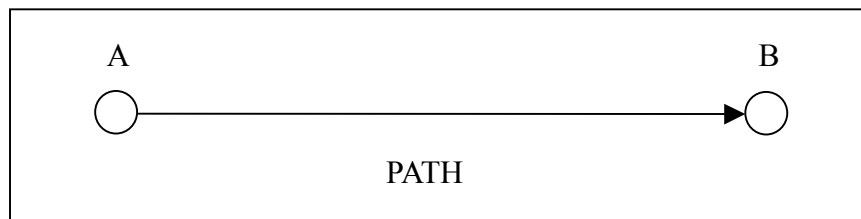


Figure 4.7. The PATH image schema (Höche (2009:81))

Höche mentions that many spatial prepositions have this PATH schema as an integral part of their meanings: *Over, through, into, around* etc, all designate a specific type of path. However, in some usages, these prepositions only designate the end-point of the path, as illustrated in the following:

- (51) a. She came from '*over the hill,*' from the higher part of Littondale.
b. There's a café that stays open – a Greek place, just *around the corner*...
c. My case is at a friend's house *down the street*.

(BNC; cited in Höche (2009:81))

The end-point sense of the prepositions in (51) is linked to the more central sense (i.e. describing the path from source to goal) by an image-schematic transformation called *end-point focus*. According to Johnson (1987), this cognitive operation enables speakers to follow the path of a moving object, and then focus on the point where it comes to rest. Note that SOURCE and PATH are faded out in Figure 4.8:

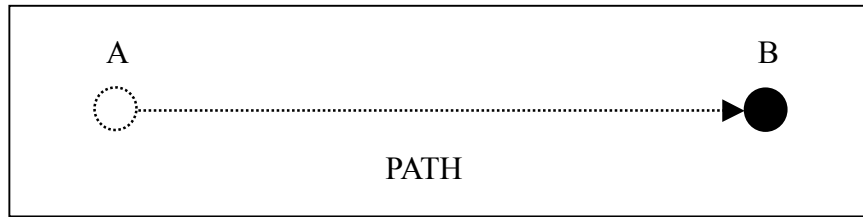


Figure 4.8. End-point focus (Höche (2009:81))

The insights of cognitive metaphor research revealed that human beings map experience from the domain of SPACE to the domain of TIME. As one consequence of such a metaphorical mapping from MOTION (spatial) to ACTION (temporal), we can transfer the spatial PATH schema to events.¹⁸

By means of the image schematic transformation “path-focus to end-focus,” the event-dependent COC receives a result meaning. Höche argues that the previous component states of the event expressed by the verb are left schematic and only the final, resultant state (the state coinciding with the end-point of the temporal path) is profiled, as illustrated in the diagram below:

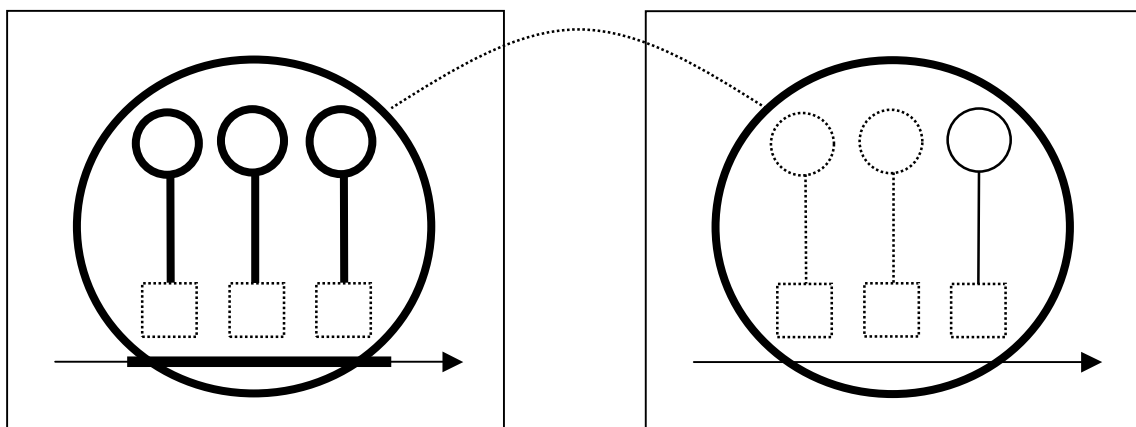


Figure 4.9. The event-dependent COC and end-point focus (cf. Höche (2009:82))

According to Höche, the event reading and the result reading stand in a metonymic relationship, more specifically, a part-whole relationship, with one fact of an event guiding the user to the whole event (Höche (2009:82)).¹⁹ That is to say, it is the PART FOR WHOLE metonymy that allows the event-dependent COC to have two semantic interpretations such as Readings A and B in (28), and aspectual differences as in (50).

From the above discussion, the constructional schema of the event-dependent COC is summarized as follows:

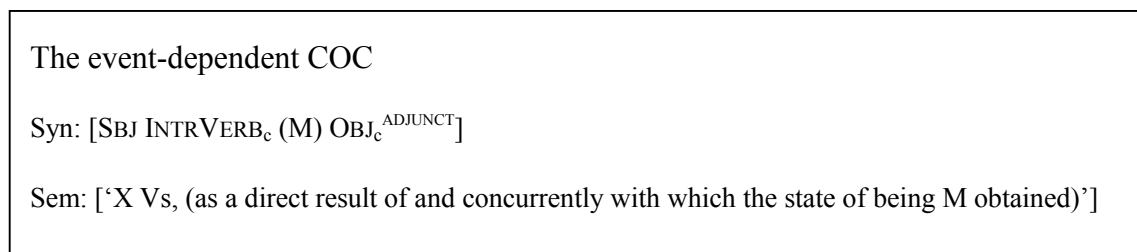


Figure 4.10. The event-dependent COC

The representation in Figure 4.10 shows the syntactic frame of the event-dependent COC with a schematic meaning. When the CO has modifiers (indicated by M), the construction has both an event reading and a result reading. On the other hand, if the CO has no modifiers, the construction does not have these two readings. Recall that the unmodified CO of the event-dependent type can function as a kind of intensifier, which is abbreviated in the above representation. In the event-dependent COC, the function of intensification of the CO is recognized through the repetitive nature of the construction.

4.7. The Event-Independent COC

Let us now move on to a closer examination of the event-independent COC. The CO of the event-independent type refers to a concrete entity which is implied by the main verb. The schematic meaning of the construction is diagrammed as follows:

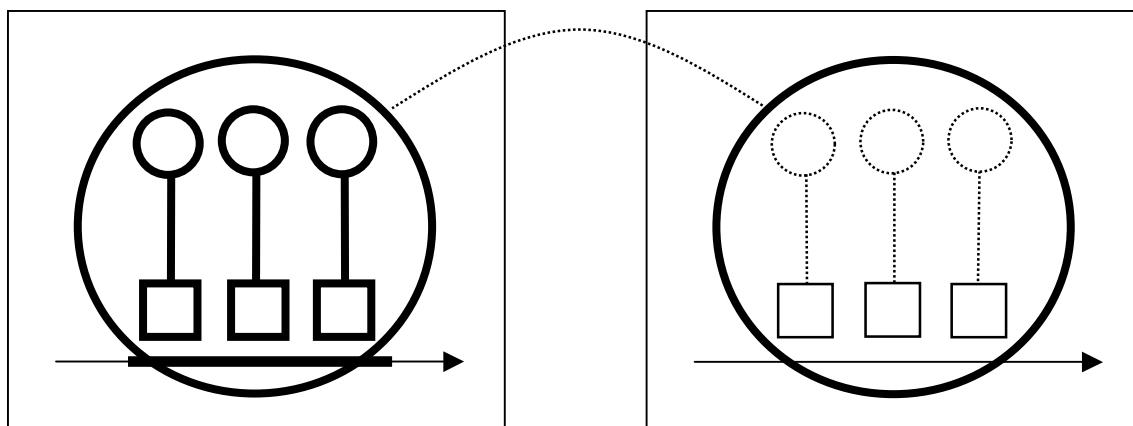


Figure 4.11. The event-independent COC (cf. Höche (2009:85), Langacker (1991:24), Taylor (2002:271))

In the preceding section, I described the specific nature of the COGNATE OBJECT CONSTRUCTION, one aspect of it being the combination of two different profiles of the same conceptual base: one related to the verbal and one related to the nominal constituent. In the case of the event-dependent COC, the landmark is left schematic in each constituent and thus the aspect of intransitive event becomes more salient. For the event-independent COC, on the other hand, the landmark is not faded out in the each constituent. Rather, only the landmark figures prominently in the nominal constituent. Consequently, the aspect of transitive event becomes foregrounded. Note also that the CO of the event-independent type does not further specify the notion (manner or degree) that is implied by the verb meaning, but rather refers to the landmark that is

evoked by the verb meaning.

Langacker (1991) argues that there are several types of nominalization which merely shift the profile of a verb to some nominal entity evoked as part of its inherent structure. Drawing on Langacker's view, Höche (2009) points out that the parts on which the profile can be shifted stand in various relationships to the base. They can originate as the verbal event's trajector (*paint – painter, host – host*), its landmark (internal object) (*choose – choice, feed – food*), its product (*mark – mark, paint – painting*), or its location (*bake – bakery, dine – diner*). Although Langacker does not make it explicit, the distinction between landmark (internal object) and product correspond to the distinction between affected and effected object (Höche (2009:84)).

Among the instances of the event-independent COC, their non-eventive COs are also divided into affected COs and effected COs:

- (52) a. Real plants should be planted with warmed water in the tank.
b. Transfer embryos or cells to acetone-cleaned slides, fix by dropping a single drop of ethanol.
c. ABU, Mitchell, Ryobi and Shimano all produce excellent products.
d. Don't draw such good drawings.

(BNC; cited in Höche (2009:84))

According to Höche, (52a, b) offer examples in which the CO is an internal landmark (affected object) of the verb, whereas the COs in (52c, d) designate products (effected objects). The difference between objects profiling events and results, and objects denoting internal landmarks and products is that the former require some type of scanning of the component states of the verb, whereas the latter profile an inherent

substructure of the event denoted by the verb, with any notion of a temporal sequence of component states being absent (Höche (2009:84-85)). Most previous studies ignore these instances, or do not treat them as instances of COCs. Following Höche, I include in my analysis of COCs not only instances in which the CO denotes an event or its resultant state, but also instances like those in (52). Henceforth, COs such as *real plants* and *a single drop of ethanol* are called *the thing CO*, while COs such as *excellent products* and *such good drawings* are called *the product CO*.²⁰

As seen in section 4.3, the CO of the event-independent type often has a semantic interpretation like Reading C: In the construction *She danced a beautiful dance*, the CO *a beautiful dance* can be interpreted as an existing beautiful type of dance like tango. In this case, the CO refers to a particular, recognizable type, which exists independently of the process. The agent gives this type a particular instantiation. Thus, I assume that such COs also function as affected objects. This claim is supported by the following facts. First, the CO denoting a type (henceforth, *the type CO*) can be the subject of the passive. Consider the following example:

- (53) The blood-curdling scream that they had all heard in countless horror movies was screamed by one of the campers. (Langacker (1991:363))

In sentence (53), the CO *the blood-curdling scream that they had all heard in countless horror movies* can undergo passivization, like a direct object. Langacker (1991) mentions that the scream referred to in (53) transcends the specific event denoted by the verb and represents a particular, recognizable type of scream whose existence is therefore independent of any single instantiation. Thus, the construction in (53) is sanctioned by the passive construction:

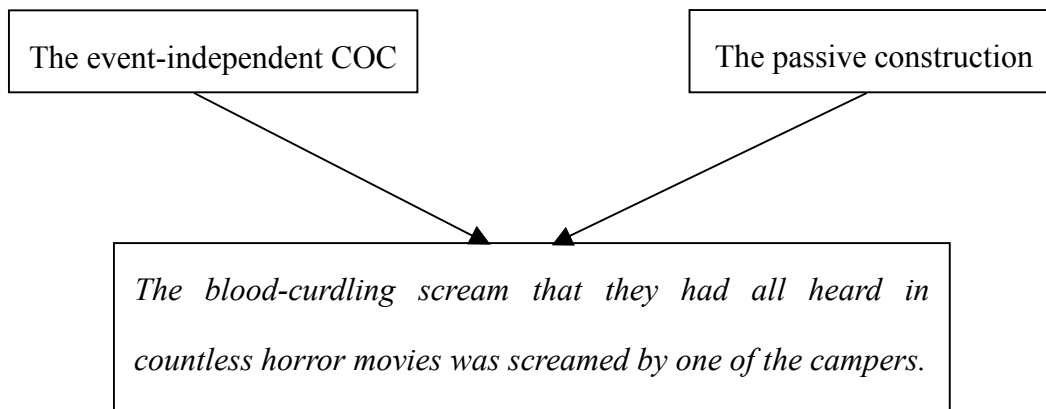


Figure 4.12. The event-independent COC and the passive construction

In addition, the type CO can undergo *it*-pronominalization. Observe the following:

- (54) a. John sang a beautiful song. He sang *it* to cheer her up.
 b. He lived a happy trouble-free life. He could live *it* because his wife took care of all the difficulties. (Takami and Kuno (2002:149))
 c. Mary screamed a blood-curdling scream and she screamed *it* practically in my ear. (Takami and Kuno (2002:153))

The COs in (54) are construed as specific types. For instance, *a happy trouble-free life* is construed as a kind of life. A type, once created, may continue to exist independently of the action that spawns it. Sentences (54a-c) thus can be appropriately paraphrased by the following expressions:

- (55) a. John recreated a beautiful song.
 b. He recreated a happy trouble-free life.

- c. Mary recreated a blood-curdling scream.

Thus, the COCs in (54) are compatible with the pronominalization construction, since their COs function as affected objects which are replicable across many particular instances:

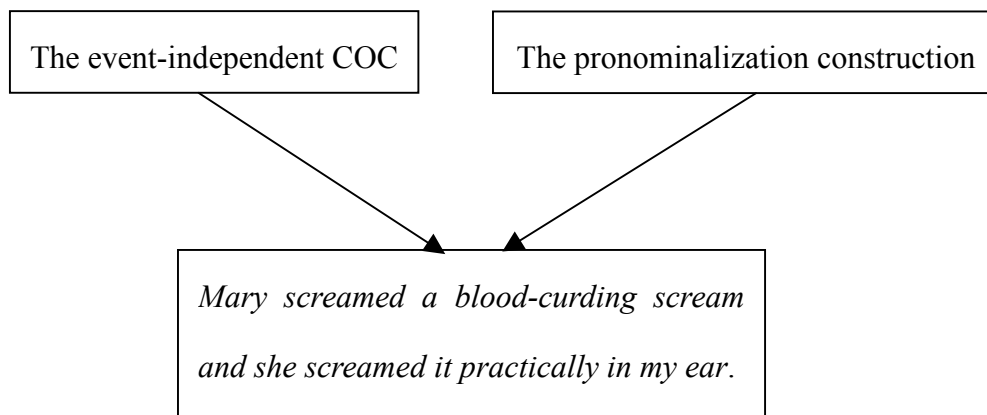


Figure 4.13. The event-independent COC and the pronominalization construction

Now it is noteworthy that sentences (54a-c) bear a resemblance to the following:

- (56) a. She acted the part of Ophelia.
b. They are playing the Egmont Overture.

(Quirk et al. (1985:750))

As is the case with sentences (54a-c), the activities in (56) recreate the referents, i.e. specific, replicable types. Incidentally, Quirk et al. (1985) treat the objects in (56) as one type of resultant objects. If the type CO is also taken as a kind of resultant objects, it seems no wonder that it is referential and can undergo *it*-pronominalization. True,

both (54) and (56) involve creation. But one does not create the Egmont Overture by playing it. The Egmont overture was composed by Ludwig van Beethoven, and then the agent in (56b) only gives it a particular instantiation. The same situation holds true for (54). In (54) each agent performs an action which creates a copy of a pre-composed entity or someone else's action and the result thereof. Therefore, the objects in (54) and (56) should be treated not as resultant object but as affected object.

Furthermore, the construction involving the type CO can be used as an answer to questions with *what*. Observe the examples in (57) and (58):

(57) A: What did he sing?

B: He sang a beautiful song.

(Omuro (1990:75))

(58) A: What (sort of dance) did the girls dance?

B: They danced a traditional dance.

(Horita (1996:239))

Sentences (57B) and (58B) are acceptable as replies to (57A) and (58A), because each CO is construed as a type executable by other agents. Again, the type CO is considered to function as a referential object.

An interesting feature of the type CO is that it does not exhibit the indefiniteness effect, like other COs of the event-independent type. Observe the following examples:

(59) a. Tom laughed *many* ridiculous laughs.

(Horita (1996:234))

b. The actress smiled *various* smiles for the photographer.

(Rice (1988:209))

- c. Diane Keaton smiles that infinitely fetching smile and elucidates: “But, you know, I mean, I say, hey, look, yeah. O.K.”

(Maureen Doud, *New York Times*)

Each of the COs in (59a-c) is construed as a replicable type, i.e. a kind of laugh or smile, and a referential entity. They can thus co-occur with strong determiners. Note also that the type CO can be used in the plural form, like the thing CO and the product CO, as illustrated in (59a, b).

Like the definite article or strong determiners, the CO with a prenominal possessive can also establish specific, definite reference, i.e., the referent is construed as a type being uniquely identifiable and recognizable by speaker and hearer (cf. Höche (2009)):

- (60) a. He sighed *her sighs*, and in his gentlemanly manner, raised his eyes against the mocking Fates.
- b. Our collective unconscious does not dream *Martin Luther King's dream*, or pray *Pope John Paul's prayer*, it endures the nightmare of the lost souls, the raving of the unclean spirit.
- c. To rediscover the life of Jesus in our own times is to come before him, poor and naked, and to live *his life*, not ours.

(BNC; cited in Höche (2009:206))

Massam (1990) claims that the agent of the CO should be coreferential with the agent of the main verb (cf. Halliday (1967), Horita (1996)). Certainly, this claim holds true for the event-dependent COC. The eventive CO just further specifies the (intransitive)

event denoted by the verb. It follows, then, that the agent of the eventive CO should be coreferential with the subject of the whole construction. On the other hand, for (60a-c), coreferentiality between the possessor and the agent is by no means necessary. It goes without saying that this semantic property is compatible with that of the event-independent COC. The non-eventive CO can function as an affected object, referring to the landmark evoked by the verb meaning. It is wrong to consider that the possessor of the affected CO referent must be coreferential with the agent of the whole sentence, i.e. trajector.

According to Höche, the sentences in (60) present the construal in which an agent performs an action which creates a copy of someone else's action and the result. That is, each sentence represents a volitional action of its subject referent. The same thing is true for the COCs in which the subject is coreferential with a possessive of the CO:

- (61) a. Then you can decide to live *your life* fully – getting as much out as you put in.
b. You've got to live *your life* too, you know, said Keith with a grin.

(BNC; Höche (2009:208))

As observed in (61), each sentence represents that the agent intends to lead his/her own life whose existence is independently of others' lives. Such a semantic interpretation is not observed in the event-dependent COC. Thus, the use of the CO with a prenominal possessive is also considered to be a representative of the type CO. The above analysis shows that the construction involving the type CO also belongs to the event-independent COC.

To sum up, the COs of the event-independent type are organized as follows. First,

the COs of the event-independent type is divided into two types of COs: affected and effected. The effected type is instantiated by the product CO, while the affected type is instantiated by the thing CO and the type CO. The difference between the thing CO and the type CO is that the former refers to a concrete thing, whereas the latter refers to a more abstract entity. The COs of the construction function as referential objects and share the common semantic property that the referent can exist independently of the action denoted by the verb. Figure 4.14 depicts the organization of the event-independent COC:

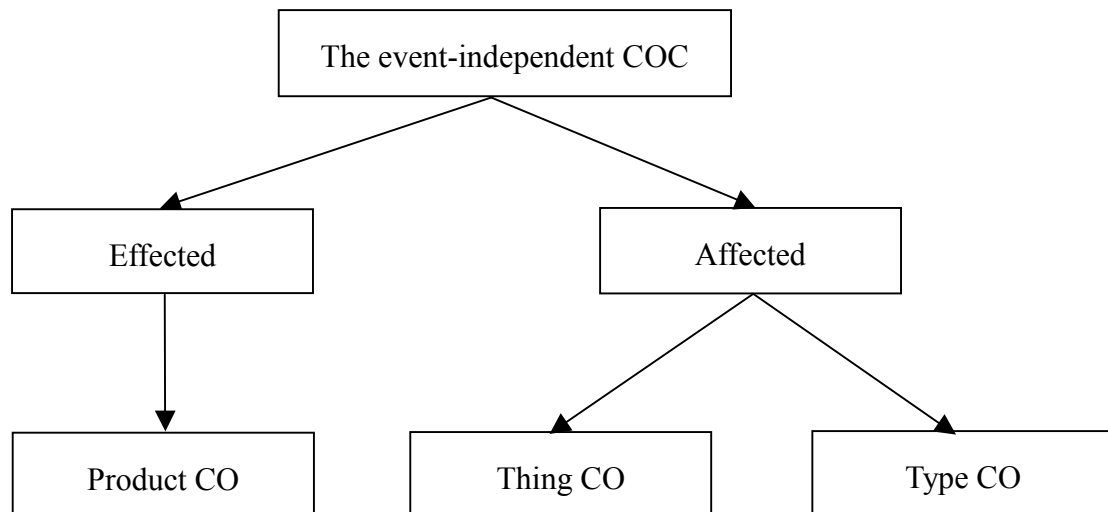


Figure 4.14. The organization of the COs of the event-independent type

It is noteworthy that the event-independent COC has two different meanings, which correspond to the traditional distinction between affected objects and effected objects. Unlike the event-dependent COC, the event-independent COC is regarded as a constructional schema which abstracts away from two subtypes: the affected type and the effected type. Consequently, the syntax and semantics of the event-independent

COC is summarized in the following two ways:

The event-independent COC (effected type)
Syn: [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}]
Sem: ['X creates a product (evoked by the verb) which may continue to exist indefinitely']

The event-independent COC (affected type)
Syn: [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}]
Sem: ['X acts on a thing or type (evoked by the verb) whose existence is independent of any single instantiation of the action']

Figure 4.15. The event-independent COC (effected type and affected type)

4.8. Historical Evidence

It is by now clear that COCs are not monolithic but form a complex category consisting of the event-dependent type and the event-independent type. The event-dependent COC has the syntactic form [SBJ INTRVERB_c (M) OBJ_c^{ADJUNCT}] and the CO functions as a predicate appositive which further specifies the manner or degree of the action represented by the verb. Moreover, the CO of the event-dependent type is co-extensive with the event denoted by the verb. This property makes possible an event reading and a result reading. The event-independent COC, on the other hand, has the syntactic form [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}] and has two different meanings, corresponding to the distinction between the affected CO and the effected CO. The type involving the affected CO is a construction in which the CO functions as an

affected object which represents a thing or a particular type evoked by the verb meaning; on the other hand, the one involving the effected CO is a construction in which the CO functions as effected object which refers to a product created by the action denoted by the verb. This characterization of two types of COCs accounts straightforwardly for their contrastive grammatical behavior and provides a natural explanation for why the COs of the same verb do not show the same syntactic properties.

My analysis is further supported by historical evidence. With respect to COCs, the division that can be made in Old English is that between so-called *cognate datives* and *cognate accusatives*, depending on whether the verb co-occurs with a dative or accusative of a cognate noun. Osaki (1998) points out that the verb often co-occurs with a cognate dative as well as a cognate accusative in Old English. Compare the following examples with the verb *libban*.²¹

- (62) a. forþon þe he her on eorþan *engelice life* [DAT] *lifde*.
 (= because he lived an angelic life here on earth) (BlHom 167. 33)
- b. Ne welle þu ðe ondredan, forðon þe ic soðlice from deaðe aaras 7 eam eft forlæten mid monnum *liifgan*, *nales hweðre þy liife* [DAT] *þe ic ær liifde*, ah swiðe ungelice of ðisse tiide me is to lifigenne.
 (= Be not afraid, for truly I have risen from death, and am permitted to live among men once more, yet not as lived before, but from this time on I must live very differently) (Bede 424. 2-5)

According to Yamakawa (1980), in (62), the CO in the instrumental-dative denotes the manner of the person's living. For example, *engelice life lifde* (= lived an angelic life)

in (62a) represents the same meaning as the expression with a manner adverbial like *lived angelically*. Similarly, the CO in (62b) also specifies the manner of how the agent lived. Therefore, it is assumed that the Old English cognate dative corresponds to the CO of the event-dependent type in Present-day English.

The CO in the accusative, on the other hand, is used to refer to a particular type. Consider the following examples:

- (63) a. *eal his lif* [ACC] *he lifde* buton synnum, þeah þe he hine lete costian.
 (= He lived all his life without sin, though he permitted himself to be tempted) (*BlHom* 33. 16-17)
- b. *gif hie on ænigum dæle wolice libban heora lif* [ACC], syn hie þonne sona from heora wonessum on wende,
 (= If they live their life amiss in any way, let them then at once be converted from their wickedness) (*BlHom* 109. 19-20)

Yamakawa (1980) mentions that in (63) the cognate accusatives with the noun ‘life’ denote the full extent of time through which one’s living lasts (cf. Osaki (1998)). However, as we have seen in section 4.7, the CO with a prenominal possessive represents a specific type, not only denoting the temporal extent of the event denoted by the verb. In Old English, the CO in the accusative develops a certain pattern of [possessive + CO^{accusative}], as illustrated in the COs *eal his lif* (= all his life) and *heora lif* (= their life). Note that this feature is compatible with that of the CO of the event-independent type: The Old English cognate accusative and the CO of the event-independent type do not exhibit the indefiniteness effect. This analysis is supported by the fact that the cognate accusative co-occurs with *hu* (= how):²²

(64) *hu hi heora lif* [ACC] *leofodon*.

(= how they lived their life)

(*GuthGl* 5. 19-25)

Unlike the cognate dative, the cognate accusative is devoid of the adverbial meaning of manner. If the cognate accusative *heora lif* in (64) represents the manner of their living, it is redundant to ask how the action is done with *how*. These examples show that the cognate accusative corresponds to the CO of the event-independent type.

The above historical evidence illustrates that there has been a distinction between the event-dependent type and the event-independent type since the Old English period. Therefore, it is not surprising that COCs in present-day English also consist of two types.

4.9. Conclusion

This chapter has investigated several issues which are indispensable for a proper description of English COCs. In the first part of this chapter the focus was put on the analysis of COCs by Pereltsvaig (1999). As we have already reviewed in Chapter 2, most previous studies favor either the adjunct analysis or the argument analysis. A closer examination, however, shows that the attempt to pin down the syntactic status of COs to either one of such syntactic categories creates confusion in the descriptions of COCs. Pereltsvaig claims that COs are divided into adjunct COs and argument COs. She provides evidence for the distinction on the basis of data from Russian, Hebrew, Vietnamese, and Edo. Along with Pereltsvaig's proposal, I showed that there are two types of COs in English as well.

Moreover, I argued that it is not the verb that determines the syntactic and semantic status of the CO. Previous studies are apt to assume that the syntactic properties of

COCs are defined only by the main verbs. They do not try to provide an answer for the question why there is variation in acceptability even among the COCs of the same verb. In order to answer this question, it is necessary to give up maintaining the reductionist assumption. By adopting a lexical-constructional approach, I proposed that COCs should be pairings of form and meaning. My lexical-constructional account conforms to the following three basic principles: 1) Categories are constructional-specific, 2) heads are constructional-specific, and 3) constructions are schemas. I argued that the syntactic properties of a COC are not defined only by the verb, but rather defined by its CO which functions as a construction-specific head. The grammatical categories of the elements, even the verb, are construction-specific.

In my lexical-constructional account, COCs consist of two types: the event-dependent type and the event-independent type. Each COC instantiates the higher order schema COGNATE OBJECT CONSTRUCTION. The event-dependent COC has the syntactic form [SBJ INTRVERB_c (M) OBJ_c^{ADJUNCT}] and the CO functions as a predicate appositive which further specifies the notion that is implied by the verb meaning. Moreover, its CO is co-extensive with the event denoted by the verb. This property makes possible two interpretations such as an event reading and a result reading. In addition, when the CO of the construction has no modifiers, through its repetitive nature, it functions as a kind of intensifier. These properties are not observed in the event-independent COC. The event-independent COC has the syntactic form [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}] and has two different meanings, which correspond to the traditional distinction between an affected object and an effected object. Unlike the event-dependent COC, the event-independent type consists of two subtypes, the effected type and the affected type. Note that this property is consistent with the fact that the construction allows various syntactic behaviors like the transitive construction. Finally,

I showed that my analysis is supported both by cognitive accounts and historical evidence. The network of COCs is summarized as in the diagram below:

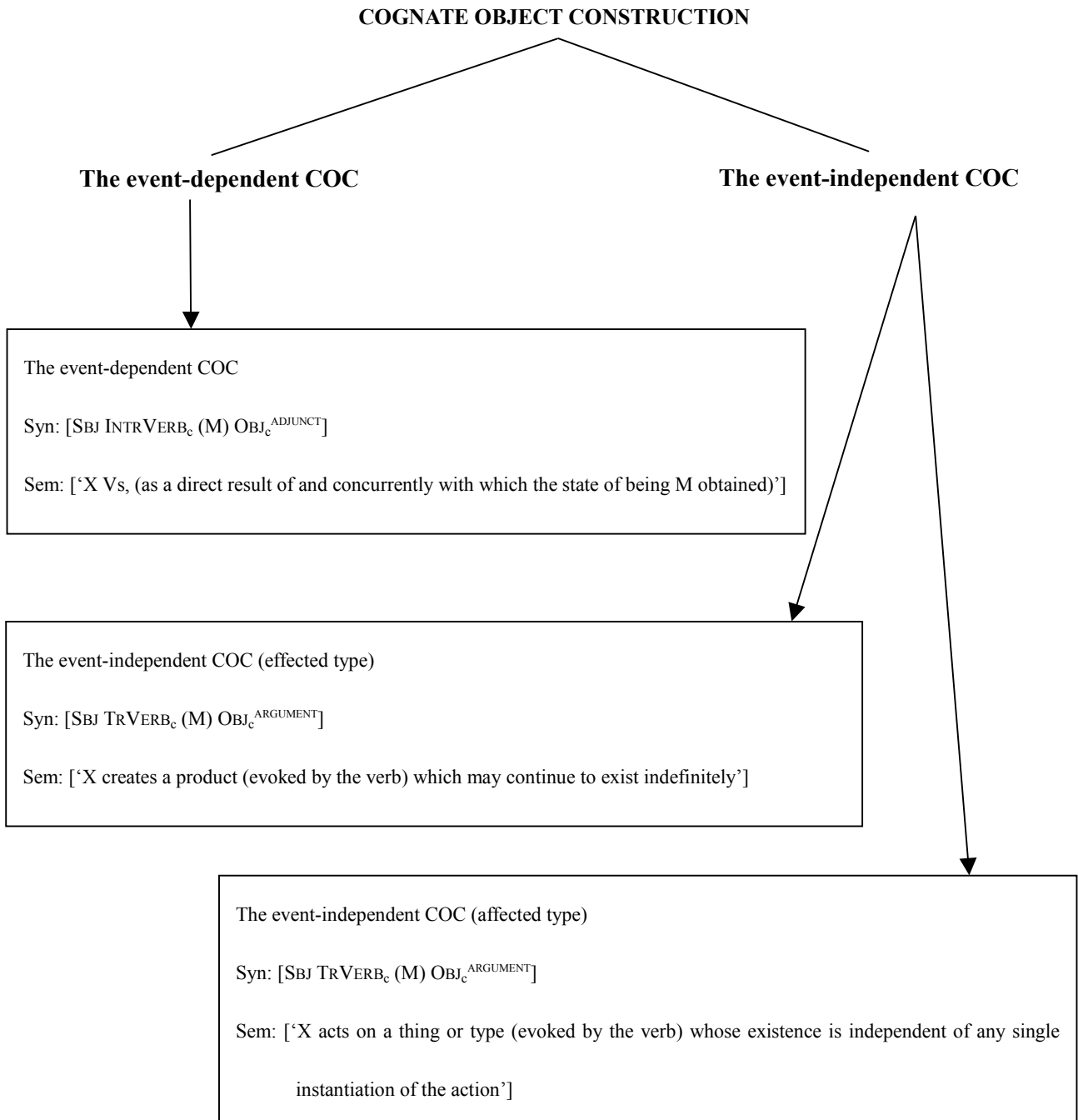


Figure 4.16. The network of English COCs

The characterization of the event-dependent COC and the event-independent COC accounts straightforwardly for their contrastive grammatical behavior and provides a natural explanation for why the COs of the same verb do not show the same syntactic properties.

The event-dependent COC and the event-independent COC are still regarded as higher-order constructional schemas, which abstract over a variety of instances and model examples reflecting the introspection in conjunction with actual uses in corpora. To demonstrate the psychological reality of these constructions, it will be necessary to examine still lower-level constructions, too, i.e. verb-class-specific constructions and verb-specific constructions.

Moreover, the four main questions given in Chapter 1 still remain unanswered: 1) Why are COCs classified into two types? 2) Why is it possible that in one type of COCs the intransitive verb takes an overt object complement, i.e. CO? 3) Where does the equal status of the CO and the corresponding manner adverbial come from? 4) How are the two types of COCs related to each other? In the next chapter, we will tackle these problems, by paying much attention to verb-class-specific constructions and verb-specific constructions.

Notes to Chapter 4

^{1.} As we have seen in Chapter 2.3.1, Massam argues that the CO allows topicalization if it includes new information. Certainly, the focus-topicalized elements often bear new information (see Gundel (1974), etc.). However, all her examples show the definiteness effect. It is well known that the use of definite articles indicates old information. If the CO allows topicalization irrespective of whether it represents old or new information, syntactic tests such as topicalization may be not useful criteria for determining the syntactic status of the CO.

^{2.} The abbreviations used in the glosses of examples are as follows: ACC = accusative, CL = clitic, DAT = dative, INSTR = instrumental, PASS = passive.

^{3.} According to Pereltsvaig, in this language even cardinal numerals are excluded.

^{4.} Pereltsvaig reports that there is no relevant data for Edo because there are no passives in that language.

^{5.} The morphological or semantic relation between the verb and its CO is abbreviated as the subscript *c*, which means ‘cognateness.’

^{6.} Likewise, we know that the noun *cigarette* refers exclusively to a pre-existing thing used for smoking, but not to the action of smoking:

(i) *cigarette* (noun)

a thin tube of paper filled with finely cut tobacco that people smoke

However, the CO including *cigarette* often expresses the way it was smoked:

- (ii) a. He smoked a sad cigarette.
- b. How/*What did he smoke?

In (ii-a), the adjective *sad* does not apply literally to the head nominal. It wasn't the cigarette that was sad, but the way it was smoked. In fact, the CO *a sad cigarette* is questioned with *how*. The above example also indicates that the constructional meanings of a COC are not reduced to the noun alone. Incidentally, traditional rhetorical analysis uses the term *transferred epithet* or the word *hypallage* for such cases as (ii-a) (Huddleston and Pullum (2002:558)). Expressions such as *He smoked a sad cigarette* and *He smoked a discreet cigarette* may be to some extent idiomatic.

^{7.} Rice (1987) and Matsumoto (1996) mention that the non-eventive CO (though they do not use this term) refers to the type which is instantiated by the action denoted by the verb. Höche (2009), on the other hand, points out that there is another version of the non-eventive CO. See section 4.6 for details.

^{8.} I used in earlier studies the term *the predicative COC* and *the referential COC* for describing English COCs (Kitahara (2005, 2006, 2007, 2008)). These terms cannot, however, capture the complex nature of the constructions and the relation between them. Thus, I adopt here the terms *the event-dependent type* and *the event-independent type*.

^{9.} According to Langacker, one participant termed the trajector is the primary figure within a profiled relation, whereas the other participant termed the landmark is a salient substructure other than the trajector of a relational predication or the profile of a nominal predication. Such trajector/landmark asymmetry is one linguistic instantiation of figure/ground alignment. In Cognitive Grammar, it is assumed that subjects and objects elaborate the trajectors and landmarks of relational predications. Thus, it follows that the subject/object distinction reflects the trajector/landmark asymmetry.

Langacker mentions that the trajector/landmark distinction is far more general and broadly applicable than the subject/object distinction as this is traditionally understood: The terms subject and object are normally reserved for overt nominals. By contrast, trajector/landmark alignment pertains to the internal structure of relational predications, at any level of organization. Trajectors and landmarks need not be spelled out overtly, unlike subjects and objects. See Langacker (1987, 1991) for more details.

¹⁰ I do not claim here that the CO of the event-dependent type should be completely the same as the appositive construction. For the appositive construction is used in various environments, as illustrated in the following:

- (i) a. He kissed her, *quick, hard kisses* that had her mouth trying to catch his, begging for more, preparing her for more.

(Linda Howard, *The Shades of Twilight*)

- b. In Vicarage Terrace, Mrs. Uphill was asleep at last, *the drained, empty, heavy sleep of exhaustion*. (Rodney D. Wingfield, *Frost at Christmas*)

- c. Dill breathed his patient breath, *a half-sigh*.

(Harper Lee, *To Kill a Mockingbird*)

- d. He *smiled the sly grin of a gator* that had just devoured a nest of ducklings, *a grin* that he knew would only make her more angry.

(Sandra Brown, *Envy*)

- e. She laughed louder, *the strong healthy laugh* of a woman at ease with herself.

(Robert Crais, *The Monkey's Raincoat*)

In (i-a), the cognate noun *quick, hard kisses* is in apposition with the transitive construction. On the other hand, in (i-b), the head noun *sleep* in *the drained, empty,*

heavy sleep of exhaustion is cognate with the adjective *asleep*. In addition, the cognate nouns *a half sigh* and *a grin* in (i-c, d) are put in apposition with the COs. Note also that the cognate noun *the strong healthy laugh* in (i-d) does not exhibit the indefiniteness effect, unlike the CO of the event-dependent type. All these properties are not observed in the event-dependent COC. Therefore I should add that the event-dependent COC has a striking resemblance to the intransitive construction with the cognate appositive.

^{11.} Many previous studies point out that the CO of the event-dependent type can be paraphrased into the corresponding manner adverbial. On the other hand, one might think that there is a semantic difference between them like this: Compared with *Oliver danced beautifully*, *Oliver danced a beautiful dance* specifies how many times the agent danced. But the COC does not necessarily count up the number of times Oliver danced. Despite the indefinite article *a*, it can refer to all of Oliver's dancing, like the sentence with the corresponding manner adverbial. The use of the indefinite article, of course, enables *a beautiful dance* to refer to one specific dance. However, this semantic interpretation depends upon the context. My informant points out that we need to change the sentence *Oliver danced a beautiful dance* to *Oliver danced the dance beautifully*, to get the desired meaning without context. The object *the dance* is made specific, thanks to using *the* instead of *a*. This kind of definiteness effect is observed not in the event-dependent COC, but rather in the event-independent COC. See section 4.7 for more details.

^{12.} Higginbotham (1987) points out the cases in which definite NPs are either disallowed or, if permitted, carry semantic implications that are not borne by indefinites:

- (i) John is a/*every lawyer from Pittsburgh. (Higginbotham (1987:43))

Rothstein (1983) mentions that all predicates are unsaturated. Thus, one might think that *a lawyer* in (i) cannot be unsaturated, since the N' *lawyer* has but one open place, and it should be bound by the indefinite article. However, *a lawyer* functions as a predicate nominal in the sentence. To resolve the contradiction, Higginbotham gives up the premise that determiners are invariably binders of open propositions and supposes that the indefinite article in (i) is interpreted instead in essentially the same way as an adjective is interpreted. Then, *a lawyer* will come out as (ii):

- (ii) a (x) & lawyer (x) (Higginbotham (1987:47))

In (ii) *a* means *one*, in other words, that it is a predicate true of each individual thing, or thing that is not a plurality. The whole of (ii) is then predicated of the subject in, say *John is a lawyer*, whose truth-conditions are then what they should be (Higginbotham (1987:47)). With respect to the event-dependent COC, we can assume, the CO is predicated of the subject and the verb (cf. Moltmann (1989)).

^{13.} According to Huddleston and Pullum (2002), in the superlative construction, the use of the definite article establishes identifiability. For example, in the sentence *Everybody wants to be a member of the most popular team*, it is the modifier *the most popular* that enables the term to be identified: it is singled out by its position at the top of the scale of popularity (Huddleston and Pullum (2002:371)). The same applies to the COs in (41). However, just because they can be identified does not mean that they are allowed to be interpreted as distinct from the activity. Note that the COs *the most ear-splitting cracks of thunder* and *the most loving smile* are indistinguishable from the

activity that engenders them.

¹⁴ Moravcsik (1978) argues that the two main meanings of reduplication are emphasis and continuity. In the case of emphasis, the increased amount of form iconically reflects an increase in intensity. With respect to continuity, a reduplicated element can suggest increased temporal extent of an action. Through the addition of the eventive CO a notion of continuity is added to an expression. However, it cannot be denied that a certain form of temporal bounding is achieved as in (50). Höche (2009) points out that, in the majority of cases, the combination of the verb and the eventive CO does signal the extension of an action over a particular period of time with the temporal limits coinciding with the boundaries of the event expressed by means of the CO:

- (i) a. He sighed harshly and leaned back in his seat. (Höche (2009:115))
- b. He sighed a harsh sigh and leaned back in his seat.

(BNC; cited in Höche (2009:115))

According to Höche, in the former example no temporal limits are specified, whereas the latter expression describes a process which extends within the boundaries of “a harsh sigh.” This means that the event of sighing takes precisely as long as it does to ‘create’ a harsh sigh (Höche (2009:115)). While the action itself is not more extended than in the CO-less variant, it is no doubt that the eventive CO does have an effect similar to what has been observed for forms containing reduplicated morphemes: This effect is iconically represented in the structure of the event-dependent COC. More important is that this effect is not inconsistent with the co-extensiveness between the verb and the eventive CO, as discussed hereinafter.

¹⁵ The translation is my own and aims to be as literal as possible to help readers focus

on the original language.

^{16.} In the literature on aspectual composition, it is generally claimed that the combination of a verb of a certain class and a direct object yields a delimited expression. However, judgments of such expressions are in reality highly variable. Smollett (2005) shows that, with adequate context, all expressions with a verb of this class and a direct object allow both non-delimited and delimited readings. For example, consider the following example:

(i) Jack built a house {?for/in} a month. (Smollett (2005:41))

Out of context, most speakers do indeed judge example (i) as allowing a delimited reading only. However, with example (i), the non-delimited reading is made more accessible with the addition of adequate context, or by changing the actual entities referred to. For example, example (ii) contrasts with example (i) simply because a Lego tower is something that can be added onto indefinitely without being considered “finished,” whereas there is often a point when we consider a house complete and construction ceases (Smollett (2005:51)).

(ii) Steven built a Lego tower for three hours. (Smollett (2005:51))

Thus, it is natural to assume that the event-dependent COC also allows both non-delimited and delimited readings, depending on context.

^{17.} Image schemas are basic, schematic structures that have developed from our earliest bodily and spatial experiences and hence are immediately meaningful to us, such as the UP-DOWN schema, the FRONT-BACK schema, and the MOTION schema. See

Lakoff (1987) and Johnson (1987) for more details.

^{18.} In the paradigm of Cognitive Linguistics, metaphor is defined as a conceptual shift in which the structure of one domain is mapped onto that of another domain. For example, the concept of space is based on one of the most fundamental of our bodily experiences and as such is the source of many metaphorical mappings, e.g. TIME IS SPACE (*The new year is coming up* (Radden and Dirven (2007:317))). See Lakoff and Johnson (1980), Lakoff (1987), and Johnson (1987) for details.

^{19.} Metonymy is a conceptual shift in which one conceptual entity is mapped onto another within the same frame or domain. The PART FOR WHOLE metonymy are conceptual in nature because it has a very general application. In fact, many instances of this metonymy can be found in a variety of linguistic expressions, as in the use of faces for *I noticed several new faces tonight* (Croft and Cruse (2004:217)). The face is the distinguishing feature of a human being. We mentally trace a path from a conceptually salient conceptual entity, such as ‘face,’ to another conceptual entity, ‘man.’ The salient entity in this conceptual shift is referred to as a reference point. Metonymy thus involves speaking about a salient reference point which allows us to access another conceptual entity, the target. In the event-dependent COC, we mentally access a whole (event) via a salient part (resultant state). For more detailed discussion about metonymy, see Lakoff and Johnson (1980), Panther and Radden (1999), Barcelona (2000), and Dirven and Pörings (2002).

^{20.} It might be objected that COCs involving product COs are not regarded as instances of the event-independent type. Certainly, product COs are not wholly independent of the designated process, since they have no prior existence but are rather created by the event itself. However, once created, such COs may also continue to exist indefinitely. In that sense they are independent of the processes that spawn them

(cf. Langacker (1991)). Note also that constructions involving product COs instantiate the passive construction as in (52a).

^{21.} *Bede* = *The Old English Version of Bede's Ecclesiastical History of the English People* 4 vols., ed. by T. Miller, OS 95, 96, 110, 111, London: EETS, 1890-98.

^{22.} *GuthGl* = *Das angelsächsische Prosa-leben des hl. Guthlac*, *Anglistische Forschungen* 27, ed. by P. Gonsler, Heidelberg: Winter, 1909; rpt. Amsterdam: Swets, 1966.

Chapter 5

A Lexical-Constructional Account of English COCs

5.1. Introduction

The preceding chapter was devoted to a lexical-constructional description of syntactic and semantic characteristics of English COCs. My description of COCs aimed to provide an integrated account of idiosyncratic properties of the constructions that had so far been given a detailed account only within the framework of Generative Grammar or Discourse-Functional Grammar, or had only been touched on by linguists working in the Cognitive Linguistics paradigm.

The proposed lexical-constructional account brought to light the complex nature of COCs: They are not monolithic but comprised of the event-dependent type and the event-independent type, instantiating the higher-order schema COGNATE OBJECT CONSTRUCTION. We are now in a position to answer the four questions given in the first chapter: 1) Why are English COCs classified into two types? 2) Why is it possible that in one type of COCs the intransitive verb takes an overt object complement, i.e. CO? 3) Where does the equal status of the CO and the corresponding manner adverbial come from? 4) How are the two types of COCs related to each other?

To give definitive answers to the above four questions, we need not only a lexical-constructional perspective but also real language data from large-scale corpora. What needs to be stressed is that the event-dependent COC and the event-independent COC are thought of as still higher-level constructions, which abstract over a variety of lower-level constructions. In order to demonstrate the psychological reality of these constructions, it is absolutely essential to look at verb-class-specific constructions and

verb-specific constructions (cf. Iwata (2006c), Iwata (2008a)). The focus must be shifted to a careful, detailed analysis of usage data extracted from large-scale corpora and search sites on the Web such as Google.

As Höche points out, none of the studies on COCs discussed so far drew on an extensive survey of real language data. The only exception is Macfarland's (1995) discussion. For her investigation, she compiled a corpus of naturally occurring tokens and gave a first corpus-based analysis of COCs. Unfortunately, she merely pointed at tendencies of usage and employed examples of the constructions as a means of illustration for the claims postulated in her own analysis, neglecting a statistical validation of formal and semantic characteristics in the use of COCs (Höche (2009:118)). Recall also that Macfarland's analysis rests on dubious premises.¹

At present, Höche (2009) seems to provide the most comprehensive corpus-based description of COCs. By consulting the World Edition of the British National Corpus as the basis for her corpus investigation of COCs, Höche explores the possible interrelations between different types of COCs and particular lexemes or groups of lexemes, applying the method of collostructional investigation developed by Gries and Stefanowitsch (Stefanowitsch and Gries (2003), Gries and Stefanowitsch (2004)).² To gain insights into the actual use of COCs by native speakers of English strongly supports my lexical-constructional account of the constructions. In this chapter, I will refer to Höche's study for more information on actual usage of COCs.

However, I must add that Höche's analysis has the same problem as the previous studies discussed so far, in particular Macfarland (1995). Through a detailed examination of her corpus-based analysis, it will be clear that there are similarities and differences between my analysis and Höche's. The following sections will show that the proposed lexical-constructional analysis gives a more plausible explanation for the

complex nature of English COCs and what was said before about the syntactic and semantic idiosyncrasies of the constructions.

5.2. The Relation between Two Types of COCs

In this section, we consider why COCs are classified into two types. As illustrated in the preceding chapter, English COCs consist of two types: the event-dependent type and the event-independent type. Each COC has its own syntactic form and semantic properties. The event-dependent COC has the syntactic form [SBJ INTRVERB_c (M) OBJ_c^{ADJUNCT}] in which the adjunct CO functions as a predicate appositive further specifying the notion that is implied by the verb meaning. The specific event which the adjunct CO designates is co-extensive with the event denoted by the verb, which makes possible an event reading and a result reading via the PART FOR WHOLE metonymy. Additionally, even unmodified adjunct COs, through their repetitive nature, can function as intensifiers. It can be said that the syntactic and semantic properties of the event-dependent COC are similar to those of the intransitive construction. The event-independent COC, on the other hand, has the syntactic form [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}] and has two different meanings, which correspond to the traditional distinction between affected objects and effected objects. Unlike the event-dependent COC, the event-independent COC is composed of two subtypes, the effected type and the affected type, in which the argument CO allows various syntactic behaviors like the direct object of the transitive construction. Taking into account the fact that each COC type has its own syntax and semantics, we are safe in assuming that English COCs form a complex category, composed of multiple constructions.

Of particular note is that many of COCs can be interpreted in two different ways (Jones (1988), Matsumoto (1996), Kitahara (2007, 2008, 2009)). To give a concrete

example, the sentence *She danced a beautiful dance* can be analyzed as an instance of the event-dependent type or that of the event-independent type. So it might appear that English COCs should be regarded as instances of constructional homonymity (Chomsky (1957, 1965)). By assuming that the event-dependent COC and the event-independent COC are *entirely* different constructions, one might speculate that the sentence is an instance of homonymous constructions, as shown in the following example:

- (1) They are flying planes. (Chomsky (1957:87))
- (2) a. [S [NP They][VP [V [AUX are] [V flying]] [NP planes]]]
- b. [S [NP They][VP [V are] [NP flying planes]]]

Sentence (1) has two interpretations: it can mean either that someone is flying planes or that something is flying planes. In the period of Transformational Grammar, it was postulated that there should be two constructional paths for obtaining (1). By means of a phrase-structure grammar the ambiguity of sentence (1) can be represented as in (2a, b). By using such representation, the sentence *She danced a beautiful dance* may be also represented as in (4a, b):³

- (3) She danced a beautiful dance.
- (4) a. [S [NP She][VP [V danced] [ADV a beautiful dance]]]
- b. [S [NP She][VP [V danced]][NP a beautiful dance]]]

The interpretation of (4a) is similar to the intransitive construction, whereas that of (4b) the transitive construction. Thus, it might be presumed that the event-dependent COC belongs to the intransitive construction, while the event-independent COC instantiates

the transitive construction. If the representations in (4) are correct, it follows that two kinds of *She danced a beautiful dance* are stored as *unrelated* constructions in native speakers' knowledge of language, corresponding to whether *a beautiful dance* functions as an adjunct CO or an argument CO. Such analysis is quite close to the reductionist accounts that have been given within the framework of Generative Grammar or Discourse-Functional Grammar: The distinction between adjuncts and arguments is seen as a clear-cut distinction.

However, comparing (1) with (3), we notice that the ambiguity of *She danced a beautiful dance* originates in the fact that the two interpretations profile the same event of [DANCE], while having syntactic differences. Unlike instances of constructional homonymy, the ambiguity of a COC relies on how a speaker construes the profiled event. Note that sentences (2a) and (2b) do not profile the same event. Hence, it would surely be rash to conclude that COCs show the same kind of constructional homonymy as sentence (1) (Kitahara (2009)).

It is normally observed in English that alternate construals of a given event engender constructions which differ in form and meaning. Take as an example the relationship between the following constructions:

- (5) a. Bill sent a walrus to Joyce.
b. Bill sent Joyce a Walrus.

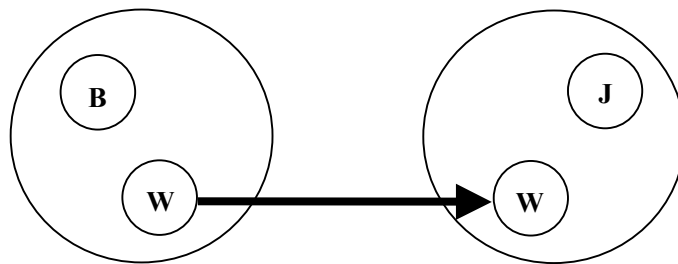
(Langacker (1990:13))

Sentence (5a) is an instance of the dative construction, while (5b) is one of the ditransitive construction. According to Langacker, the standard transformational analysis of these sentences treats them as synonymous and derives them from a

common deep structure. Depending on the particular choice of deep structure, the preposition *to* is either deleted or inserted transformationally, and the nonsubject nominals are permuted in the course of deriving the surface form of either (5a) or (5b).

Cognitive Linguistics or Construction Grammar, on the other hand, does not posit abstract deep structures, and neither sentence type is derived from the other. Sentences (5a) and (5b) are claimed instead to represent alternate construals of the profiled event. The dative construction and the ditransitive construction differ in meaning because they employ subtly different construals to structure the event of [SEND]. The essentials of the analysis are sketched in Figure 5.1:

(a) Bill sent a walrus to Joyce.



(b) Bill sent Joyce a walrus.

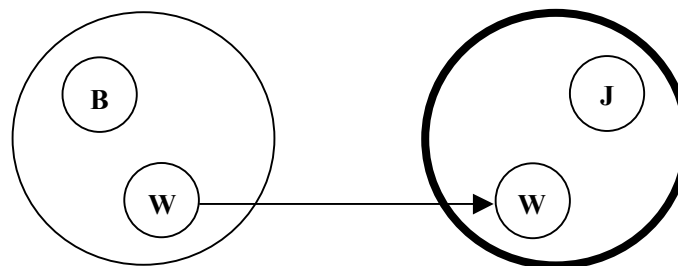


Figure 5.1. The dative construction and the ditransitive construction (adapted from Langacker (1990:14))

In Figure 5.1, the small circles represent Bill (B), Joyce (J), and the walrus (W); the large circles stand for the regions over which Bill and Joyce exercise dominion and heavy lines indicate a certain degree of relative prominence. Langacker argues that up to a point sentences (5a) and (5b) are semantically equivalent. Each symbolizes a conception in which a walrus originates in the domain under Bill's control and at Bill's instigation, follows a path that results in its eventual location within the region under Joyce's control. The semantic contrast resides in the relative salience of certain facets of this complex scene. In (5a), the morpheme *to* specifically designates the path followed by the walrus, thereby rendering this aspect of the conceptualization more prominent than it would otherwise be, as indicated in Figure 5.1 (a). In (5b), on the other hand, the morpheme *to* is absent, but the juxtaposition of two unmarked nominals (Joyce and a walrus) after the verb symbolizes a possessive relationship between the first nominal and the second. Consequently (5b) lends added prominence to the configuration that results when the walrus completes its trajectory, namely that which finds it in Joyce's possession, as indicated in Figure 5.1 (b). The dative alternation mirrors how a speaker chooses to structure and interpret the event described by the verb.

Let us return to the case of COCs. The proposed account holds that there is a higher-order schema COGNATE OBJECT CONSTRUCTION abstracting over the event-dependent COC and the event-independent COC. The higher-order schema designates the specific process instance profiled by the verb. The complex nature of a COC is arrived at via a combination of summary scanning of its component states and profile shifting, an additional end-point focus transformation (the event-dependent type), or a shift of the profile to the verb's primary landmark (the event-independent type). My descriptions are diagrammed in Figure 5.2:

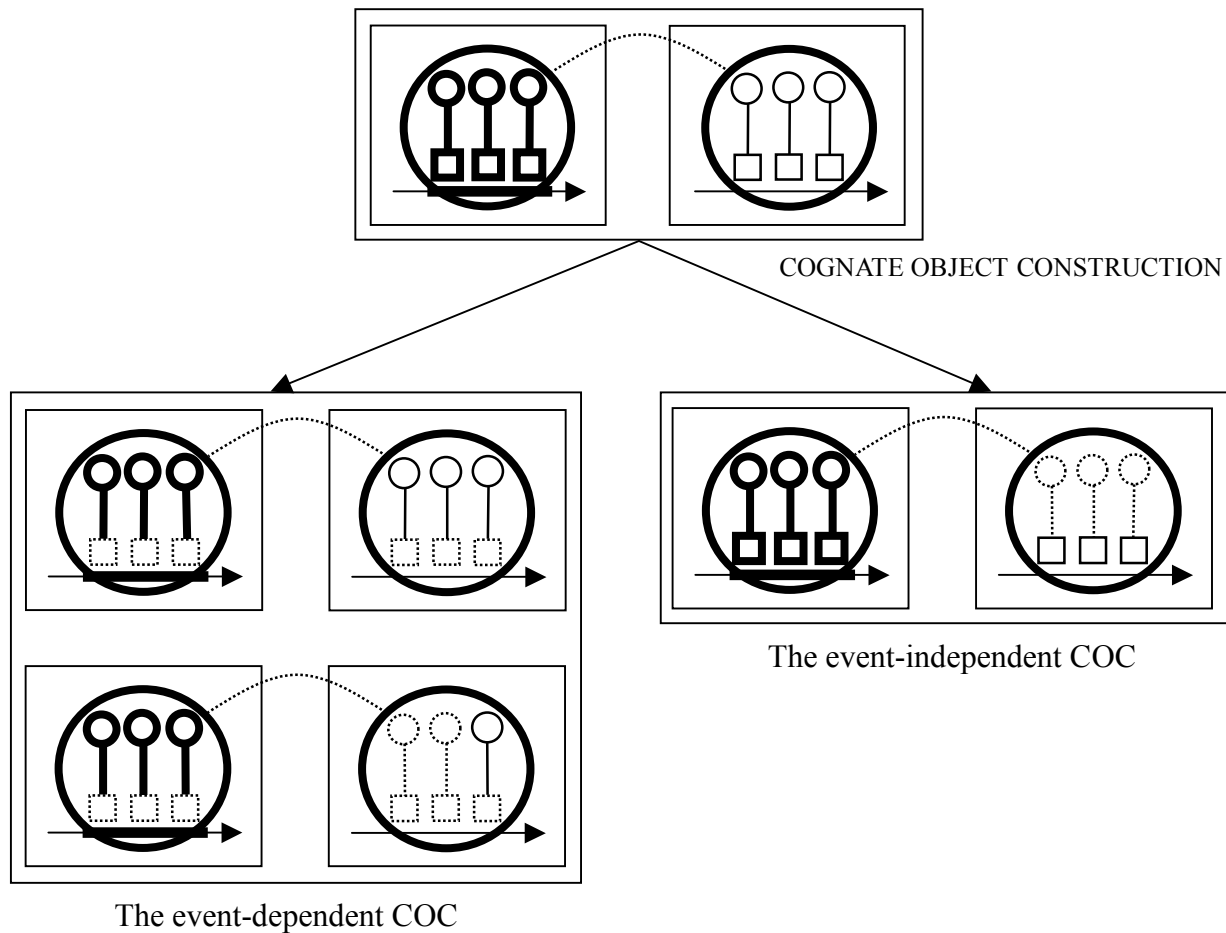


Figure 5.2. The relationship between event construals and COCs

Compare the event-dependent COC with the event-independent COC. In the network of COCs, all of the content in one construction may be presumed to figure in the other as well. What differs is the relative salience of substructures. My account suggests that these two types of COCs are available as alternate means of construing a given event, as in dative alternation constructions. We see, then, that judgments of well-formedness of a COC often hinge on the interplay and compatibility of construals, and are influenced by subtle shifts in context, intended meaning, or how a speaker construes a conceived situation. This characterization shows that the distinction between adjuncts and arguments in COCs must be seen as a continuum rather than a

clear-cut distinction, which is due to the fact that the potential of substructures of conceptual entities to function as prominent ones is a matter of degree.

The argument/adjunct distinction is probably one of the most controversial issues in linguistics. To consider the argument/adjunct distinction as a continuum seems quite a radical view (cf. Croft (2001)). The distinction that has been presented so far, for example, in the generative tradition, assumes that arguments are elements participating in the event and adjuncts are ones contextualizing or locating the event. This definition seems to be quite clear, but when we deal with concrete examples it is not the case. Consider the following examples:

- (6) a. The verdict rendered him speechless.
- b. I put the sweater in a box.
- (7) a. Before she left the phone rang.
- b. We chased squirrels in the park.

(Langacker (1987:308))

The status of an element of a clause is not always so evident or immune to controversy. *Speechless* in (6a) would be considered an argument of the verb, as would be the prepositional phrase *in a box* of (6b). In (7), on the other hand, the adverbials *before she left* and *in the park* are treated as adjuncts of the clause. In fact, the latter is omissible, whereas the former is not. These examples indicate that the syntactic status of an element of a clause is not recognized in the phrase-structure level. The same holds true for nominals put in the object position:

- (8) a. All the racers ran five miles.

- b. All the racers ran the first miles quite easily.
- c. *Five miles were run by all the racers.
- d. The first miles were run quite easily by all the racers.

(Langacker (2008:391))

Langacker (2008) argues that there is also flexibility in how something coded as object is construed. To give an example, the start of a marathon might equally well be described by either (8a) or (8b). But while the object nominals refer to the same five-mile path, these sentences construe it rather differently. In (8a), *five miles* serves mainly to specify a distance. Its referent is viewed primarily as a point on a scale of measurement, which can be thought of as an abstract location. Since the object is a nonparticipant, the sentence is nontransitive, so its passive counterpart, (8c) is infelicitous. By contrast, *the first five miles* is portrayed in (8b) as a spatial path to be traversed, or a kind of adversary that has to be conquered. Construed as a participant that the runners interact with, *the first five miles* is not just an object but a direct object, so to some extent (8b) is transitive. Its passive counterpart, (8d), is thus acceptable. Note that the argument/adjunct distinction in (8) is based on alternate construals of how one construes the event of [RUN] and a spatial path. The above examples suggest that the so-called argument/adjunct distinction should be gradient, rather than clear-cut. While neither intuitively obvious nor recognized in traditional linguistics, I consider this as a fundamental cognitive ability having numerous and varied linguistic manifestations, including English COCs.

I propose now that English COCs are stored as a heterogeneous category comprising independent constructions, rather than a homogeneous category. However, it must be noted that the classification of COCs often depends on how a speaker

structures and interprets the event described by a verb, as in the dative alternation. In this respect, the event-dependent COC and the event-independent COC can be different but related constructions.

Of course, there is a striking difference between COCs and dative alternation constructions. In the case of the dative alternation, we see a distinctive difference between the syntactic form of the dative construction and that of the ditransitive construction. On the other hand, the two types of COCs share the same form at least *on a superficial level*. There is no doubt that each COC has its own form and meaning. But it should not be overlooked that the two types of COCs have the common argument structure [SBJ VERB_c OBJ_c]: the verb takes an object complement, irrespective of whether it functions as an adjunct or argument.⁴ Further complicating the matter is the fact that the CO repeats the form and meaning of the verb. Thus, it is not unreasonable to suppose that English COCs can be superficial homonymous constructions. This superficial constructional homonymy is considered one factor that has complicated the classification of COCs. From all these considerations, I should like to draw the following conclusion:

(9) *Why are English COCs classified into two types?*

English COCs are classified into two types, because they form a heterogeneous category consisting of two independent constructions, the event-dependent type and the event-independent type. The use of these constructions often depends on how a speaker structures and interprets the event described by the verb. Thus, the instances which can be interpreted in two alternate ways show superficial constructional homonymy.

Naturally, the analysis offered here applies only to higher-level constructions. I do not contend that all COCs are not necessarily interpreted in two ways. Some instances are interpreted only as the event-dependent COC or the event-independent COC. For example, the verbs which are conventionally used as transitive, *tell*, *feel*, *produce*, *build* are matched with type COs or product COs, as exemplified in the following:

- (10) a. Jerry told **a tale**/a story/a lie/the truth/a joke.
b. The soldiers felt **a (terrible) feeling**/despair/the rain/the ground beneath them.
c. The team produced **a product**/a stuffy/a mess/a document/a show.
d. They built **a brick building**/a tower/a bridge/a city/a new model/a raft.

(Höche (2009:165-166))

The majority of these verbs have a cognate noun which denotes an affected entity or effected entity. When the verbs *tell*, *feel*, *produce*, *build*, which are often used transitively, occur with COs, the effect of their usage is different from the cases in which verbs such as *dance*, *live*, *die*, *smile* occur with COs. Höche (2009) points out that the integration of these verbs into the construction does not change anything about the original participant constellation, as the CO simply designates one particular type of possible effected or affected entities. In other words, the COCs in which verbs used transitively occur may be interpreted only as instances of the event-independent type. What is special is the relatively generic level of the object if compared to the other possible objects (Höche (2009:166)).⁵

Moreover, when the verbs which have been traditionally seen as unaccusative

co-occur with COs, they behave differently from the cases in which the unergative verbs take COs. As mentioned in Chapter 2.4, Takami and Kuno (2002), and Kuno and Takami (2004) make the observation that some unaccusative verbs can occur with COs:

- (11) a. The tree grew a century's growth within only ten years.
b. The stock market dropped its largest drop in three years today.
c. Stanley watched as the ball bounced a funny little bounce right into the shortstop's glove.
d. The apples fell just a short fall to the lower deck, and so were not too badly bruised.

(Takami and Kuno (2002:42))

This observation contradicts the widely held generalization about the occurrence of COs: *Only unergative verbs can appear in the COC, and no unaccusative verbs can.* The verbs in (11) are obviously unaccusative, because they represent nonvolitional events involving nonhuman subjects, and they express the change of state or location of their referents (Nakajima (2006:675)). Interestingly enough, the COs in (11) cannot undergo passivization like those in (12):

- (12) a. *A century's growth was grown by the tree within only ten years.
b. *The largest drop was dropped by the stock market in three years today.
c. *A funny little bounce was bounced right into the shortstop's glove by the ball.
d. *Just a short fall was fallen to the lower deck by the apples.

(Nakajima (2006:677))

According to Nakajima (2006), the COs in (11) can be approximately paraphrased by using adverbials representing the extent of the events as in (13):

- (13) a. The tree trunk grew *by a century's expansion* in only ten years.
- b. The stock market dropped *by 250 points* today.
- c. The ball bounced *with a funny little curve* right into the shortstop's glove.
- d. The apples fell *{by/to} the length of my arm*.

(Nakajima (2006:676))

Furthermore, the COs in (11) cannot be questioned by the interrogative nominal *what kind of*. Instead, they take the interrogative adverbial *how much* or *how far*, as illustrated in the following:

- (14) a. {How much/How far/*What kind of growth} did the tree grow in ten years?
- b. {How much/How far/*What kind of drop} did the stock market drop today?
- c. {How much/How far/*What kind of fall} did the apples fall to the lower deck?

(Nakajima (2006:677))

The examples in (12)-(14) show that the COCs in which the unaccusative verbs occur are used exclusively as instances of the event-dependent COC. The COCs in (11) clearly contrast with those which allows both adjunct COs and argument COs. After

all, all instances do not allow the argument/adjunct ‘alternation’ of their COs.

In passing, the same situation holds for dative alternation constructions. For example, as is often pointed out, the verbs *cost*, *forgive*, *teach* can occur with the ditransitive construction, whereas they cannot occur with the dative construction. Observe the following examples:

- (15) a. It cost me five dollars.
b. *It cost five dollars {to/for} me.
(Kishimoto (2001:129))

- (16) a. John forgave Mary her debts.
b. *John forgave her debts to Mary.
(Kishimoto (2001:135))

- (17) a. Lipson’s textbook taught me Russian.
b. *Lipson’s textbook taught Russian to me.
(Kishimoto (2001:136))

The verbs *fix*, *report*, *donate*, on the other hand, can occur only with the dative construction, as exemplified in the following:

- (18) a. John fixed the radiator for Mary.
b. *John fixed Mary the radiator.
(Kishimoto (2001:137))

- (19) a. John reported the news to Bill.
b. *John reported Bill the news.
(Kishimoto (2001:140))

- (20) a. John donated money to the church.
b. *John donated the church money.

(Kishimoto (2001:140))

In order to capture the fact that not all verbs allow the dative alternation, we would have to specify each verb that occurs in the dative construction or one that occurs in the ditransitive construction. Therefore, positing lower-level constructions such as verb-class-specific constructions and verb-specific constructions would allow us to proceed further to the end (cf. Iwata (2006c), Iwata (2008a)).

The parallelism between COCs and dative alternation constructions implies that lower-level constructions are more important than higher-level constructions for the purpose of linguistic description of COCs. Lower-level constructions take precedence over higher-level, abstract constructions (Iwata (2006c:513)). With respect to the classification of the event-dependent COC and the event-independent COC, we must shift our focus to verb-class-specific constructions and verb-specific constructions, to identify which classes of verbs can appear in COCs and which instances can be interpreted in two ways or not. We shall come back to this issue in section 5.5.

5.3. COCs Are Not Monotransitive Constructions

This section tackles the question of why it is possible that in one type of COCs the intransitive verb takes an overt object complement. As already discussed in the preceding section, the event-dependent COC has syntactic and semantic properties close to the intransitive construction. However, it is also true that the event-dependent COC takes a CO as an overt object complement. Given that the CO of the event-dependent type is an object complement, one can argue that the event-dependent COC should be

described as a subtype of the transitive construction. If the event-independent COC is also dealt with as a subtype of the transitive construction, it may be contended that English COCs are constructions which instantiate the transitive construction. In what follows, I review Höche (2009), who treats COCs as monotransitive constructions, and point out some serious problems with her analysis. My lexical-constructural account will demonstrate that COCs cannot be incorporated into the transitive construction.

5.3.1. Höche (2009)

Macfarland (1995) treated English COCs uniformly as constructions in which a transitive verb takes a CO as a true object. Along with Macfarland, Höche (2009) also claims that COCs should be dealt with as monotransitive constructions, while recognizing the similarity between one type of COCs and manner adverbs, as illustrated in the following examples:

- (21) a. Brad smiled charmingly.
b. Brad smiled a charming smile.

(Höche (2009:95))

In the adjunct analysis, sentence variants like those in (21) have been considered identical expressions of what appear to be truth-functionally equivalent situations. Höche, however, rules out an interpretation of the sentence pair as synonymous, following three fundamental assumptions of Cognitive Linguistics:

- (22) Meaning is conceptualization
Grammatical constructions are meaningful

Change of form implies change of meaning

(Höche (2009:95))

The assumptions in (22) lead us to expect that a speaker choosing the one or the other form of expression, e.g. favoring the event-dependent COC over an adverb construction, does so in order to express a particular conceptualization of the same situation: The sentence *Brad smiled a charming smile* should not be considered synonymous with *Brad smiled charmingly*.

In the Cognitive Linguistics paradigm, the reason for the meaning differences between the two variants in (21) is sought in the different conceptual relations that hold between the verb and the respective constituents following the verb. *Charmingly* is a manner adverb. Adverbs are understood in Cognitive Grammar as profiling an atemporal relationship, i.e. interconnections that hold between two or more entities. The specific example of *charmingly* is diagrammed as in Figure 5.3:

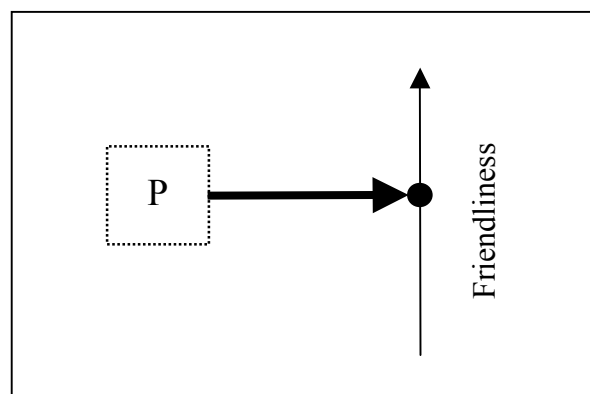


Figure 5.3. Conceptual content of *charmingly* (adapted from Höche (2009:95))

In Figure 5.3, the profiled relationship is assumed to be that between a process (P),

which is the schematic trajector of the relation, and a defined region on a scale measuring friendliness/attractiveness/politeness.

Höche puts special focus on the fact that one cannot conceive of *charmingly* without evoking at the same time an event to which the value expressed by the adverb is ascribed. In this sense, it can be said that an adverb is conceptually dependent. Langacker (1987) defines ‘conceptually dependent’ as follows:

- (23) One structure, *D*, is dependent on the other, *A*, to the extent that *A* constitutes an elaboration of a salient substructure within *D*.

(Langacker (1987:300))

In a grammatical construction, the asymmetry between two component structures differs substantially in their degree of mutual dependences; on balance, one of them (*A*) is autonomous, and the other (*D*) is dependent. When one dependent component presupposes another autonomous component, the dependent component offers a schematic substructure, a so-called *elaboration site* or *e-site*, which is to be elaborated by the autonomous component. Returning to Figure 5.3, we can see that the event expressed by the verb is indicated by the small square. P constitutes a salient substructure of *charmingly* which needs to be elaborated by a verb designating a process. The constellation of a more autonomous element (verb) and more dependent element (adverb) on the one hand and the verb’s functioning as a profile determinant are crucial features for defining the syntactic relation that holds between the two components. In this constellation, *charmingly* functions as a modifier, which is by definition conceptually dependent on the profile determinant, the verb (Höche (2009:96)).

The nominal *a charming smile*, on the other hand, involves a constituent as a

whole profiling a thing instead of an atemporal relation. The relation that holds between the noun *smile* and the adjective *charming* is comparable to that of the verb *smile* and the adverb *charmingly* in that the adjective portrays an atemporal relation as well: It profiles an interconnection between an entity (*smile*) and a scalar value of friendliness. This makes it possible that the nominal *a charming smile* and the adverb *charmingly* are semantically equal.

Höche, however, mentions that the relationship between the full nominal phrase and the verb is different from that between the adverb *charmingly* and the verb. To describe *a charming smile* as an argument, she probes for the presence of features of nominal complements as defined by Langacker (1987). According to Langacker, when a dependent structure functions as a profile determinant, its inherent substructures are elaborated by more autonomous entities. For example, consider the verb *employ*. In the sentence *The company employed a Polish salesman*, the verb *employ* has two inherent substructures that need to be elaborated for the phrase to completely depict an act of employing: the employer as the verb's trajector and the employee as its landmark. The dependent *employ* which functions as a profile determinant is elaborated by two autonomous entities, the employer and the employee. Höche argues that this is the case for the relation between the verb and the CO. In the case of a COC, a process (verb) is conceptually dependent on its participant; it offers e-sites that need to be elaborated by other entities. The CO (an autonomous participant) elaborates the landmark of the verb, whereby the latter serves as the profile determinant. Therefore, Höche insists that even eventive COs such as *a charming smile* should be regarded as arguments, instead of recognizing them as adverbials. If her analysis is correct, the difference between a verb-adverb structure and a verb-eventive CO structure is one of A/D asymmetry in the first place,⁶ and therefore one of conceptual difference between

the verb and other constituents of a profiled relation. These different constellations are summarized as in Table 5.1:

	verb-adverb		verb-eventive CO	
	verb	adverb	verb	eventive-CO
A/D asymmetry	A	D	D	A
Direction of elaboration	elaborater	elaboratee	elaboratee	elaborater
Syntactic function	profile determinant (head)	adjunct	profile determinant (head)	argument

Table 5.1. Argument/adjunct distinction from a cognitive grammar perspective (adapted from Höche (2009:97))

However, the situation is not as straightforward as presented so far. As Höche points out, many of the verbs occurring in COCs lack a prominent e-site for a landmark, i.e. they are conventionally associated with one participant only. She contends that this is not exactly what motivates the discussion of COs as adjuncts. Following from the proposal submitted by Langacker (1987) and Croft (2001), the autonomy/dependence distinction is gradient, as are the notions “salient substructure” or “prominent e-site.” Therefore, Höche speculates that the argument/adjunct distinction may at best be treated as a continuum, ranging from clear cases of adjuncts (*Brad smiled charmingly*) over COs (*Brad smiled a charming smile*) to clear cases of arguments (*Brad ignored her charming smile*). In other words, the eventive CO has an intermediate status between

adjuncts and arguments.

To explain the fact that the verbs which are conventionally used as intransitive can take overt object complements, Höche uses Goldberg's model of Construction Grammar. On the assumption that there can be mismatches between the specifications of verbs and the specifications of constructions, Goldberg claims that a construction can enrich the participant constellation conventionally associated with a particular verb. It is not necessary that each argument role of the construction corresponds to a participant of the verb. For the construction is assumed to add roles not contributed by the verb (Goldberg (1995:54)). Following Goldberg's claim, it would be on the basis of fusing the semantics of a particular construction with the verb that speakers can easily interpret sentences which include verbs 'equipped' with participants which are not determined by the verbs' participant specifications. Consider the following cases:

- (24) a. Anthony Everard tried to laugh away his daughters' fury.
(caused-motion construction)
- b. A correspondent of that chain, that accompanies the British troops, assured that the allied soldiers were applauded to the entrance in the Iraqi city.
(caused-motion construction)
- c. I've cried me a river, I've cried me a lake. (ditransitive construction)
- d. Daniel Craig dresses his way to fame. (way-construction)
(Höche (2009:101))

The underlined elements are assumed to be roles added by the respective construction. Höche proposes that, like the examples in (24), the majority of verbs taking a CO should be described as cases where there is a mismatch between the number of

participant roles associated with the verb and the number of argument roles of the construction. This implies that the argument structure is ‘imposed’ on the verbs by a meaningful argument structure construction. Höche deals with the construction involving an eventive CO as a special, non-prototypical type of the transitive construction offering two argument slots, by postulating that the argument roles are inherent in the construction and not provided by the verb. Then, it is argued that the second argument slot for verbs such as *smile* or *laugh*, which are conventionally associated with the intransitive construction, is made available by the monotransitive construction as a meaningful argument structure construction.

Adopting Goldberg’s mode of notation, Höche represents the prototype of monotransitive patterns, as shown in Figure 5.4:

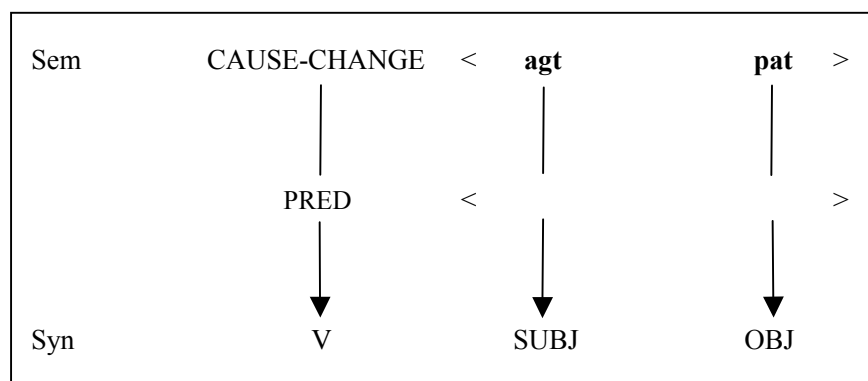


Figure 5.4. The monotransitive construction (prototype) (Höche (2009:102))

The semantic layer spells out the semantics directly associated with the construction, i.e. “X CAUSES Y to CHANGE,” while the syntactic level presents the syntactic functions V, SUBJ, and OBJ, to which the argument roles are linked. According to Höche, this representation is applicable to the monotransitive construction including an affected

object which undergoes a change of state or the one including an effected object that is created through the activity expressed by the verb. Bearing in mind that COs are frequently described as objects of result, Höche claims that the monotransitive construction with an effected object should be considered as the pattern which sanctions COCs, except for COs of the affected-category.

However, even if it is the construction which provides an additional role, several other conditions must be fulfilled in order to fuse the participant roles of the verb with the argument roles of the construction. Goldberg (1995) argues that there are semantic restrictions on the types of constructions a verb can occur with. According to Goldberg, the participant roles of the verb and argument roles of the construction need to be semantically compatible in order to be integrated. She proposes the following principle:

(25) *The Semantic Coherence Principle*

Only roles which are semantically compatible can be fused. Two roles r_1 and r_2 are semantically compatible if either r_1 can be construed as an instance of r_2 , or r_2 can be construed as an instance of r_1 .

(Goldberg (1995:50))

The principle in (25) means that in order to meet the specifications of the monotransitive construction with an effected object, the event expressed by a CO needs to be construed as an entity which is effected by the action of the AGENT. Therefore, Höche insists on the need to identify a construal process which plausibly explains how speakers come to perceive an action or the result thereof as a concrete, effected entity.

Höche proposes two construal operations. One construal operation is *conceptual*

metaphor. As is well known, conceptual metaphor is a very powerful and ubiquitous cognitive tool. With respect to COCs, one basic type of conceptual metaphors comes into play: ontological metaphors. Ontological metaphors function as means of grasping intangible concepts such as emotions, experiences, ideas, and events as bounded, concrete entities or substances. These metaphors represent mappings which have their source in our interaction with physical, clearly delineated objects and enable us to refer to our experiences, categorize them, group them, quantify them, and, by this means, reason about them (Lakoff and Johnson (1980:25)). EVENTS/ACTIONS ARE OBJECTS/CONTAINERS is one of the manifold ontological mappings which human beings constantly make use of to apprehend the complex nature of events and actions (Höche (2009:103)). As such, they can be perceived as being created, manipulated, possessed, and transferred, as illustrated in the following:

- (26) a. I **have** a headache. (Possession) (Lakoff and Johnson (1999:196))
 b. [...] as soon as her back is turned, we **give** the dog **a kick** and it shoots off. (Transfer) (BNC; cited in Höche (2009:104))

Moreover, as Lakoff and Johnson (1980) observe, activities can be viewed as containers for the actions and other activities that make them up. They can be also viewed as containers for the energy and material required for them and for their by-products. Lakoff and Johnson provides the following example:

- (27) I put a lot of energy into washing the windows.
 (Lakoff and Johnson (1980:31))

Note that example (27) reflects a speaker's construing the activity of washing windows as a 'collecting tank' of energetic processes.

Drawing on these insights of conceptual metaphor research, Höche presents the analysis of COs as objects that are effected through the action an AGENT is executing, to explain the occurrence of entities denoting events or actions in the PATIENT slot of the monotransitive construction. She further adds that all those verbs which imply some energetic exchange may occur in the construction, i.e. all those that can be construed as actions which require some amount of energetic input and create some 'output,' be it sorts of sounds (*laugh, cry, sob*), some kind of verbal utterance (*tell, sing*), a bodily movement (*jump, dance, step*), or the product of cognitive/psychological processes (*think, dream*) (cf. section 5.5.1; Horita (1996)). She mentions that these verbs qualify as the most likely candidates and should be considered as prototypical COC-verbs.⁷

In order to account for the great semantic variety of verbs in COCs, Höche points out the intervention of the other construal operation, *coercion effects*, which shift the verb's meaning so that it is compatible with the meaning of the construction. Taylor (2002) describes coercion as the phenomenon of one linguistic unit exerting an influence on another unit if combined with it, thereby causing to change its specifications. Goldberg already observes the need to recognize a particular process of coercion in order to account for cases in which a construction requires a particular interpretation which is not independently coded by particular lexical items. Along similar lines, Michaelis (2004) argues as follows:

- (28) I assume a coercion mechanism whereby constructional requirements [...] 'win out' over lexical features when the lexical item and the construction upon which it is superimposed have different values for a given attribute.

This accommodation mechanism is described [...] as the override principle: [...] If a lexical item is semantically incompatible with its syntactic context, the meaning of the lexical item conforms to the meaning of the structure in which it is embedded.

(Michaelis (2004:51); cited in Höche (2009:105))

With respect to argument structure constructions, it is assumed that coercion effects may be responsible for changes of verb meanings. Observe the following sentences:

- (29) a. Hugh **urged** Mrs Tobias **into** her taxi and walked off smartly in the opposite direction.
- b. How do you **fit** your elephants **into** a Mini?

(Höche (2009:105))

The motional meaning of the verbs *urge* and *fit* in these examples, according to Höche, is evoked by the caused-motion construction. Similarly, as for COCs, verbs such as *dream* and *roar* are claimed to be coerced into having a creational meaning by the monotransitive construction as follows:

- (30) a. [T]hey **dream** wildly beautiful, but sometimes impossible, **dreams**.
- b. She **roared the roar** of a lioness celebrating her kill.

(Höche (2009:105))

Höche says that it is the concurrence of coercive effects a construction exerts on the meaning of lexemes therein and a speaker's capacities for construal which enables the

use of highly diverse, semantically unrelated verbs in the construction. Thus, even the verbs *dream* and *roar*, which hardly share a common semantic ground, can be used in the COC, ‘eliciting’ a creational sense for both verbs (Höche (2009:105)).

Höche’s description of COCs is summarized in Figure. 5.5:

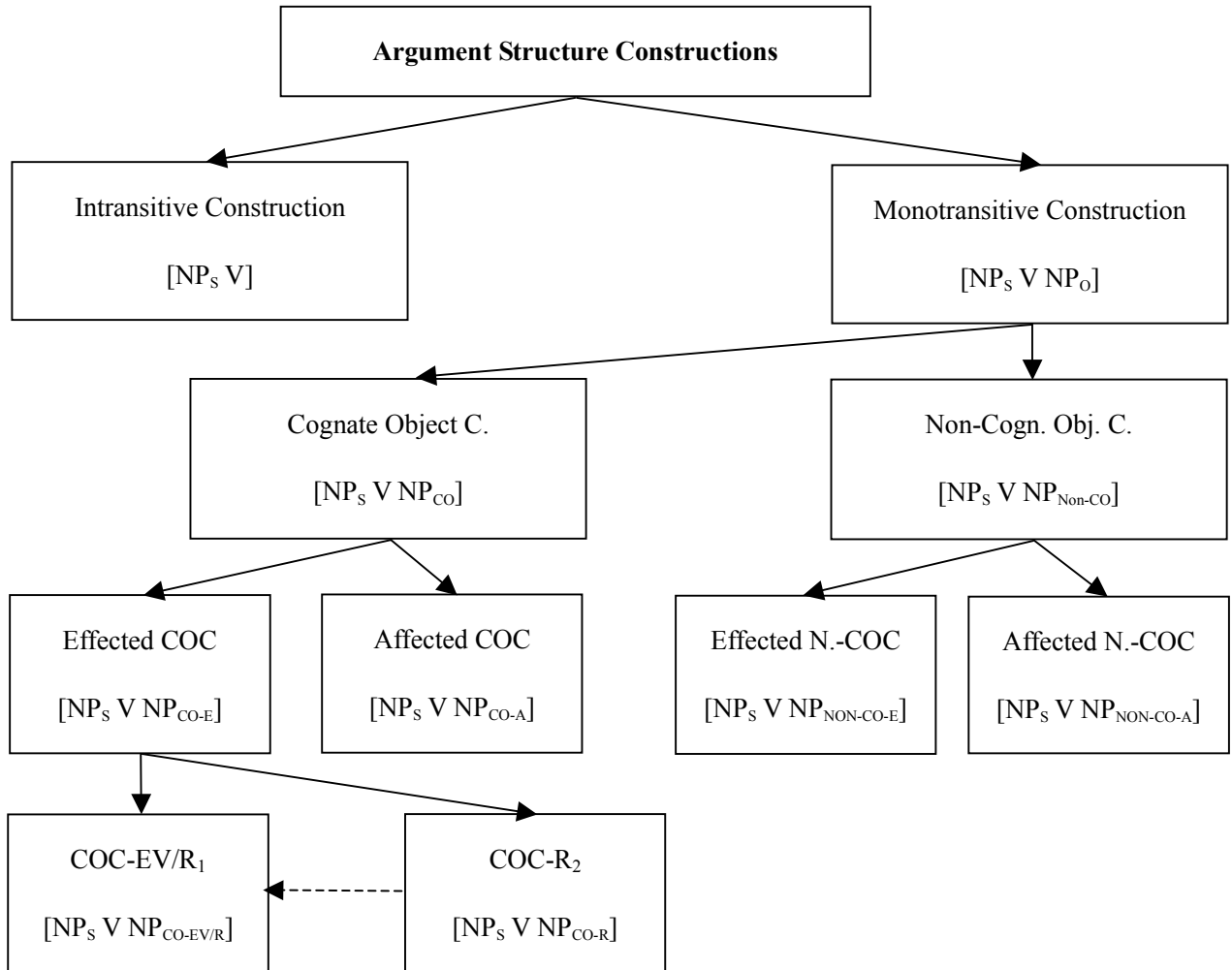


Figure 5.5. Höche’s version of the constructional network of COCs (adapted from Höche (2009:142))

As seen in Figure 5.5, Höche classifies COCs into Effected COC and Affected COC.

Effected COCs are further divided into two types: COC-EV/R₁ and COC-R₂. EV and R stand for event and result, respectively. COC-EV/R₁ corresponds roughly to the type which I call the event-dependent COC, while COC-R₂ and Affected COC the type which is referred to as the event-independent COC. As the names R₁ and R₂ imply, the construction involving an eventive CO is regarded as one type of the transitive construction, i.e. the monotransitive construction involving a resultant object. The dashed arrow shows the metaphorical link between COC-EV/R₁ and COC-R₂. All in all, Höche maintains that all COCs should be incorporated into the transitive construction category.

5.3.2. Eventive COs Are Conceptually Dependent

Höche's description of COCs might sound plausible to some people. However, a careful examination suggests that it does not successfully capture the nature of the constructions. First, it is necessary to consider whether eventive COs are conceptually autonomous. Following the basic principle that change of form implies change of meaning, Höche claims that the construction involving an eventive CO, i.e. the event-dependent COC, is not synonymous with the intransitive construction with the corresponding manner adverbial. Her argument is based on the assumption that eventive COs are arguments. If eventive COs are arguments, they must be differentiated from manner adverbials as adjuncts. In the Cognitive Linguistics paradigm, arguments are considered conceptually autonomous, while adjuncts are regarded as conceptually dependent. Her analysis seems to conform to the discipline of Cognitive Linguistics.

However, Höche's analysis has serious empirical problems. The biggest problem is that she ignores syntactic and semantic properties of eventive COs which have been

pointed out so far. Although she emphasizes the importance of introspective procedures (p.3), in fact, she seems to dismiss syntactic evidence for the idiosyncratic characteristics of the event-dependent COC as unreliable and useless in her actual practice. Certainly, eventive COs are not fully equivalent to manner adverbials.⁸ But it should not be overlooked that they induce syntactic behavior different from normal direct objects, especially resultant objects. She advances no convincing arguments to demonstrate that eventive COs are arguments. The event-dependent COC is not only paraphrasable into the intransitive construction with a manner adverbial. For example, the CO of the event-dependent COC can be separated by a comma or connected with a dash like afterthoughts (cf. Bolinger (1977), Kasai (1980)):

(31) a. He smiled, a nervous smile. (Kasai (1980:12))

b. Mary slept – a very sound sleep. (Kashino (1993:49))

Additionally, the event-dependent COC can be an answer to the question that asks how the action is done:

(32) A: How did Miss Maple smile?

B: She smiled a deprecating smile.

(Omuro (1990:75))

(33) A: How did the girls dance?

B: The girls danced a nervous dance.

(Horita (1996:239))

It should not be forgotten that the CO of the event-dependent COC exhibits

indefiniteness effect. Eventive COs can be semantically equivalent with the corresponding manner adverbs, only if they are indefinite:

(34) *John screamed *this* scream/*every* scream we heard today.

(Moltmann (1989:301))

(35) a. Sam danced {*the/every*} beautiful dance.

≠ Sam danced beautifully.

b. Sam smiled {*the/every*} beautiful smile.

≠ Sam smiled beautifully.

Remember also that the CO of the event-dependent type cannot undergo passivization and *it*-pronominalization. All the above examples demonstrate that eventive COs are adjuncts rather than arguments.

Moreover, it seems quite dubious that eventive COs are conceptually autonomous. In fact, there is no charming smile without the action of smiling, no beautiful dance without the action of dancing, no heroic death without the action of dying. In other words, the verbs evoke eventive COs. The following examples clearly show that eventive COs are conceptually dependent:

(36) a. ??John laughed, but in fact he didn't laugh a laugh.

(Macfarland (1995:102))

b. ??Brad smiled, but in fact he didn't smile a smile.

As shown in (36), the use of the verb entails the existence of the CO, since negating the noun results in infelicity. Therefore, the COs which verbs used intransitively take are

considered conceptually dependent. Höche also notices that for an event interpretation of *a charming smile*, the degree of salience of a schematic process is no doubt higher than for affected objects or resultant objects. For it is hardly possible to conceptualize the event of *a charming smile* without conceiving of the simultaneous action. Unfortunately, she jumps to the conclusion that event-dependent COCs must be considered as deviations from the prototypical transitive constructions.

The fact that eventive COs are conceptually dependent is not incompatible with my claim that the semantic head of a COC should be its CO. Recall that when a dependent structure functions as a profile determinant, its inherent substructures are elaborated by more autonomous entities. In the case of the event-dependent COC, the eventive CO functions as a profile determinant, while the intransitive verb is considered conceptually autonomous. The CO denotes the specific process instance profiled by the verb. In this sense, it can be said that the inherent substructures of the eventive CO are elaborated by the existence of the verb. My analysis is summarized in Table 5.2:

	verb-adverb		verb-eventive CO	
	verb	adverb	verb	CO
A/D asymmetry	A	D	A	D
Direction of elaboration	elaborater	elaboratee	elaborater	elaboratee
Syntactic function	profile determinant (head)	adjunct	verb	profile determinant (semantic head/adjunct)

Table. 5.2. A/D asymmetry from a lexical-constructional perspective

If my analysis is correct, then it follows that the event-dependent COC may be thought of as a non-prototypical instance of the intransitive construction, rather than that of the transitive construction. Hence, I propose that COCs are not monolithic but form a heterogeneous category consisting of multiple independent constructions, including a non-prototypical instance of the intransitive construction.

5.3.3. Corpus Data

Ironically, my analysis that the construction involving an eventive CO should not be considered an instance of the transitive construction is supported by the corpus data which Höche herself compiles and provides. To gain insights into the actual use of COCs by native speakers of English, Höche provides a statistical analysis of usage data extracted from the BNC. Her close analysis of the BNC yields 3,139 instances of COCs, involving 109 different verbs. Table 5.3. gives an overview on the frequency of the 25 most frequent verbs occurring in COCs, including information about their semantic class and the type of the COC.⁹

With respect to the types of COCs, Höche comes up with a fourfold distinction: EV/R₁ (*live a life, smile a smile, die a death*), R₁ (*tell a tale, sing a song*), R₂ (*produce a product, weave a web*), and A (= AFFECTED) (*sow a seed, drink a drink, smell a smell*). R₁ refers to the type whose nominals denote created entities which are event-result like. As seen in Table 5.3, it is impossible to describe COCs as a single, homogeneous category; rather they should be discussed as a heterogeneous category. Although Höche treats COCs as a family of constructions, the syntactic and semantic evidence I have presented so far shows that they form a complex category composed of multiple independent constructions. Even if it is true that COCs constitute a family of constructions, all of them are not incorporated into the transitive construction.

	<i>Verb</i>	<i>CO</i>	<i>Total COC</i>	<i>Type of CO</i>	<i>semantic class of verb</i>
(1)	live	life	699	EV/R ₁	existence
(2)	sing	song	466	R ₁	performance
(3)	tell	tale	401	R ₁	verbal communication
(4)	smile	smile	203	EV/R ₁	non-verbal communication
(5)	sow	seed	198	A	putting
(6)	produce	product	141	R ₂	creation
(7)	give	gift	128	A	change of possession
(8)	build	building	100	R ₂	creation
(9)	die	death	87	EV/R ₁	disappearance
(10)	think	thought	78	R ₁	mental activity
(11)	see	sight	72	A	perception
(12)	do	deed	67	EV/R ₁	execution
(13)	name	name	45	A	verbal communication
(14)	dream	dream	45	EV/R ₁	mental activity
(15)	weave	web	26	R ₂	creation
(16)	smell	smell	24	A	perception
(17)	feel	feeling	23	A	perception
(18)	drink	drink	23	A	ingesting
(19)	feed	food	21	A	ingesting
(20)	fight	fight	19	EV/R ₁	social-interaction
(21)	grin	grin	18	EV/R ₁	non-verbal communication
(22)	plant	plant	17	A	putting
(23)	sleep	sleep	14	EV/R ₁	bodily process
(24)	dance	dance	12	EV/R ₁	performance
(25)	laugh	laugh	10	EV/R ₁	non-verbal communication

Table 5.3. Top 25 of verbs in COCs in the BNC (Höche (2009:125, 298-300))

COC-EV/R₁ is roughly equivalent to the type which I call the event-dependent COC. According to Höche, this type of COC constitutes the prototypical type of the constructions. This view is supported by the type and token frequencies of the single classes. The corpus data suggests that slightly less than half of the 109 forms fall into the COC class comprising those instances which are most commonly described as COs in previous studies: 49 items (types) found in 1270 concrete instances of usage (tokens) are of EV/R₁ that designates an abstract action or event. On the other hand, 5 items (947 instances) belong to the R₁ type, 40 items (625 instances) are categorized as affected COs, and 15 items (297 instances) are grouped as effected objects of the type

R₂. On the basis of these corpus data, we can hypothesize that it is the EV/R₁ type that forms the core of a network of English COCs, since both type and token frequency point at a prominent status of this subcategory.¹⁰

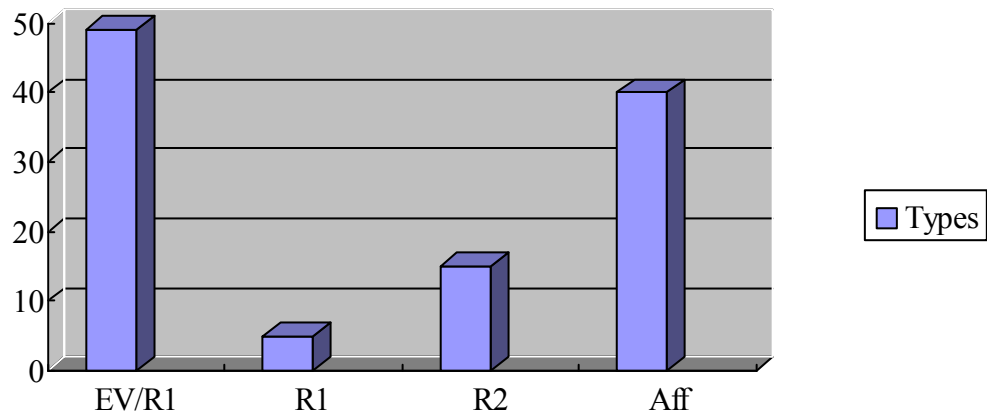


Figure 5.6. The distribution of CO-types in the BNC (adapted from Höche (2009:128))

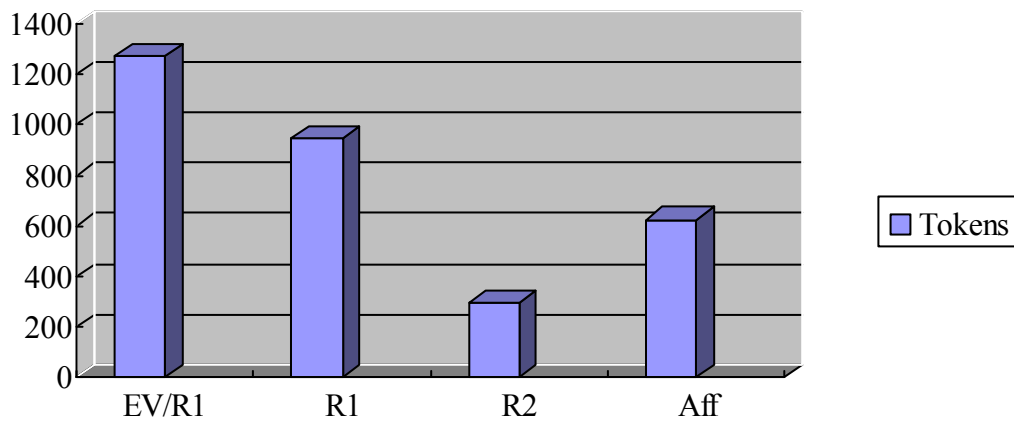


Figure 5.7. The distribution of CO-tokens in the BNC (adapted from Höche (2009:129))

Moreover, in order to describe the associations between verbs and COCs, Höche conducts the so-called collexeme analysis, which measures the collostructional strength between a construction and lexemes which are attracted to a particular slot in the construction. The method provides results which indicate whether a particular lexeme occurs in a construction more or less often than expected by chance and thus can be used as a measure of the strength of attraction or repulsion between word and construction (Stefanowitsch and Gries (2003), Gries and Stefanowitsch (2004)). Rankings obtained by such collostructional analysis are considered to represent actual language usage more adequately than rankings elicited through raw frequency counts. For her calculations, she inputted the different types of frequency needed for such an analysis into the program *Coll. Analysis 3. A program for R for Windows 2.x* (Gries (2007)). Table 5.4 shows Top 30 of significantly attracted collexemes in the COC:^{11, 12}

<i>Collexeme</i>		<i>OF</i>	<i>Coll.strengthth</i>	<i>Collexeme</i>		<i>OF</i>	<i>Coll.strengthth</i>
(1)	live (EV/R ₁)	699	Infinite	(17)	feed (A)	21	16.0352252
(2)	sing (R ₁)	466	Infinite	(18)	dance (EV/R ₁)	12	11.0907643
(3)	tell (R ₁)	401	Infinite	(19)	fight (EV/R ₁)	19	10.1506220
(4)	sow (A)	198	Infinite	(20)	farm (A)	6	9.1245645
(5)	smile (EV/R ₁)	202	297.9094632	(21)	sleep (EV/R ₁)	14	8.7065932
(6)	produce (R ₂)	141	118.8687254	(22)	sigh (EV/R ₁)	8	6.1915389
(7)	build (R ₂)	100	83.1064042	(23)	think (R ₁)	78	5.9205229
(8)	dream (EV/R ₁)	45	74.1631838	(24)	light (A)	8	5.6867855
(9)	die (EV/R ₁)	87	67.0985713	(25)	pray (EV/R ₁)	7	5.0026088
(10)	name (A)	45	49.3171758	(26)	tie (A)	7	4.2810390
(11)	weave (R ₂)	26	42.5363268	(27)	edit (A)	5	4.0938225
(12)	give (A)	128	32.8022754	(28)	paint (R ₂)	7	3.8935361
(13)	smell (A)	24	30.6824942	(29)	laugh (EV/R ₁)	10	3.4179565
(14)	grin (EV/R ₁)	18	20.5684481	(30)	yawn (EV/R ₁)	2	2.4074298
(15)	drink (A)	23	19.2846741	
(16)	plant (A)	17	18.3931186		Totals	3139	

Table 5.4. Top 30 of significantly attracted collexemes in the COC (Höche (2009:134, 298-300))

Table 5.4 indicates that of the high significant 30 verbs 12 are members of the EV/R₁ subcategory, 3 are categorized as the R₁ type, 11 belong to the A type, and 4 are instances of the R₂ type. These data lend further support to Höche's hypothesis that COC-EV/R₁ must be considered the core form of COCs.¹³

One question arises here: If COCs are monotransitive constructions, why does COC-EV/R₁, but not COC-R₁, R₂ or Affected COC, form the core of a network of the constructions? In other words, why are not COC-R₁, R₂ and Affected COC prototypical types of the constructions? Needless to say, these constructions have syntactic and semantic properties close to the prototypical instances of the transitive construction. If Höche's analysis were correct, prototypical instances would be dealt with as non-prototypical ones. Her claim clearly conflicts with the basic ideas of prototype theory (cf. Rosch (1975, 1978), Rosch and Mervis (1975), Lakoff (1987), Langacker (1987, 1990, 1991), Taylor (2003), Croft and Cruse (2004)).¹⁴

An alternative to overcome such contradiction is to describe COC-EV/R₁, i.e. the event-dependent COC, as a special instance of the intransitive construction. If the EV/R₁ type regarded as a prototypical member is a special instance of the intransitive construction, it is no wonder that the types which have properties close to the transitive construction, COC-R₁, R₂ and Affected COC, are classified as peripheral members of COCs. Therefore, I assume that the event-dependent COC is a special case of the intransitive construction, while the event-independent COC is that of the transitive construction. In addition, to properly capture the fact that the event-dependent COC is a non-prototypical member of the intransitive construction, whereas it is a prototypical member of COCs, it is necessary to assume that the category of COGNATE OBJECT CONSTRUCTION exists independently of any other categories, in particular the intransitive construction and the transitive construction. Hence, I propose the

following constructional network of English COCs:

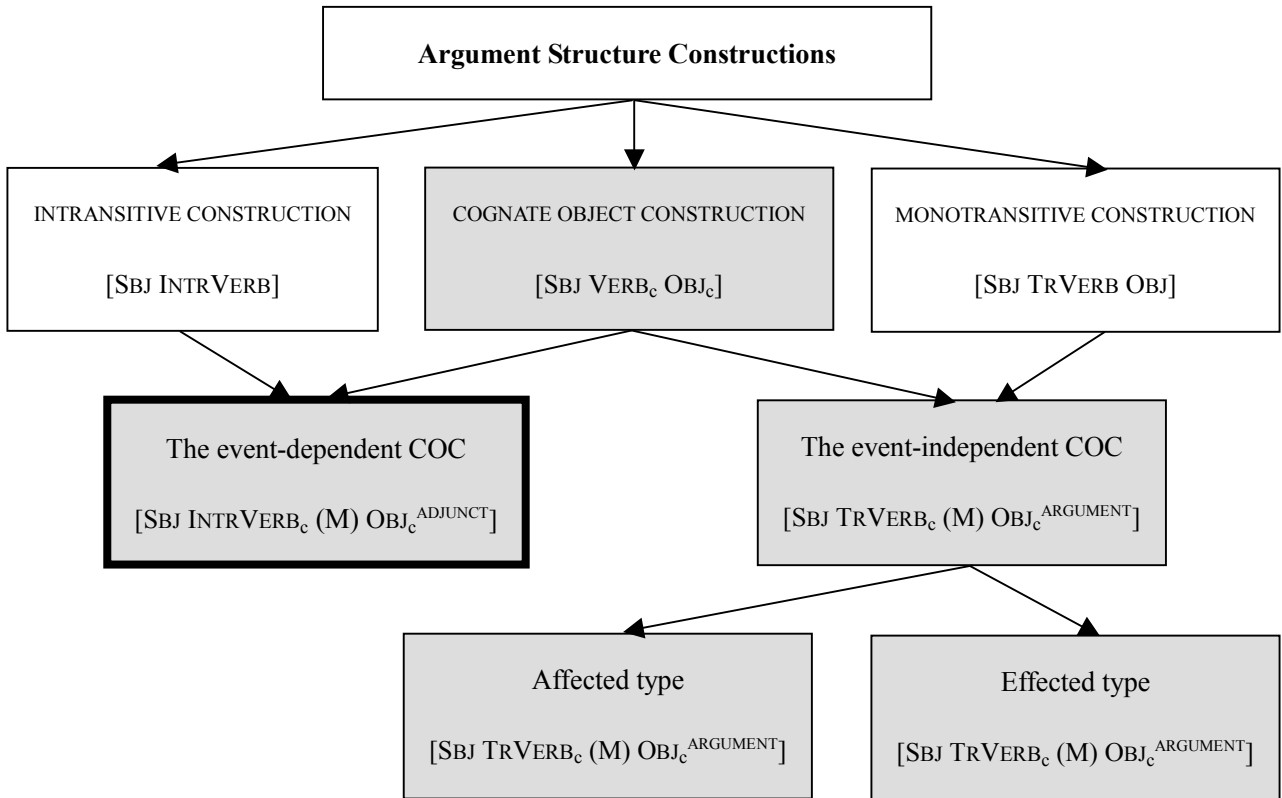


Figure 5.8. Alternative version of the constructional network of COCs

As seen in Figure 5.8, the event-dependent COC is a special instance of the intransitive construction, while the event-independent COC is that of the transitive construction. By abstracting over these two types of constructions, we now have an abstract COGNATE OBJECT CONSTRUCTION. The event-dependent type is a prototypical member of COCs, as indicated by the bold-line rectangle. Recall that such multiple parents are the norm rather than the exception (Chapter 3.4).

5.3.4. Prosodic Function

One might comment that while my description of COCs sketched in Figure 5.8 will enable us to describe the observed corpus data, it remains unclear how to verify that the category COGNATE OBJECT CONSTRUCTION is psychologically real. As mentioned in section 5.2, example (37a) is interpreted only as an instance of the event-dependent COC, and (37b) as an instance of the event-independent COC. It might be objected that it is impossible to assume the category COGNATE OBJECT CONSTRUCTION subsuming two types of COCs, since there is no apparent relation between (37a) and (37b):

- (37) a. The tree grew a century's growth within only ten years. (= (11a))
b. The team produced a product. (= (10c))

However, the category COGNATE OBJECT CONSTRUCTION is psychologically real. The evidence for this is that the above examples share the same property: The objects are morphologically or semantically related to the verbs themselves. According to Taylor (2003), for some constructions, the formal characterization needs to include prosodic information. In light of the prosodic information, all COCs would be subsumed under the category COGNATE OBJECT CONSTRUCTION. Osaki (2000) offers an explanation for the development of COCs in English. His research makes it clear that COs were pleonastically inserted as alliterative filler words in late OE poetry and they were stylistically preferred to create alliteration in late OE prose. In short, COs were originally required for alliteration in written English. This may be knowledge a contemporary speaker of English does not have. However, even today, COCs are most frequently found in written texts (cf. Kurata (1986), Kitahara (2005, 2006)):

- (38) On Nicholas stopping to salute them, *Mr Lenville laughed a scornful laugh*, and made some general remark touching the natural history of puppies. (Charles Dickens, *Nicholas Nickleby*)
- (39) Johnnie looked hopefully at his father; he knew that shoulder was tender from an old fall; and indeed it appeared for a moment as if Scully was going to flame out over the matter, but in the end *he smiled a sickly smile* and remained silent. (Stephen Crane, *The Blue Hotel*)
- (40) ‘Mr. Rochester, if ever *I did a good deed* in my life – if ever *I thought a good thought* – if ever *I prayed a sincere and blameless prayer* – if ever *I wished a righteous wish*, – I am rewarded now. To be your wife is, for me, to be happy as I can be on earth.’
(Charlotte Brontë, *Jane Eyre*)
- (41) But she joined in the forfeits, and *loved her love* to admiration with all letters of the alphabet. (Charles Dickens, *A Christmas Carol*)
- (42) *Flies wove a web* in the sunny rooms;
(Virginia Woolf, *To the Lighthouse*)
- (43) He smelled the tar and oakum of the deck as he slept and *he smelled the smell of Africa* that the land breeze brought at morning.
(Ernest Hemingway, *The Old Man & the Sea*)

In the above examples, *laugh-laugh*, *smile-smile*, *do-deed*, *pray-prayer* belong to the event-dependent COC, while *think-thought*, *wish-wish*, *love-love*, *weave-web*, *smell-smell* instantiate the event-independent COC. Notice that the obligatory attention to sound repetition and rhythm allows us to experience the texts as different from ordinary ones. There seems to be no doubt that the event-dependent COC and

the event-independent COC share the same prosodic function. Hence it is quite natural to suppose that there exists the category COGNATE OBJECT CONSTRUCTION subsuming all the instances of COCs.

5.3.5. Metaphor?

To address the question why verbs used intransitively can take overt object complements, Höche adopts Goldberg's construction grammar approach and claims that two construal operations, ontological metaphor and coercion, are responsible for the make-up of the construction involving an eventive CO. This analysis, however, has some problems which would be associated with theoretical foundations of Cognitive Linguistics.

Let us now examine whether eventive COs are conceptualized as things by means of the ontological metaphor EVENTS/ACTIONS ARE OBJECTS/CONTAINERS. As mentioned in the previous chapter, COCs are constructions in which the verb and the CO each describe the same event and evoke essentially the same conceptual content. The component states of a process constitute a set of interconnected entities and thus implicitly define an abstract region. This usually latent region can be recognized as such and profiled via summary scanning. Such cognitive operation leads to the make-up of the event-dependent COC and the event-independent COC. What is important is that a certain degree of dynamicity is still inherent in the conceptualization of a CO as a thing. This property allows two interpretations of the event-dependent COC such as an event reading and a result reading.

In order to claim that the eventive CO is conceptualized as a thing via the EVENT/ACTIONS ARE OBJECTS/CONTAINERS metaphor, one must make it clear what is preserved in the metaphorical mapping. Lakoff (1993), who characterizes metaphor as

a mapping from a source domain to a target domain, proposes the following principle:

(44) *The Invariance Principle*

Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain. (Lakoff (1993:215))

According to the Invariance Principle, target domain structure exists prior to metaphorical mappings. Thus not only must both source and target domain properties be taken into account, but also target domain properties must be seen as playing a central role in determining the preserved properties (Iwata (1995:174)):

(45) A corollary of the Invariance Principle is that image-schema structure inherent in the target domain cannot be violated, and that inherent target domain structure limits the possibilities for mappings automatically.

(Lakoff (1993:216))

For example, consider the TIME IS MOTION metaphor. We can find many examples, such as the following, in which the concept of time is structured according to motion, as follows:

- (46) a. The time will come when...
- b. The time has long since gone when...
- c. The time for action has arrived...

(Iwata (1998b:519))

The examples in (46) suggest that there are similarities between spatial and temporal concepts. However, the parallels between the two domains are not created by a metaphorical mapping. They differ as to dimensionality: Physical motion is three-dimensional, whereas time is one-dimensional. Thus, perfect parallelism fails because the two domains are quite differently structured. This is illustrated in the following example:

(47) *The time {zigzagged/curved/meandered}. (Iwata (1998b:519))

Clark (1973) points out that time ought to be described using one-dimensional spatial terms, because it is one-dimensional. Given that one-dimension is the only possibility in the temporal domain, it comes as no surprise that the temporal domain is not compatible with the verbs *zigzag*, *curve*, and *meander* which do not express a line.

On the other hand, the verb *spread*, which expresses a mass's movement over a two-dimensional area as in (48) or a radial movement of multiplex entities as in (49), can be used in the temporal domain, as shown in (50):

(48) The syrup spread out. (Lakoff (1987:432))

(49) a. They spread south and colonized the plains of Africa. (*COBUILD*)

b. Settlers soon spread inland. (*OALD*)

(Iwata (1995:177))

(50) a. Their experience of elation was spread over twenty years.

b. spread the payments over three months. (*OALD*)

(Iwata (1998b:520))

The temporal path is one-dimensional and continuous. In (50a), a continuous, linear entity occupies a certain extension on the temporal path, while in (50b) occasions of payment are distributed evenly on the time line. The examples in (50) show that when the verb *spread* is used in the temporal domain, its image-schematic structures change from two-dimensional and three-dimensional to one-dimensional. One-dimension is a limited portion of two dimensions and three dimensions, and in this sense parts of the image-schematic structure can be said to be preserved, in accordance with (51):

- (51) Only parts of the image-schematic structure that are compatible with inherent target domain structure are preserved in mappings.

(Iwata (1995:194))

In the case of the CO of the event-dependent type, on the other hand, it is not easy to tell what counts as the preservation of image-schematic structures. We have already seen that the CO of the event-dependent type does not show the syntactic and semantic properties of an object of result. For example, the construction allows both a non-delimited reading and a delimited reading, depending on context:

- (52) a. Mary laughed a mirthless laugh {for an hour/in an hour}.
b. Josie danced a silly dance {for an hour/in an hour}.
c. Martha sang a joyful song {for an hour/in an hour}.

(Nakajima (2006:680))

If eventive COs are construed as objects that are effected through the action an agent is executing, the degree of dynamicity seen in (52) should not be obtained, since by

default resultant objects cannot describe non-delimited events (cf. Smollett (2005)):

- (53) a. *Carpenters built a house for a week. (Tenny (1994:27))
b. Mouton published the book in a month/*for a month.
(Tenny (1994:160))

If Höche's analysis is correct, it follows that parts of the image-schematic structure that are *not* compatible with the inherent target domain structure is preserved in the construal of the eventive CO. The examples in (52) and (53) demonstrate that Höche's proposal clearly violates the Invariance Principle.

One might think that this type of CO is a non-prototypical direct object and that it preserves the part of the inherent target domain in that it can co-occur with an indefinite article. However, all the nouns which co-occur with an indefinite article do not always function as arguments, as illustrated in the following:

- (54) a. Yesterday is *a beautiful day*.
b. You've been away *a long time*.

In the above examples, *a beautiful day* and *a long time* do not function as arguments. If the eventive CO is a predicate nominal or an adverbial accusative, it is no surprising that it can occur with an indefinite article. It seems difficult to demonstrate that the eventive CO is construed as a thing via the EVENTS/ACTIONS ARE OBJECTS/CONTAINERS metaphor, on the basis of the possibility of co-occurring with an indefinite article. To make an unsubstantiated claim may lead to create confusion in the description of COCs. Metaphor should not be an excuse for lack of precision or the "Anything goes" attitudes

(Iwata (1995)). Thus, I do not commit myself to the relationship between eventive COs and the EVENTS/ACTIONS ARE OBJECTS/CONTAINERS metaphor.

5.3.6. Coercion Effects?

Let us turn to the issue whether coercion effects are required for the make-up of the event-dependent COC. Iwata (2008a) points out that coercion effects are not a necessary feature of constructions. As already suggested in Chapter 3, overriding effects can be used as a diagnostic only for limited cases.¹⁵ According to Michaelis (2003, 2004), coercion effects are observed only with one type of constructions. She divides constructions into two types, *concord constructions* and *shift constructions*, as defined in (a) and (b), respectively:

(55) a. *concord construction*

A construction which denotes the same kind of entity or event as the lexical expression with which it is combined.

b. *shift construction*

A construction which denotes a different kind of entity or event from the lexical expression with which it is combined.

(Michaelis (2004:28-29))

In the case of shift constructions, the Override Principle in (56) is at work:

(56) *The Override Principle*

If a lexical item is semantically compatible with its morphosyntactic context, the meaning of the lexical item conforms to the meaning of the

structure in which it is embedded.

(Michaelis (2004:25))

Following Michaelis' classification, the event-dependent COC would be considered instances of shift constructions. One might take the following examples as the ones that establish the necessity of positing coercion effects in the event-dependent COC:

- (57) a. He smoked a sad cigarette.
b. He smoked a discreet cigarette.
c. How/*What did he smoke?

The noun *cigarette* refers exclusively to a pre-existing thing used for smoking, but not to the action of smoking. Thus, one might expect that *a sad cigarette* or *a discreet cigarette* functions as an affected object, i.e. a thing CO. However, the CO including *cigarette* expresses the way it was smoked. In fact, examples (57a, b) can be answers to the question with *how* like (57c). The adjectives do not apply literally to the head nominals. The CO *a sad/discreet cigarette* has the same function as an external modifier, so to speak. The above examples are based on authentic language data:

- (58) a. She found a moment's privacy in the back hall and *smoked a quick cigarette*. (Jaclyn Weldon White, *Whisper to the Black Candle: Voodoo, Murder, and the Case of Anjette Lyles*)
b. He changed out of uniform, *smoked a quiet cigarette*, and then walked through the main terminal to meet his wife.

(Dennis Kenyon, *Appointment on Lake Michigan*)

The examples in (57) and (58) seem to indicate that the constructional meanings of the event-dependent COC should not be reduced to the noun alone.

However, as far as I know, the *smoke-cigarette* type is the only example which demonstrates that a coercion works in the event-dependent COC. If such coercion effect is inherent in the higher-order schema, every verbs and nouns ought to occur there. But this is not the case:

(59) a. *The glass broke a crooked break.

(Levin and Rappaport Hovav (1995:40))

b. *She arrived a glamorous arrival.

(Levin and Rappaport Hovav (1995:148))

c. *Phyllis existed a peaceful existence.

(Levin and Rappaport Hovav (1995:150))

The event-dependent COC cannot override verbs like *break*, *arrive*, and *exist*. Not every verb occurs in the event-dependent COC. Therefore, we cannot postulate that coercion effects are inherent in higher-level constructions.

Goldberg virtually limits herself to schematic, abstract constructions in emphasizing the top-down character of constructions. Höche, on the other hand, professes to adopt the usage-based model which emphasizes the bottom-up nature of constructions. Höche's approach is supposed to be incompatible with Goldberg's. To answer the question why in the event-dependent COC the intransitive verb can take an overt object complement, I cannot understand why she is engaging in such an inconsistent practice and why she does not pay much attention to more concrete constructions, in which the verb meaning and the constructional meaning are close to

each other. Taking into account syntactic and semantic properties of the instances of the construction, we would analyze the object complements as semantically close to adverbials. This means that the specifications of the verb correspond with those of the construction, even though there is a mismatch between the form and meaning of its CO. Most of instances of the event-dependent COC are thought of as concord constructions, except for the *smoke-cigarette* type. Hence, coercion effects are not required for the description of all the instances of the construction.¹⁶ To explain the fact that not every verb occurs in the event-dependent COC, we need to posit a verb-specific construction that specifies each verb occurring in the construction:

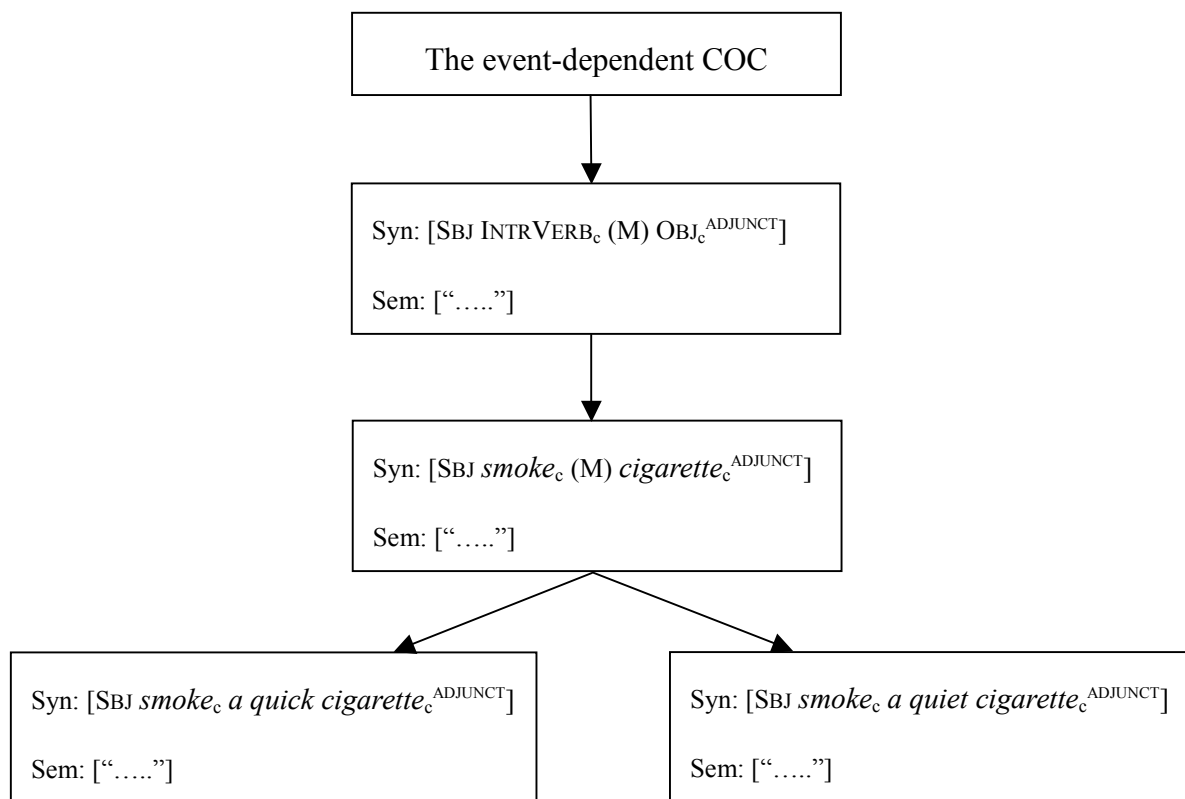


Figure 5.9. The *smoke-cigarette* type and the event-dependent COC

5.3.7. Reductionist vs. Maximalist

In passing, the proposed account does not need to posit a special mechanism like coercion even for the following cases:

- (60) a. She smiled Marilyn Monroe's smile (in "Gentlemen Prefer Blondes").
- b. Marilyn Monroe's smile was smiled by Mary.
- c. Mary smiled Marilyn Monroe's smile. Nancy smiled *it*, too.

(Kitahara (2006:54))

- (61) a. This clause puts as plainly as it can be put the idea that His death was equivalent to the death of all; in other words, it was *the death of all men which was died by Him*. Were this not so, His death would be nothing to them. It is beside the mark to say, as Mr. Lidgett does, that *His death is died by them rather than theirs by Him*; the very point of the apostle's argument may be said to be that *in order that they may die His death He must first die theirs*.
- b. His death can put the constraint of love upon all men, only when it is thus judged that *the death of all was died by Him*.

(James Denney, *The Death of Christ: Its Place and Interpretation in the New Testament*)

Following Höche's analysis, one might think that *Marilyn Monroe's smile* and *the death of all men* may be construed as things via the EVENTS/ACTIONS ARE OBJECTS/CONTAINERS metaphor. In addition, it might be argued that the verbs *smile* and *die* are coerced into having a creational meaning, to be matched with the semantics of the monotransitive construction. Certainly, these COs may be construed as things by a metaphorical mapping. However, we cannot find any creational meaning in the

above examples. For example, in (60), one does not create Marilyn Monroe's smile by smiling it, but rather one gives it a particular instantiation. The same situation holds true for (61). Just because Jesus Christ dies for all men, it does not mean that they do not die. We cannot analyze these COs as objects that are effected through the actions executed by agents. Even if (60) and (61) are dealt with as instances which are sanctioned by the monotransitive construction with an affected object, such analysis would need a special mechanism, to explain why the verbs *smile* and *die* can be fused with the monotransitive construction.

Höche's analysis on COCs is reductionist. She intends to provide a comprehensive description for the constructions, following the basic principles of Cognitive Linguistics or Construction Grammar. Thus, my analysis and Höche's share a number of fundamental assumptions. The main difference between the two analyses concerns how to represent verb meanings. Höche seems to consider that verb meanings can be defined in pure isolation. In fact, adopting Goldberg's model of Construction Grammar, she deals with prototypical COCs as constructions in which there is a mismatch between the number of participant roles with the verb and the number of argument roles of the construction. Therefore, she must use special mechanisms to overcome the incompatibility between the verb and the construction.

My lexical-constructional approach, on the other hand, assumes that there are no atomic primitives and that grammatical categories such as intransitive verb or transitive verb are construction-specific. Whether a given verb can occur in a particular construction or not is a matter of whether the whole string embedding the verb in that construction can instantiate a relevant construction or not. Neither verbs nor constructions appear in isolation. Verb meanings are only definable with respect to the constructions they occur in (Croft (2003:64)). In this sense, my approach is

nonreductionist and maximalist. Thus, as for the verbs *smile* and *die*, my proposed account does not need to postulate that the number of participant roles these verbs are associated with does not correspond with the number of argument roles offered by the constructions and that the constructions enrich the participant constellation conventionally associated with these verbs. Instead of positing coercion effects, my lexical-constructional approach assumes that verb-specific constructions handle selectional restrictions of these verbs:

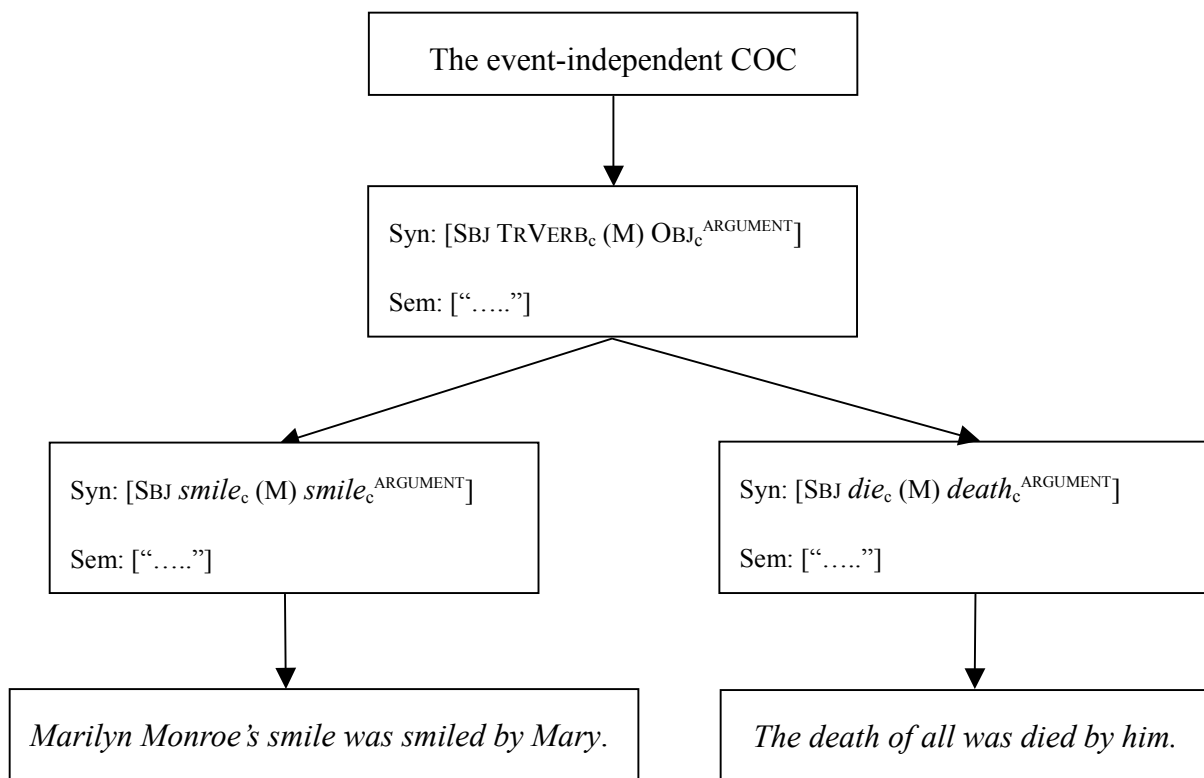


Figure 5.10. *Smile* and *die*, and the event-independent COC

5.3.8. The Event-Dependent COC as a Constructional Idiom

My lexical-constructional account makes it clear that the CO of the

event-dependent type functions as an adjunct, rather than an argument, and it is a special case of the intransitive construction. Unlike Höche's, the proposed account does not posit complex construal operations such as conceptual metaphors and coercion effects, to address the question why the intransitive verb can take a CO. In this respect, my proposed lexical-constructional analysis provides a more natural explanation for the complex nature of the constructions.

Why can the event-dependent COC take an overt object complement? The answer is that the CO can be semantically equivalent to a manner adverbial. In fact, it is not unusual in English that NPs function as adverbials:

(62) a. I travel *second class*. (Yasui (1983:495))

b. You should never abandon your job *this way*.

(Haegeman and Guéron (1999:41))

In (62), italicized NPs function as adverbial accusatives. These NPs can be widely used in various constructions. However, there is a striking difference between the CO of the event-dependent type and adverbial accusatives: The eventive CO is virtually restricted to occurring in the event-dependent COC. In other words, only in the construction can it function as an adverbial. In this sense, the CO of the construction is more idiomatic than adverbial accusatives. Given the fact that the event-dependent COC is not isolated and productive, the construction may be regarded as a constructional idiom (Chapter 3.2). If the event-dependent COC is a constructional idiom, it is quite natural that it has a syntax which is unique to the construction in question, i.e. the verbs which are conventionally used as intransitive take overt object complements. From the above discussion, I conclude as follows:

- (63) *Why is it possible that in one type of COCs the intransitive verb takes an overt object complement, i.e. CO?*

The intransitive verb can take a CO because the construction in which the verb occurs is a constructional idiom. Since the CO can function as an adverbial, there is no mismatch between the number of participant roles associated with the main verb and the number of argument roles of the construction. In this sense, most instances of the event-dependent COC are considered concord constructions.

Langacker (1991) mentions that the construction involving an eventive CO describes an act by means of a marginally transitive expression. This remark may be a little misleading: He never identifies the construction with the transitive construction. Now his remark should be modified as follows: The construction describes an act by means of a *superficially* transitive expression.

5.4. The Relation between the Event-Dependent COC and the Intransitive Construction with the Corresponding Manner Adverbial

In this section, we consider the relationship between the event-dependent COC and the intransitive construction with the corresponding manner adverbial. A careful examination of the two constructions allows us to answer the question of where the equal status of the CO of the event-dependent type and the corresponding manner adverbial comes from. One of the special features of the event-dependent COC is that it has a reading equivalent to the intransitive construction involving a manner adverb:

- (64) a. She laughed a raucous laugh.

- = She laughed raucously.
- b. The old man walked a slouchy walk.
= The old man walked slouchingly.
- c. Bill sighed a weary sigh.
= Bill sighed wearily.

(Horita (1996:221-222))

Jones (1988) contends that the difference between COs and manner adverbials is more a matter of style than meaning. However, under the framework of Construction Grammar, it would be recognized that there are also semantic differences between them.

By comparing an adjectival modifier in a COC with an adverbial modifier in the corresponding intransitive construction, Horita (1996) elucidates the relationship between the two constructions. According to her analysis, there is a semantic parallelism between the two constructions, which has not been fully dealt with by many previous studies. However, the construction involving an eventive CO is not exactly the same as the corresponding intransitive construction. We will identify similarities and differences between the two constructions.

5.4.1. Horita (1996)

As has been repeatedly pointed out, the event-dependent type can be semantically close to the intransitive construction with the corresponding manner adverbial. To give a concrete example, example (65a) is thought to correspond semantically to (65b):

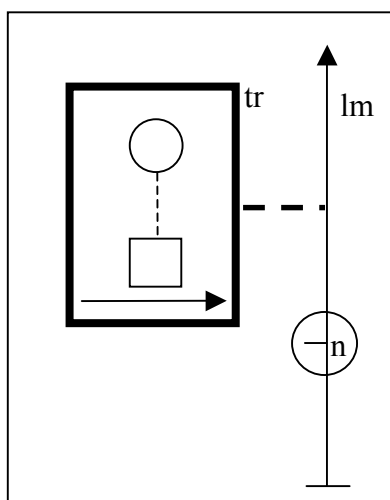
- (65) a. Tom fought ferociously.
- b. Tom fought a ferocious fight.

(Horita (1996:228))

In the above examples, the modifying relation between *ferociously* and the verb *fight* seems semantically parallel to that between *ferocious* and the noun *fight*, in spite of the fact that heads and modifiers represent different grammatical categories in the two constructions. However, this parallelism has not been adequately dealt with by the previous studies working in the generative framework or the discourse-functional framework.

Horita (1996) considers why the adverb *ferociously* and the adjective *ferocious* are perceived as being semantically equivalent, under the framework of Cognitive Grammar. According to Horita, *ferociously* and *ferocious* have the same conceptual content and profile the same interconnections, as sketched in Figure 5.11:

(a) ADV



(b) ADJ

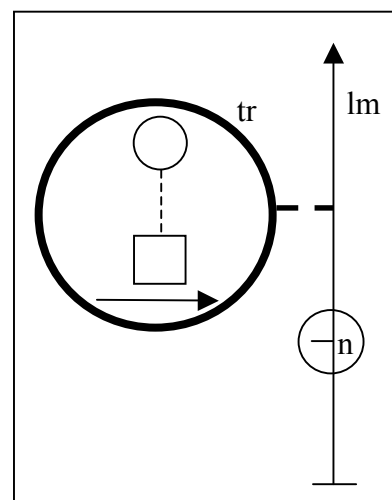


Figure 5.11. Adverb and adjective (Langacker (1991:43); cited in Horita (1996:229))

Each invokes the conception of a comparison scale pertaining to the degree of ferocity. Figure 5.11 (a) depicts the semantic content of the adverb, e.g. *ferociously*, while Figure 5.11 (b) depicts that of the adjective, e.g. *ferocious*. In both diagrams, the upward arrow indicates a scale pertaining to the degree of ferocity. Each predication specifies that some process falls within that portion of the scale located beyond the neighborhood of the norm (n), and chooses the schematically characterized process for its trajector, and the scalar region for its landmark. Each profiles the interconnections between the process and the scalar region.

In Cognitive Grammar, a difference in grammatical category is assumed to imply a difference in meaning ('Change of form implies change of meaning'). It is necessary to identify what makes the semantic difference between the adverb *ferociously* and the adjective *ferocious*. On the basis of the assumptions of Cognitive Grammar, Horita argues that the semantic distinction resides in whether the trajector is simply construed as a process, or is reified to form an abstract region, as indicated by the bold-line circle in Figure 5.11 (b). Although this contrast is subtle, it produces a difference in meaning and is responsible for the difference in grammatical category (Horita (1996:229)). In Figure 5.11 (a), because the trajector is processual, i.e. a verb, its structure is adapted for the modification of a verb and is therefore categorized as an adverb. On the other hand, in Figure 5.11 (b), because of the nominal character of its trajector, its structure is categorized as an adjective.

From the above considerations, Horita claims that the modifying relationships are parallel between an adverb and an adjective, because in both instances a process is situated within the landmark region of the scale, but the difference of meaning and category between the two relates to whether the process retains its processual construal or undergoes reification.

Her analysis can also capture another problem. According to Massam (1990), an adjective modifying a CO can be manner-oriented or subject-oriented, as in (66) and (67), but it cannot be speaker-oriented, as in (68):

- (66) a. King Alfred died a gruesome death. (manner)
b. King Alfred died gruesomely.

(Massam (1990:174))

- (67) a. Henleigh smiled an unkind smile. (subject-oriented, manner)
b. Henleigh (unkindly) smiled (unkindly).

(Massam (1990:174))

- (68) a. *Hans smiled an evident smile.
b. Evidently, Hans smiled.

(Massam (1990:174))

This behavior of the modifier with the CO can be explained by using the adverbial or adjectival schematic conceptions diagrammed in Figure 5.11 (a, b). The parallel construal between an adjective modifying a CO and an adverb modifying a verb is related to the fact that their conceptual contents are equivalent. The conception of process can make inherent reference to its participants. In the process designated by the intransitive verb in a COC, there is only one participant (Agent). In (66) and (67), each subject is a participant located within the process and can therefore retain the parallelism of the modifying relationship. On the other hand, a speaker is not a participant but a conceptualizer who is responsible for the conceptualization of the whole event coded in a clausal expression. In other words, the speaker cannot be situated within the process in Figure 5.11. Hence an adjective cannot be

speaker-oriented, and the modifying relation between an adjective *evident* and a CO *smile* in (68a) cannot be thought to be equal to that between the adverb *evidently* and the verb *smile* in (68b). Horita explains that the adverb and the adjective can be paraphrased, as in (66) and (67), only if their conceptual contents are as shown in Figure 5.11 (a) or (b) respectively.

5.4.2. Similarities and Differences

I basically agree with Horita's analysis. However, note that her analysis can be applied only to the type which I call the event-dependent COC. The CO of the event-independent type does not represent the action itself denoted by the verb, but rather refers to the landmark that is evoked by the verb meaning (Chapter 4.7). Thus, there is no parallel construal between an adjective modifying a non-eventive CO and an adverb modifying a verb, because their conceptual contents are not equivalent. Conversely, the CO can be semantically equivalent to the corresponding manner adverbial only if they have the same conceptual content.

In addition, the event-dependent COC does not always have the same semantic function as the corresponding intransitive construction. As already mentioned, the former allows an event reading and a result reading, while the latter does not:

(69) a. He sighed harshly and leaned back in his seat. (Höche (2009:115))

b. He sighed a harsh sigh and leaned back in his seat.

(BNC; cited in Höche (2009:115))

The sentence *he sighed harshly* specifies no temporal limits. On the other hand, *he sighed a harsh sigh* describes a process which extends within the boundaries of “a harsh

sigh.” In other words, ‘to sigh’ and ‘a harsh sigh’ are co-extensive and unfold at the same time. The event reading and result reading of the event-dependent COC rely on how the CO highlights the event denoted by the verb. Note that such multiple semantic interpretations are not observed in (69a).

Recall also that unmodified eventive COs allow for intensifier interpretations. It would not usually be felicitous to use a CO that does not include some adjectival modification. However, the repeated element has the function of intensification, which comes as a result of the re-newed reference to previously verbalized elements. In fact, in the event-dependent COC, the repetition of the event denoted by the verb reflects an increase in intensity (e.g., *Joseph dreamed a dream* = *Joseph certainly dreamed*). Naturally, manner adverbials do not have such a semantic function. Certainly, the CO of the event-dependent type and the corresponding manner adverbial may share the same syntactic and semantic properties in several respects. However, it is wrong to identify the event-dependent COC with the corresponding intransitive construction.

Another thing worth noting is that the CO of the event-dependent type cannot be always paraphrased by using the corresponding manner adverbial. For example, (70a) cannot be paraphrased by (70b):

- (70) a. She smiled a warm happy smile.
b. *She smiled warmly happily.

(Omuro (1990:68))

The description of a bodily gesture can be achieved through an adverb. But English grammar has much more restricted possibilities for adverbial modification of verbs than adjectival modification of nouns (Dixon (2005:124-125)):

- (71) a. She died the most awful death.
b. *She died awfully.
c. ?She died most awfully.

(Dixon (2005:124-125))

According to Dixon (2005), (71b) is ungrammatical and even (71c) sounds a little odd. Moreover, the event-dependent COC is likely to be used because there are much greater possibilities for relative or prepositional modification of a noun than there are for adverbial modification of a verb:

- (72) a. He laughed a laugh that shook the timbers of even that solidly built old house.
b. She smiled a smile without humor. (Horita (1996:235))
c. Mona sneezed a 20 decibel sneeze, which is a rare thing to hear.

(Massam (1990:168))

As illustrated in (72), using the event-dependent COC allows one to add much more information to the verbal notion than using the intransitive construction. Note that this view is similar to the view held by traditional grammarians that the main function of a CO is to make up for a lexical gap which the language has in not offering an appropriate adverb to describe an action denoted by the verb (Chapter 1.2).

Taking into account the differences between the event-dependent COC and the intransitive construction, it seems safe to conclude that the former construction is not exactly the same as the latter construction. Rather, the event-dependent COC exists independently of the intransitive construction, even if they are linked in construction

taxonomies. The following conclusion can be drawn from the above view:

(73) *Where does the equal status of the CO of the event-dependent type and the corresponding manner adverbial come from?*

The equal status of the CO of the event-dependent type and the corresponding manner adverbial comes from the relation between the adjective modifying the eventive CO and the adverbial modifying the verb, in which they must have the same conceptual content; i.e., a process is situated within the landmark region of the scale. However, the event-dependent COC is not exactly the same as the intransitive construction in that 1) the eventive CO allows an event reading and a result reading, 2) the unmodified eventive CO can function as an intensifier, 3) using the event-dependent type enables us to add much more information to the verbal notion than using the intransitive construction. Hence, the event-dependent COC should be considered to exist independently of the intransitive construction, even though they are linked in construction taxonomies.

5.5. The Relation between Verbs and Two Types of COCs

It should be obvious by now that English COCs form a heterogeneous category consisting of two independent constructions, the event-dependent type and the event-independent type. The former is a prototypical instance of COCs, while the latter is a non-prototypical one. As mentioned in section 5.2, the use of these constructions often depends on how a speaker structures and interprets the event described by the verb. All of the content in one construction is assumed to figure in

the other as well. What differs is the relative salience of substructures. The relation between the two types of COCs is based on conventional imagery, which reflects our ability to construe a given event in many different ways (cf. Langacker (1987)). What concerns us about this shift in construal is the fact that not all verbs take COs and not all COCs are interpreted in two ways. In order to capture this fact, we need to pay much attention on verb-class-specific constructions and verb-specific constructions. In what follows, I address the question of how the two types of COCs are related to each other, by identifying what kind of verbs can appear in the constructions and which instances allow for two interpretations. I will show that my proposed approach can give a more coherent account of COCs in English than any other cognitive linguistic approaches.

5.5.1. Transitivity and COCs

Many previous studies provide descriptions built on transitivity as a crucial definitional feature of the types of verbs that may enter COCs. By adopting a cognitive grammar approach, Horita (1996) examines what verbs are possible in the constructions and why they are regarded as acceptable. She argues that the verbs which can take COs should be lexically intransitive verbs, since COs are easily omissible, as shown in (74):

- (74) a. She grinned (a happy grin).
b. John slept (a sound sleep).
c. Susan sneezed (a glorious sneeze).

(Horita (1996:230-231))

Perlmutter (1978) classifies intransitive verbs into unaccusative verbs (e.g. *sink*, *arrive*,

break) and unergative verbs (e.g. *dance, smile, run*). Many linguists have observed that only unergative verbs can occur with COs, whereas unaccusative verbs cannot take such objects (Keyser and Roeper (1984), Massam (1990), Levin and Rappaport Hovav (1995), among others):

- (75) a. He walked a funny walk.
b. She cried a good long cry.
c. The baby slept a sound sleep.
d. She ran a good run.

- (76) a. *John arrived a late arrival.
b. *The comedian appeared an amusing appearance.
c. *We approached a strange approach.

(Keyser and Roeper (1984:404))

- d. *The actress fainted a feigned faint.

(Levin and Rappaport Hovav (1995:40))

On the basis of (75) and (76), Horita supposes that differences in construal between unergative and unaccusative verbs lead to the difference in acceptability with COs. In the case of such unergative verbs as *walk, cry, sleep, and run*, the actions described by the verbs can be controlled by the subjects. Thus, the subjects are supposed to supply energy to themselves in order to bring about the activity. Their cognitive structures are portrayed in Figure 5.12. Figure 5.12 indicates that the subject (Agent) itself not only exerts energy but also receives it. In other words, the subject is both an energy source and an energy sink. Horita argues that although actually there is only one participant in the designated event, we can conceive of a transmission of energy from the

participant to itself, i.e., the transmission of energy is reflexive.

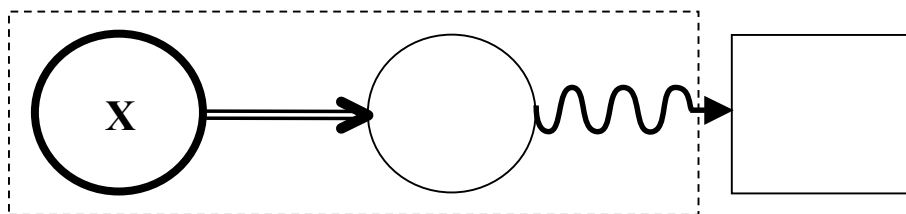


Figure 5.12. Unergative Verb (e.g., x walked.) (Horita (1996:231))

On the other hand, unaccusative verbs like *arrive*, *appear*, *approach*, and *faint* are argued to be viewed as a thematic process whose construal is absolute. For example, in the case of the verb *arrive*, the movement per se is saliently evoked and placed in profile, as sketched in Figure 5.13:

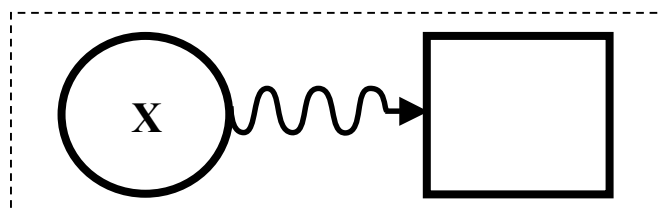


Figure 5.13. Unaccusative Verb (e.g., x arrived) (Horita (1996:232))

Thus, Horita claims that unaccusative and unergative verbs are typically different with reference to energy in construals.

In the Cognitive Linguistics paradigm, the concept of transmission of energy is assumed to be one of the conceptual factors contributing to transitivity. Energy can

imply not only physical energy, which is transmitted from one participant to another, but also causative force (Horita (1996:232)). In fact, some unergative verbs can take not only COs but also other objects, as shown in (77):

- (77) a. Tom walked the dog to the park.
b. Mary danced Bill so beautifully.
c. The doctor bled the patient.

(Horita (1996:232))

To give an example, the verb *walk* in (77a) is used in the sense of ‘cause to walk.’ However, other unergative verbs do not allow causative uses as well:

- (78) a. *The doctor coughed Kay.
b. *The sleeping pills yawned Pat.
c. *The pollen sneezed Tony.

(Levin and Rappaport Hovav (1995:116))

Furthermore, in resultative constructions, unergative verbs can occur with both fake objects and resultative complements, as in (79), while unaccusative verbs cannot, as in (80):

- (79) a. He walked his feet to pieces.
b. Mary laughed herself into a stupor.
c. She danced her toes sore.

(Horita (1996:232))

- (80) a. *John arrived himself sick.
b. *The comedian appeared himself famous.
c. *The mirror broke itself into pieces.

(Horita (1996:232))

Based on these facts, Horita proposes that unergative verbs can take fake objects with resultative complements, or COs, because they are construed as events including the transmission of energy. Her proposal appears to be supported by the following examples:

- (81) a. She runs straight.
b. She runs a straight run.

(Horita (1996:233))

- (82) a. The road runs straight.
b. *The road runs a straight run.

(Horita (1996:233))

The subject in (81a) moves along a spatial path, whereas sentence (82a) describes a static configuration in which a spatially extended subject simultaneously occupies every location along such a path. In this case, although (81b) is a possible paraphrase of (81a), we cannot use a COC like (82b) as the paraphrase of (82a). According to Horita, (82a) should be an instance of *subjectification*. Langacker (1990) mentions that subjectification represents a common type of semantic change, in which spatial motion on the part of an objectively-construed participant is replaced by subjective motion (mental scanning) on the part of the conceptualizer (Langacker (1990:327)).¹⁷ Data

like (82a) is characterized by mental scanning on the part of the conceptualizer. Thus, the subject *the road* does not exert energy and receive it. The cognitive structure of the verb *run* in (82b) cannot be represented as in Figure 5.12, which includes a transmission of energy. Hence, the unacceptability of (82b).

At first sight, it might seem plausible to claim that the verbs occurring in COCs are unergative verbs whose conceptual structures include one participant and a reflexive transmission of energy. Unfortunately, Horita's analysis has some serious problems. First, Horita does not take into account the instances which such verbs as *tell*, *feel*, *produce*, *build* occur with COs. She seems to deal with only the construction which I call the event-dependent type as a COC. However, we cannot elucidate the nature of English COCs, unless we incorporate into the analysis the instances which have so far not been considered as COCs.

Second, some unaccusative verbs can occur with COs. Takami and Kuno (2002), and Kuno and Takami (2004) report on the grammaticality of the below sentences:

- (83) a. The tree grew a century's growth within only ten years.
b. The stock market dropped its largest drop in three years today.
c. Stanley watched as the ball bounced a funny little bounce right into the shortstop's glove.
d. The apples fell just a short fall to the lower deck, and so were not too badly bruised.

(= (11))

Höche (2009) also dismisses the above examples as unreliable and useless, because they are contrived by the authors and not extracted from a corpus of naturally occurring

language, i.e. BNC. However, the appropriate introspection in conjunction with actual uses in corpora could lead to findings about structures of the human conceptual system which may be psychologically plausible. Just because a linguistic expression is not attested in a large corpus does not mean that it is ‘impossible and not attested’ (Chapter 3.7). In fact, the following data is extracted from Google and the Bank of English:

(84) a. *In every day they grew a year’s growth, and in every night another year’s growth, but at dawn, when the stars were adding, they grew three year’s growth in the twinkling of an eye.*

(Andrew Lang, Henry Justice Ford, *The Violet Fairy Book*)

b. I mean a lot of the statistics and things Michael Howard Yesterday in Parliament saying that *crime in London has dropped erm the highest erm drop in twenty years* I think it was that is purely because it was so high the previous year. (The Bank of English)

c. *We bounced a little bounce* and then the plane just settled down on the runway. (Jim Hayden, *The Year of God’s Promise*)

Note in the above examples that the actions described by verbs such as *grow*, *drop*, and *bounce* cannot be controlled by the subjects. For example, with respect to (84c), it is not the subjects but the plane they boarded that can exert energy and receive it. These examples indicate that it is wrong to claim that only unergative verbs can occur in COCs. Hence, it seems quite dubious that differences in construal between unergative verbs and unaccusative verbs are responsible for the difference in acceptability with COs. The unacceptability of (82b) should not be ascribed to the transitivity of the sentence. In the next subsection, I adopt a lexical-constructional approach instead and

give a more coherent account of COCs than cognitive grammar approaches.

5.5.2. A Lexical-Constructional Account of COCs

In order to capture the fact that not all verbs participate in COCs and not all instances are interpreted in two ways, my lexical-constructional account posits verb-class-specific constructions and verb-specific constructions. As already noted in Chapter 3.6, my approach emphasizes the usage-based aspects of constructions. An essentially usage-based view entails that constructions are nothing more than schematic form-meaning pairings abstracted over usage events. Since schemas are available at varying degrees of abstraction, constructions should be also available at varying degree of abstraction (Iwata (2008a:36)).

Take the verb *live* as an illustration. The construction in which the verb *live* takes a CO can be interpreted as either an instance of the event-dependent COC, as in (85a), or one of the event-independent COC, as in (85b). By abstracting over these instances and other individual occurrences, two kinds of verb-specific constructions arise, [SBJ *live_c* (M) *life_c*^{ADJUNCT}] and [SBJ *live_c* (M) *life_c*^{ARGUMENT}]:

- (85) a. Sam lived an unhappy life ('Sam lived unhappily').
*An unhappy life was lived by Sam.
Sam lived an unhappy life. *He lived *it* because of his sin.
- b. Sam lived an unhappy life ('Sam lived an unhappy type of life').
An unhappy life was lived by Sam.
Sam lived an unhappy life. He lived *it* because of his sin.

The same thing is true of verbs such as *dance*, *fight*, *scream*. As seen in (86), if the

COC involving the verb *dance* is interpreted as an instance of the event-dependent type, it is not compatible with the passive construction and the pronominalization construction. On the other hand, if the COC are interpreted as that of the event-independent type, its CO can undergo passivization and *it*-pronominalization:

- (86) a. Sam danced a merry dance ('Sam danced merrily').
 *A merry dance was danced by Sam.
 Sam danced a merry dance. *Sam danced *it* because he was sad.
- b. Sam danced a merry dance ('Sam danced a merry type of dance').
 A merry dance was danced by Sam.
 Sam danced a merry dance. Sam danced *it* because he was sad.

The above examples show that there are also verb-specific constructions such as [SBJ $dance_c$ (M) $dance_c^{ADJUNCT}$] and [SBJ $dance_c$ (M) $dance_c^{ARGUMENT}$].

By abstracting over these constructions and other verb-specific constructions, we now have two kinds of verb-class-specific constructions, [SBJ UNERGATIVEVERB_c (M) OBJ_c^{ADJUNCT}] and [SBJ UNERGATIVEVERB_c (M) OBJ_c^{ARGUMENT}]. The UNERGATIVEVERB class corresponds to the one which has been traditionally considered the prototypical class of verbs occurring in COCs.

On the other hand, the constructions in which verbs such as *tell*, *produce*, *weave* take COs are interpreted only as instances of the event-independent COC, whereas the ones in which such verbs as *grow*, *drop*, *bounce* take COs belong to the event-dependent COC. By abstracting over these verb-specific constructions, we have the UNACCUSATIVEVERB class construction and the TRANSITIVEVERB class construction. These verb classes correspond to the ones which have so far been regarded as

non-prototypical classes of verbs appearing in COCs. Figure 5.14 shows the hierarchical organizations of COCs:

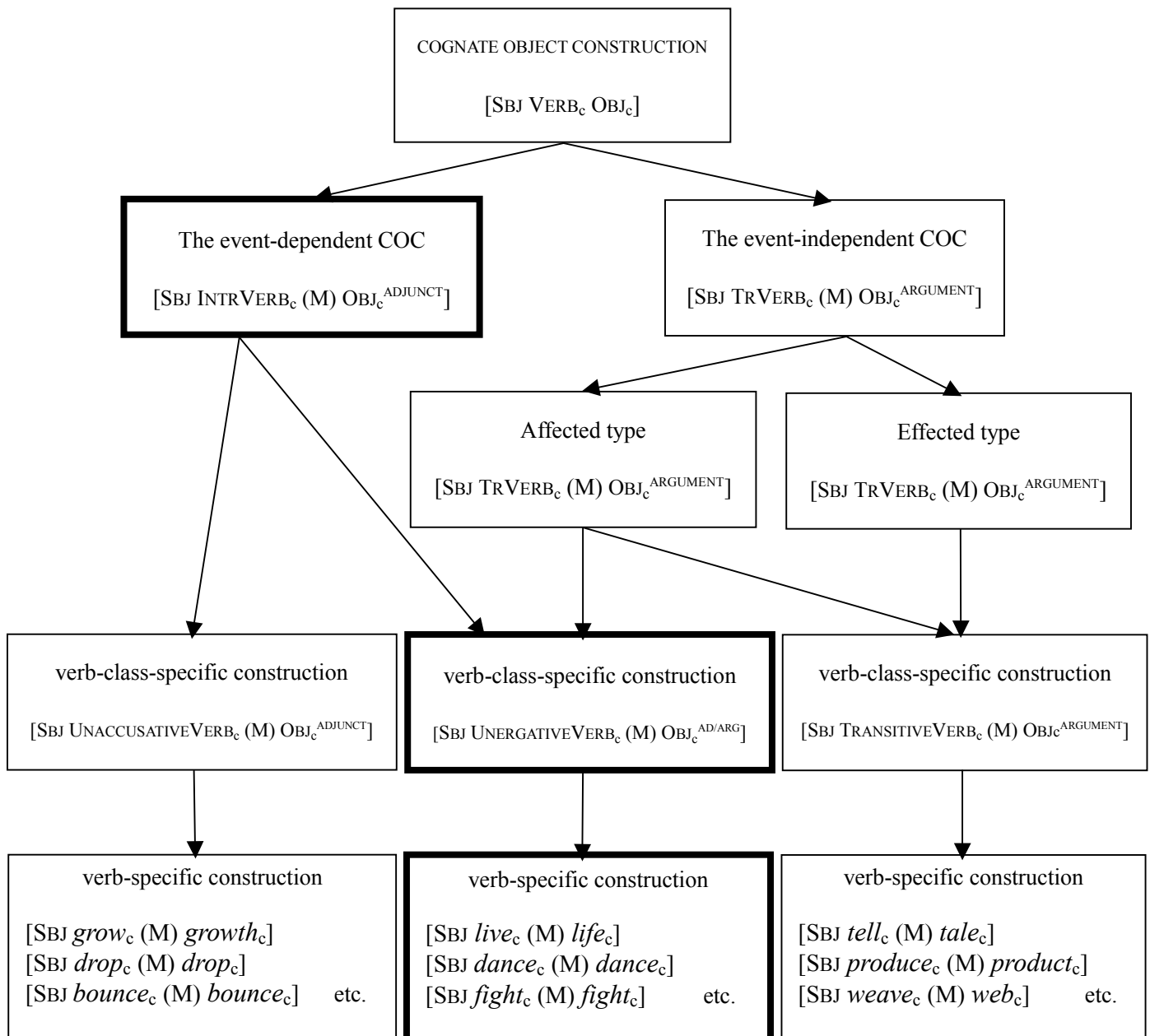


Figure 5.14. The hierarchical organization of English COCs

In the construction hierarchy seen above, verb-specific constructions handle

subcategorization properties and selectional restrictions, while verb-class-specific constructions capture syntactic and semantic regularities of verb classes. In addition, verb-class-specific constructions capture argument structure alternations. Now we can predict that only the *UNERGATIVEVERB* class construction allows two interpretations.

Constructions as schemas both capture the commonalities over their instances and sanction new instances which conform with their specifications. Recall that constructions and individual full expressions are related in the following manner (Chapter 3.6.3). First, constructions as schemas sanction more concrete linguistic expressions, to the extent that they can be associated with linguistic structures that already have unit status. Second, constructions sanction the linguistic expression as a whole, not part of it. Whether a given verb can appear in a particular construction depends on whether the whole string involving the verb can instantiate a relevant construction or not. In short, if the sentence in which a given verb occurs does not instantiate a relevant construction, it is judged unacceptable or ungrammatical.

My lexical-constructional approach can easily identify what kind of verbs can appear in COCs. Let us consider the following examples:

(87) a. *The glass broke a crooked break. (= (59a))

b. *She arrived a glamorous arrival. (= (59b))

c. *Karen appeared a striking appearance at the department party.

(Levin and Rappaport Hovav (1995:150))

d. *The accident occurred a sudden occurrence.

(Takami and Kuno (2002:157))

As seen in (87), the verbs *break*, *arrive*, *appear*, and *occur* cannot appear in COCs.

These verbs do not represent processes, but rather describe the endpoints of activities or events. In fact, they are incompatible with adverbials such as *for an hour*, which represents a temporal duration, unlike the verbs *laugh* or *live*:

- (88) a. The glass broke *{*for/in}* three minutes.
b. She arrived *{*for/in}* an hour.

(Takami and Kuno (2002:159))

- (89) a. Casey laughed *for* 20 seconds.
b. Mayflies live *for* a day.

(Massam (1990:178))

Both the event-dependent COC and the event-independent COC represent activities or events involving temporal processes. The CO of the event-dependent type designates the specific instance of the event denoted by the verb, whereas that of the event-independent type refers to a simple by-product of the activity or a pre-composed entity which exists independently of the process denoted by the verb. The whole sentences in which achievement verbs such as *break*, *arrive*, *appear*, *occur* take COs are not semantically compatible with the event-dependent COC or the event-independent COC. Hence, the unacceptability of (87). The same situation holds for (90):

- (90) *Phyllis existed a peaceful existence. (= (59c))

The verb *exist* is not a dynamic verb but rather a stative verb, which does not imply a manner of movement or an affected or effected entity. The whole string in which the verb *exist* occurs with a CO is not compatible with the event-dependent type or the

event-independent type. English COCs describe a wide range of actions involving temporal processes, which may be physical (*dance, smile, walk*), mental (*dream, think*), perceptual (*feel, smell, taste*). Therefore, stative verbs cannot appear in COCs. The unacceptability of *The road runs a straight run* is also explained by the simple fact that since the situation involves a static configuration, there is no ‘objective’ movement. From the above discussion, I hypothesize that the verbs occurring in COCs must represent activities and actions involving temporal processes.

The following sections aim to work out how the three classes of verbs are related to COCs and why only the UNERGATIVEVERB class construction can be interpreted in two ways.

5.5.3. Transitive Verbs

As Rice (1987) mentions, COs are already understood from the context either because they are closely connected semantically with the activities described by the verbs or because it is impossible to disassociate them from the processes denoted by the verbs. Prototypical COCs are regarded as constructions in which the CO repeats an event denoted by the verb and further specifies the manner of the action. However, among COs there are instances which designate concrete entities and then may continue to exist independently of the processes represented by the verbs. COCs involving such COs are categorized as instances of the event-independent type.

The COCs containing the verbs traditionally classified as transitive are sanctioned as instances of the event-independent COC. For example, consider the sentence *He wove an intricate web*. Although the NP *web* is a nominalization of the verb *weave*, it describes not an abstract event but rather a concrete entity resulting from the action denoted by the verb:

(91) *web* (noun)

- a. a net of thin threads made by a SPIDER to catch insects:

He watched a spider spinning its web.

- b. a closely related set of things that can be very complicated:

a tangled web of relationships

(LDOCE online)

We can predict that in the sentence *He wove an intricate web*, the NP *web* does not repeat the event itself represented by the verb. In fact, the sentence cannot be paraphrased by the corresponding intransitive construction, as illustrated in the following:

(92) He wove an intricate web. ≠ He wove intricately. (Höche (2009:126))

The same situation holds true for NPs such as *tale, feeling, product, building*:

- (93) a. Jerry told a tale.
b. The soldiers felt a (terrible) feeling.
c. The team produced a product.
d. They built a brick building.

The NPs in (93) correspond to so-called affected objects or effected objects, which denote concrete entities. One might argue that the NP *feeling* represents an abstract concept like anger, sadness, or happiness. However, English native speakers seem to construe *feeling* as a thing:

- (94) a. It was the last game of the season and *feelings were running high*.
b. Children only slowly develop the ability to *put their feelings into words*.
c. My parents had *mixed feelings* about all the changes.

(LDOCE online)

As seen in the above examples, the NP *feelings* is metaphorically construed as moving things in (94a), objects packaged into words as ‘containers’ in (94b), or mixed materials in (94c). *A terrible feeling* in (93b) is also assumed to be construed as a thing, since it cannot be paraphrased by the adverb *terribly*:

- (95) The soldiers felt a terrible feeling. ≠ The soldiers felt terribly.

Along with *feeling*, the NPs *tale*, *product*, and *building* do not allow for an event interpretation and thus cannot be semantically equivalent to manner adverbials:

- (96) a. Jerry told a happy tale. ≠ Jerry told happily.
b. The team produced a great product. ≠ The team produced greatly.
c. They built a beautiful building. ≠ They built beautifully.

These facts suggest that if a CO-nominal denotes a concrete entity which can exist independently of the action represented by the verb, the COC involving it is not compatible with the syntax and semantics of the event-dependent type.

In general, verbs such as *weave*, *tell*, *feel*, *produce*, *build* are considered to denote voluntary events, in which the agent acts consciously and volitionally, and thus controls

the event involving two participants. As a consequence of the agent's action, it is implied that something happens to the referent of the object nominal. The referent can be accorded separate status lexically and syntactically. Therefore, it is not surprising that the COCs containing verbs with such semantic properties are sanctioned not by the event-dependent COC, but by the event-independent COC. These considerations lead us to propose that the whole strings containing transitive verbs should be sanctioned as instances of the event-independent type.

5.5.4. Unaccusative Verbs

In the literature, unaccusative verbs are argued to be mainly those that represent nonvolitional events of the subject referents and express changes of state/location of these referents. The semantic role of the subjects is a theme/patient. The events denoted by unaccusative verbs cannot be controlled by the subjects. Thus, many previous studies, which contend that COs are arguments, postulate that unaccusative verbs cannot appear in the COC. For it is not reasonable to think that the verbs having such semantic properties occur in the construction requiring two participants/arguments. However, we have observed that English COCs are classified into the event-dependent type and the event-independent type. The CO of the former construction is not an argument but an adjunct. Thus, it is not logically impossible that unaccusative verbs appear in the event-dependent COC. In fact, the following are examples which are observed in actual language use:¹⁸

- (97) a. *In every day they grew a year's growth, and in every night another year's growth, but at dawn, when the stars were adding, they grew three year's growth in the twinkling of an eye.*

- b. I mean a lot of the statistics and things Michael Howard Yesterday in Parliament saying that *crime in London has dropped erm the highest erm drop in twenty years* I think it was that is purely because it was so high the previous year.
- c. *We bounced a little bounce* and then the plane just settled down on the runway.

(= (83))

- (98) And while that wind was blowing, *it thundered the loudest thunder they had ever heard*, and a big dog that nobody had ever seen before jumped through the window. Well, Uncle Bob stood up and told them to curt out that dumb supper! And that was the end of that.

(Eloise Greenfield, Lessie Jones Little, *Childtimes: a three-generation memoir*)

Unlike *web, feeling, product, building*, the NPs such as *growth, drop, bounce, thunder* denote more abstract concepts. Take *growth* as an example:

(99) *growth* (noun)

- a. the process of growing physically, mentally or emotionally:
Lack of water will stunt the plant's growth.
- b. an increase in the size, amount or degree of sth:
population growth, the rapid growth in violent crime
- c. an increase in economic activity:
a disappointing year of little growth in Britain and America

(OALD online)

As seen in (99), *growth* is an uncountable noun, which denotes not a substantial entity but an abstract event beyond human control.¹⁹ Thus, the sentence in which the verb *grow* takes a CO is incompatible with the passive construction and the pronominalization construction:

- (100) In every day they grew a year's growth.
*A year's growth was grown by them.
*They grew a year's growth, and I also grew *it*.

The examples in (100) indicate that the COC involving the verb *grow* does not instantiate the event-independent COC. The same is true of the verbs *drop*, *bounce*, and *thunder*:

- (101)a. Crime in London has dropped the highest drop in twenty years.
*The highest drop has been dropped in twenty years.
Crime in London has dropped the highest drop in twenty years. *Crime in Japan has not dropped *it*.
- b. We bounced a little bounce.
*A little bounce was bounced by us.
We bounced a little bounce. *We bounced *it* because we boarded the dangerous plane.
- c. It thundered the loudest thunder.
*The loudest thunder was thundered.
It thundered the loudest thunder. *That big rain cloud thundered *it*.

Note that the COs *growth*, *drop*, *bounce*, and *thunder* can be paraphrased by using adverbial PPs, as in the following:

- (102) Crime in London has dropped the highest drop in twenty years.
= Crime in London has dropped *by the highest amount* in twenty years.

From the above discussion, I claim that the COCs involving unaccusative verbs are sanctioned only by the event-dependent COC.

5.5.5. Unergative Verbs

The case of unergative verbs is more complex. Unergative Verbs are those that represent volitional acts of their subject referents (*smile*, *grin*, *laugh*, *dance*, etc.) and those that represent involuntary bodily process (*cough*, *sneeze*, *belch*, *sleep*, etc.). In the former case the semantic role of the subject is an agent, and in the latter it is an experiencer. I call the former verbs *the volitional UNERGATIVEVERB class* and the latter verbs *the involuntary UNERGATIVEVERB class*.

First, let us consider the volitional UNERGATIVEVERB class. It seems instructive to start by clarifying the fundamental difference between the verb *dance* and the verb *smile*. Comparing *dance* to *smile*, we can see that the COC containing the former verb can be interpreted as either an instance of the event-dependent type or one of the event-independent type, whereas the one containing the latter verb cannot be interpreted as one of the event-independent type, without adequate context:

- (103)a. Sam danced a merry dance ('Sam danced merrily').
*A merry dance was danced by Sam.

Sam danced a merry dance. *Sam danced *it* because he was sad.

- b. Sam danced a merry dance ('Sam danced a merry type of dance').

A merry dance was danced by Sam.

Sam danced a merry dance. Sam danced *it* because he was sad.

- (104)a. Sam smiled a beautiful smile ('Sam smiled beautifully').

*A beautiful smile was smiled by Sam.

Sam smiled a beautiful smile. *Sam smiled *it* because he was happy.

- b. Sam smiled a beautiful smile ('Sam smiled a beautiful type of smile').

?A beautiful smile was smiled by Sam.

Sam smiled a beautiful smile. ?Sam smiled *it* because he was happy.

Perlmutter (1978) classifies verbs such as *smile*, *grin*, *laugh* as predicates describing willed or volitional acts, like *dance*. However, unlike *dance*, the COCs involving these verbs are not easily interpreted as instances of the event-dependent type. To properly capture the nature of COCs, *smile*, *grin*, *laugh* should be treated differently from *dance*.

As mentioned in Chapter 4.4, the noun *smile* denotes an abstract event rather than a concrete entity, while the noun *dance* denotes not only an abstract event but also a concrete entity. It appears that the sentence in which the verb *smile* takes a CO is not semantically compatible with the event-independent COC. However, we have seen that there are examples where the COC containing the verb *smile* is interpreted as an instance of the event-independent type:

- (105)a. The actress smiled various smiles for the photographers.

- b. Various smiles were smiled for the photographers by the actress.

(Horita (1996:243))

We need to explain why the unergative verbs whose COs describe abstract events can occur in the event-independent COC.

Recall that in a usage-based theory, newly encountered expressions are acceptable, and meaningful, to the extent that they can be associated with linguistic structures that already have unit status. There are two ways of association: 1) The novel expression may count as an instance of a schema; 2) it may be assimilated, via similarity, to an already established unit. As shown in (104), the sentence in which the verb *smile* takes a CO could not be sanctioned by the event-independent COC schema without adequate context. Therefore, I propose that instances of the event-dependent COC involving the verb *smile* are sanctioned by the second way of association: being assimilated to an already established unit.

The process of extension involves not only the base (novel expression) and the target (established unit). When one linguistic expression is assimilated to another via similarity, a higher-order schema (verb-class-specific construction) needs to be extracted which captures the commonality between the two expressions (Iwata (2006c)). Accordingly, the extension in question is diagrammed as in Figure 5.15:

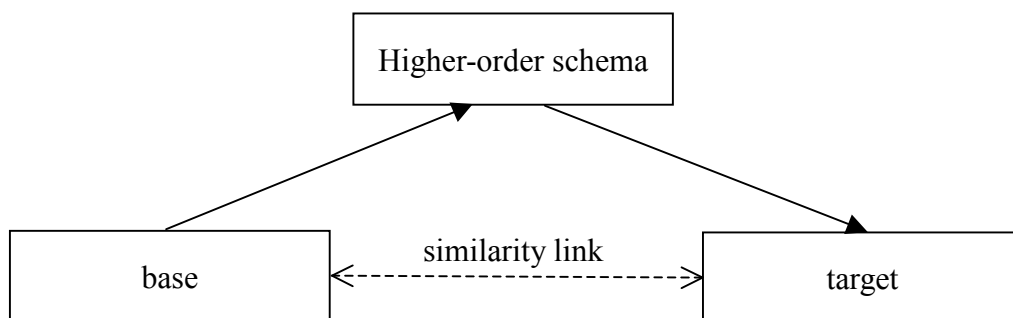


Figure 5.15. Base, target, and higher-order schema (adapted from Iwata (2006c:526))

First, a higher-order schema is extracted from the base. The higher-order schema then sanctions the target.

In the case of the *UNERGATIVEVERB* class construction, what is considered to be an established unit is the *live-life* type. Choosing the *live-life* type as the base for extension is justified by the following considerations. First, by Höche's collostructional analysis of COCs, it turns out that the COC involving the verb *live* far outnumber other verb-specific constructions (Table 5.3 and Table 5.4). Second, without any context, the *live-life* type can be interpreted as either an instance of the event-dependent COC or one of the event-independent COC. In fact, although the noun *life* describes not a concrete entity but rather an abstract event, except for metonymically referring to living things (e.g., *Is there life on the other planet?*), it can be metaphorically construed as a thing:

- (106)a. He has had a good life.
- b. Many of these children have led very sheltered lives.
- c. articles about the love lives of the stars

(*OALD* online)

Not surprisingly, the COC involving such a noun is not incompatible with the passive construction:

- (107)a. The idea that large sums of money must be awarded to compensate people for words which “tend to lower them in the estimation of right-thinking members of society” smacks of an age when *social and political life was lived in gentlemen's clubs*, when escutcheons could be

blotted and society scandals resolved by writs for slander.

- b. Anyway, with Selina here, *my life is being lived in white underpants*.
- c. At the basis of Parsons's theory is a contrast between family life and school life. *School life is lived in a society that is constituted in the course of lessons*.
- d. *Victoria's whole life had been lived within the aura of the Royal Family*, and she reacted by instinct to nurture that relationship.

(BNC)

As seen above, passivized COCs containing the verb *live* and the noun *life* are found relatively frequently in a large corpus. Note that each of the COs in (107) refers to a particular type, which seems to take on an independent existence. The accompanying modifiers, *school and political*, *my*, *school*, and *Victoria's* help us to construe COs as entities which are salient or distinguishable from the activity that engenders them.²⁰

Langacker (1991) notes that the COCs involving unergative verbs show a certain reluctance to passivize, as shown in (108):

- (108)a. ?One of the campers screamed a blood-curdling scream.
- b. ?*A blood-curdling scream was screamed by one of the campers.

(Langacker (1991:363))

On the other hand, he mentions that the following sentence sounds quite natural:

- (109) The blood-curdling scream that they had all heard in countless horror movies was screamed by one of the campers. (Langacker (1991:363))

According to Langacker, the reason for the difference is that the CO in (109) transcends the specific event profiled by the verb and represents a particular type whose existence is therefore independent of any single instantiation (Chapter 4.7). In this respect, example (109) is similar to the *live-life* type. The analogical extension in question can be described, as follows:

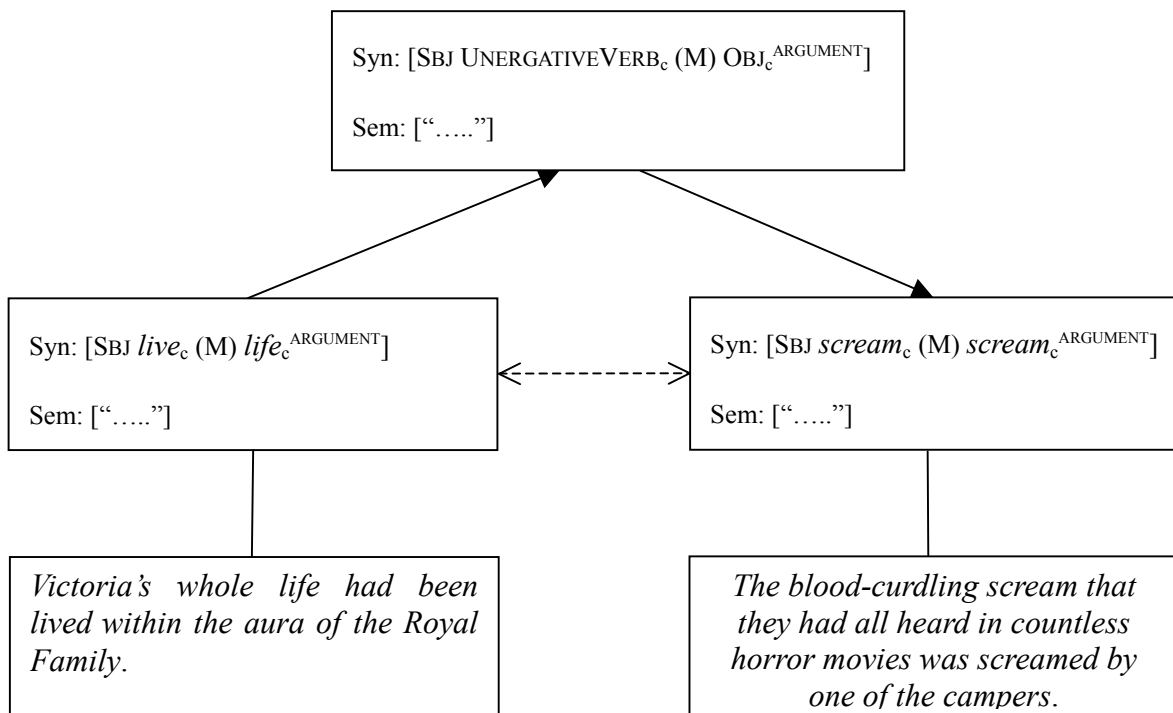


Figure 5.16. *Scream, live*, and the event-independent COC

The above examples suggest that by adding modification to the eventive CO, we can conceive of some differentiation between the event and a conceptually more specified event (Horita (1996)). Consider the following examples:

(110) a. She smiled Marilyn Monroe’s smile (in “Gentlemen prefer Blondes”).

- b. Marilyn Monroe's smile was smiled by Mary.
- c. Mary smiled Marilyn Monroe's smile. Nancy smiled *it*, too.

(= (60))

(110a) means that the subject imitated Marilyn Monroe's smile in "Gentlemen prefer Blondes." In this case, the CO is interpreted as a particular, recognizable type in terms of the information of its modification part. Thus, *Marilyn Monroe's smile* can undergo passivization and be substituted by the pronoun *it*, as in (110b) and (110c). The same situation holds for (111):

- (111) a. The old man laughed one of those short Pict laughs – like a fox barking on a frosty night.
- b. One of those short Pict laughs was laughed by the old man.

(Hamada (1997:104))

Pict laugh is considered to be unique to an ancient people who lived in what is now eastern and northeastern Scotland, from Caithness to Fife. The noun *laugh* in the above example is construed as a particular type of laugh. Thus, the COC containing the verb *laugh* and the CO *Pict laugh* instantiates the event-independent type.

Furthermore, if an abstract event is replicated, it may approach or achieve participant status, especially if the multiple instances are all construed as different from one another (Rice (1987:213)). The following examples illustrate this point:

- (112) a. Pictures were taken, *laughs were laughed*, food was eaten.

(Takami and Kuno (2002:166))

- b. The air was clear and hot, but there was a light refreshing breeze cooling my skin down as I moved. For this time of year, it was blissful and idealistic. Respiration increased and faces tanned. *Smiles were smiled* and waves waved by every hand. No waves were exchanged by me, I just wandered, and smiled and respired.

(http://www.bbc.co.uk/northamptonshire/features/poetry_prose/2004/write/chris_belson.shtml)

Rice (1987) argues that when an eventive CO achieves this status as a type, i.e. as an entity generally replicable across many particular instances, it seems to take on an independent existence. In fact, the COs *laughs* and *smiles* are subjects of passive constructions. These COs are assumed to be construed as types. The CO *various smiles* in (105) is also conceived as a distinct type and then can undergo passivization. Hence, we can consider that [SBJ *smile* (M) *smile_c*^{ARGUMENT}] is acceptable, despite the fact that *smile* itself is not compatible with the event-independent COC:

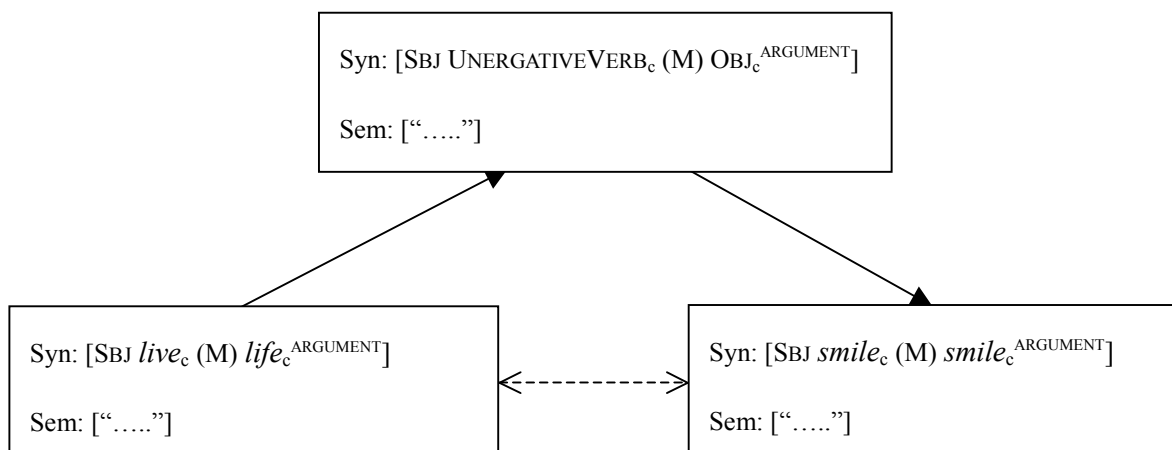


Figure 5.17. *Smile, live*, and the event-independent COC

From the above considerations, I hypothesize that the COCs involving unergative verbs can be sanctioned as the event-independent COC, to the extent that the COs are not merely construed as the specific event profiled by the verb but as a special type. This hypothesis is further supported by the following examples:

- (113)a. *A hearty sneeze was sneezed by the patient
b. That hearty sneeze so carelessly sneezed by your insubordinate little brat will cost us 300 pounds worth of replacement sterile solution.

(Kibort (2004:160))

- (114)a. A sneeze that would wake up the dead was sneezed by Willy.
b. The sneeze of a hay-fever sufferer was sneezed by Willy.
c. Several sneezes were sneezed by Willy in rapid succession.

(Rice (1987:214))

The verb *sneeze* belongs to the involuntary UNERGATIVEVERB class. The COC in which *sneeze* occurs seems to be similar to the UNACCUSATIVEVERB class construction in that the verb describes an involuntary event involving one participant (experiencer) and the CO does not refer to an concrete entity. Actually, without any context, the *sneeze-sneeze* type is not sanctioned by the event-independent COC, as shown in (113a). However, by adding modification to the CO, the *sneeze-sneeze* type becomes semantically compatible with the passive construction. What differentiates the involuntary UNERGATIVEVERB class from the UNACCUSATIVEVERB class is that the former class represents an involuntary event which may be under the subject's control. Hence, we can assume that whether an COC can be interpreted in two ways or not depends on:
1) whether it represents an activity or action involving a temporal process which may be

under the subject's control; and 2) whether the eventive CO can represent a particular or identifiable type. That is, the event-dependent COC and the event-independent COC form a continuum in the UNERGATIVEVERB class construction.

5.5.6. *die*

One might wonder why the verb *die* appears in COCs. As often pointed out, the verb *die* is compatible with adverbials such as *in an hour* which represents a point in time, while it is not compatible with durative temporal adverbials such as *for an hour*:

- (115)a. She died *in* an hour.
b. *She died *for* an hour.

(Takami and Kuno (2002:159))

As shown in (115), the aspectual property of the verb *die* seems to be similar to that of achievement verbs such as *break, arrive, appear, occur*. Since the verb *die* behaves in the same way as achievement verbs, one might expect that it cannot appear in COCs. However, this is not the case. The COC involving the verb *die* is observed frequently:

- (116)a. An extreme form of the first is the fur trapper in the Russian and Canadian Arctic who lays a line of traps across country which he visits once a fortnight collecting *the victims who have died a slow and agonising death* with one or two legs caught in a gin trap.
b. The new Sun was clearly going to provide a Conservative voice for the tabloid market and would eat further into its declining sales, so *the Sketch died a quiet and unsurprising death*.

- c. It occurred to him that Newley might have *died a perfectly natural death* – a heart attack, perhaps, brought on by the blackmail.

(BNC)

Takami and Kuno (2002), and Kuno and Takami (2004) mention that the COC involving the verb *die* historically has a different derivational process from ordinary COCs. According to the *Oxford English Dictionary*, the noun *death* in ‘to die a (specified) death’ represented instrumental in Old English. In Middle English, it was used with various prepositions such as *by*, *with*, *on*, and *in*. It is in present-day English that it is used without a preposition. From the above facts, they claim that the whole object NP involving *death* describes a manner in which someone dies, unlike ordinary COs which are resultant objects.

Unfortunately, there are two problems with the description of the COC involving the verb *die* in *Oxford English Dictionary*. First, the cases where the COs bear a case other than accusative are not exceptional in Old English. Second, it is not rare for the COs of the verbs other than *die* to be used with various prepositions. Therefore, I argued that it is pointless to claim that the COC containing the verb *die* should be differentiated from ordinary COCs (Chapter 2.4.2). Additionally, the COC involving the verb *die* seems to be compatible with the event-dependent type in that it describes how someone died. It should be obvious now that the CO of the event-dependent type is not a resultant object (Chapter 4.6).

It is noteworthy that, unlike other achievement verbs, the verb *die* describes not only an endpoint or a result, but also a process of how the subject stops living.²¹

- (117) a. Her father *died suddenly in an accident* when she was only ten.

- b. The animals *died of starvation* in the snow.
 - c. Do you believe in *anything enough to die for it?*
 - d. She *died young/happy/poor*.
- (118) You're going to get out of this... you're going to go on and you're going to make babies and watch them grow and *you're going to die an old lady, warm in your bed*. Not here. Not this night. Do you understand me? (James Cameron, *Titanic*)

For example, in (118), the sentence *you're going to die an old lady, warm in your bed* means that the subject is going to die in her warm bed after she got older. Since the verb *die* can represent a process, it should be treated differently from other achievement verbs. This semantic property is not incompatible with the event-dependent COC.

It might be argued that the verb *die* should be classified as belonging to the UNACCUSATIVEVERB class, since the event of dying is beyond the subject's control. However, *die* can represent an action which may be controlled by the subject:

- (119)a. memory of those who *died for* independence
- b. The shrine honors those who *died fighting for Japan*, including several men who were convicted of war crimes for their actions in World War II.

(EIJIRO on the WEB)

In (119), the verb *die* describes a self-sacrificial death. These examples indicate that the event denoted by *die* can be under the subject's control. In this case, the verb *die* has the same semantic property as the UNERGATIVEVERB class, which may be compatible

with both the event-dependent COC and the event-independent COC. In fact, when the *die-death* type describes a self-sacrificial death, its CO takes on an independence existence and therefore refers to a particular type of death:

(120)a. This clause puts as plainly as it can be put the idea that His death was equivalent to the death of all; in other words, it was *the death of all men which was died by Him*. Were this not so, His death would be nothing to them. It is beside the mark to say, as Mr. Lidgett does, that *His death is died by them rather than theirs by Him*; the very point of the apostle's argument may be said to be that *in order that they may die His death He must first die theirs*.

b. His death can put the constraint of love upon all men, only when it is thus judged that *the death of all was died by Him*.

(= (61))

In addition, there are examples in which the symbolic death of a famous Rock'n Roll star can be conceived as a particular type:

(121) But the one true *R'n'R death was died by the one true original R'n'R star, Elvis*, who died on the lavatory of what boiled down to a lethal does of constipation. (Höche (2009:161))

The verb *die* has been traditionally discussed as unaccusative (cf. Macfarland (1995), Takami and Kuno (2002), Kuno and Takami (2004), Höche (2009)). However, the above examples show that *die* is no longer an unaccusative verb, because it can be

compatible with the event-independent COC, depending on context. Therefore, I agree with Macfarland and Höche that the verb *die* should be not unaccusative but rather unergative.

5.5.7. The Transitivity Continuum

On the basis of the analysis of COCs presented in this section, we can provide the following answer to the question of how the two types of COCs are related to each other:

(122) *How are the two types of COCs related to each other?*

The event-dependent COC and the event-independent COC form a continuum in the UNERGATIVEVERB class construction, to the extent that the verb represents an activity or action involving a temporal process which may be under the subject's control and the eventive CO can represent a particular or identifiable type.

(122) lends further support to the idea that the argument/adjunct distinction should be gradient (cf. Croft (2001), Langacker (2008)). In the UNERGATIVEVERB class construction, the argument/adjunct distinction of the CO is based on whether or not the event denoted by the CO can represent a particular and recognizable type. This clearly means that the argument/adjunct distinction may be a semantic one rather than a syntactic one.

A concluding point which should be taken up with regards to the relation between verbs and the two types of COCs concerns its contribution to the phenomenon of transitivity as a continuum. Not only do the different subclasses of COCs vary in their

degree of transitivity but also they mark the transition between the intransitive construction and the transitive construction. The whole continuum is illustrated in Figure 5.18:

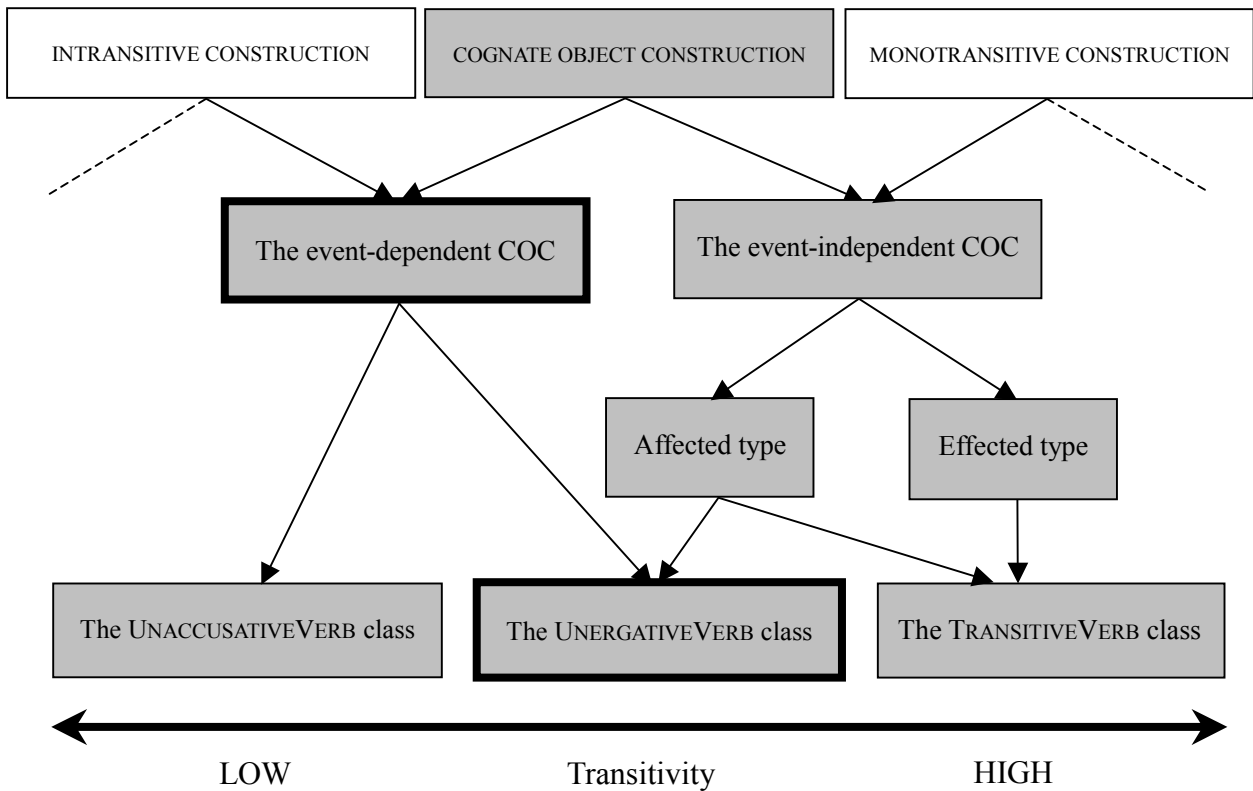


Figure 5.18. The transitivity continuum in English COCs

Since transitivity is to be understood as a continuum, the different categories naturally overlap and merge by definition. At this point, it is in the UNERGATIVEVERB class construction that such overlaps are observed. However, the process of encountering new category members for COCs located on a continuum of transitivity is probably a process that goes on throughout our lives.

5.6. Conclusion

The purpose of this chapter was to provide a definitive answer to the four main questions in the first chapter, by adopting a lexical-constructional approach. First, my answer to the question of why COCs are classified into two types is that they form not a homogeneous category, but rather a heterogeneous one which consists of two independent constructions, the event-dependent type and the event-independent type. I pointed out that the use of these constructions often depends on how a speaker structures and interprets the event described by the verb. In addition, it was argued that the COCs which can be interpreted in two ways show superficial constructional homonymy.

Second, the reason that, in the event-dependent COC, the intransitive verb takes an overt object complement is simply that the construction involving the verb is a constructional idiom. The CO of the construction can function as an adverbial. Contrary to Höche's (2009) analysis, there is no mismatch between the number of participant roles associated with the main verb and the number of argument roles of the construction. I added that most instances of the event-dependent COC are considered concord constructions (Michaelis (2004)).

Third, the equal status of the CO of the event-dependent type and the corresponding manner adverbial come from the relation between the adjective modifying the eventive CO and the adverbial modifying the verb, in which they must have the same conceptual content; i.e., a process is situated within the landmark region of the scale (Horita (1996)). However, the event-dependent COC is not exactly the same as the intransitive construction in the following respects: 1) The eventive CO allows an event reading and a result reading; 2) the unmodified eventive CO can function as an intensifier; and 3) using the event-dependent type enables us to add much

more information to the verbal notion than using the intransitive construction (cf. Jespersen (1924), Huddleston and Pullum (2002)). Hence, I argued that the event-dependent COC should be considered to exist independently of the intransitive construction, even if they are linked in construction taxonomies.

Fourth, my lexical-constructional approach demonstrates that the event-dependent COC and the event-independent COC form a continuum in the *UNERGATIVEVERB* class construction, to the extent that the verb represents an activity or action involving a temporal process which may be under the subject's control and the eventive CO can represent a particular or identifiable type. This is an answer to how the two types of COCs are related to each other. My account lends further support to the idea that the argument/adjunct distinction should be gradient. The argument/adjunct distinction of the CO is based on whether or not the event denoted by the CO can represent a particular, recognizable type. Accordingly, the argument/adjunct distinction may be a semantic one rather than a syntactic one.

The data discussed in this chapter demonstrate that the process of learning a language is a different kind of task than has traditionally been considered to be the case. Until recently the process of combining words into sentences has been seen as a process that is primarily governed by rules involving word-class concepts and rules of combination that refer to those concepts (e.g. phrase-structure rule). Certainly, rules of this kind play some role in the process. However, it is clear from the data discussed here that much more subtle knowledge (i.e. frame-semantic knowledge) is involved in creating COCs.

To claim that language learners expect 'constructions' to play a role in linguistic encoding is, of course, to attribute to them some kind of innate knowledge of general principles of language design. But this kind of knowledge is much less arcane than are

the highly abstract formal principles that are often postulated in formal theories of language acquisition, based on the generative paradigm. The general issue, then, is whether the brain contains some kind of mental organ that is specific to language, or whether the principles that govern language acquisition are part of more general principles of cognitive development. The evidence discussed in this chapter supports the latter view.

Notes to Chapter 5

1. See Chapter 2.3.2 for details on Macfarland's (1995) discussion.
2. In order to describe the associations between verbs and COCs, Höche conducts a *collostructional analysis* (Stefanowitsch and Gries (2003), Gries and Stefanowitsch (2004)), which investigates which lexemes are strongly attracted or repelled by a particular slot in a particular construction, i.e. occur more frequently or less frequently than expected. Lexemes that are attracted to a particular construction are referred to as *collexemes* of this construction. Conversely, a construction associated with a particular lexeme may be referred to as a *collostruct*. The combination of a collexeme and a collostruct will be called a *collostruction* (Stefanowitsch and Gries (2003:215)). See Stefanowitsch and Gries (2003), Gries and Stefanowitsch (2004), and Höche (2009) for more details.
3. For convenience of explanation, *a beautiful dance* which functions as an adjunct CO is simply represented as [ADV a beautiful dance]. This does not mean that the CO of the event-dependent type has the same function as the corresponding manner adverbial. As mentioned in Chapter 4.6, the former cannot be identified with the latter, since it allows an event reading and a result reading. See also section 5.4 for more detailed discussion of the meaning difference between the CO of the event-dependent type and the corresponding manner adverbial.
4. On the assumption that the event-dependent COC and the event-independent COC have the common argument structure [SBJ VERB_c OBJ_c], one might argue that there is a polysemous relation between these constructions. However, such an analysis cannot capture the fact that each type has its own syntax and semantics and that there are

instances which can be interpreted only as the event-dependent type or the event-independent type.

^{5.} Note also that the objects are morphologically or semantically related to the verbs themselves. See section 5.3.4.

^{6.} The A/D asymmetry refers to the asymmetry between two component structures differing substantially in their degree of mutual dependence in a grammatical construction; on balance, one of them (A) is autonomous, and the other (D) is dependent. See Langacker (1987) for more details.

^{7.} Höche adds that the slots constructions offer are variable and are usually filled with lexemes from a particular category. In the Cognitive Linguistics paradigm, categories are assumed to have prototypical instances and peripheral members. Thus, it must be expected that verbs are used in a COC's slot which only marginally meet the specifications listed by Höche and that one cannot fully predict each and every verb that will occur in the construction. Höche cites the following passage from Bybee (2003):

- (i) The possibility of adding new peripheral members to a category allows productivity and change. New items can be used in a construction if they are perceived as similar in some way to existing members.

(Bybee (2003:158))

Passage (i) is rooted in a usage-based view of constructions, adopted by cognitive linguists. It may appear, then, that Höche's analysis also takes a fundamentally usage-based view. In actual practice, however, Höche is ambivalent on this point. The Goldbergian representation and the construal operations which she uses are suited for capturing the top-down character of constructions and the cases in which

constructions superimpose their syntax and semantics upon lexical verbs. Goldberg’s model of Construction Grammar is logically incompatible with the usage-based view (Iwata (2008a:131)). The theory which takes a usage-based view should avoid Goldberg’s strategy. Unfortunately, Höche proposes a hybrid model which incorporates ideas and notions of both Langacker and Goldberg’s approaches to verbal complementations. As mentioned in Chapter 3.7, Langacker’s approach is never consistent with that of Goldberg. Höche advances no convincing arguments to demonstrate that this is not the case.

8. See section 5.4 for a detailed examination of the difference between adjunct COs and the corresponding manner adverbial.

9. According to Höche, the semantic classes of verbs in Table 5.3 are based on Levin’s (1993) system.

10. As regards the distribution of CO-types/tokens, Höche includes R_1 into the EV/ R_1 category. However, as already mentioned in section 5.2, the syntactic and semantic properties of the R_1 type are different from those of the EV/ R_1 type (see also Höche (2009)). Thus I distinguish precisely between EV/ R_1 and R_1 in Figures 5.6 and 5.7.

11. Höche shows which frequencies of occurrences are necessary to measure the collostructional strength between a verb and a COC. Take the verb *live* as an example:

	live	¬ live	Row Totals
COC	699	2,440	3,139
¬ COC	26,802	10,176,359	10,203,161
Column Totals	27,501	10,178,799	10,206,300

Table 5n.1. Frequency data necessary for the analysis of collostructional strength (Höche (2009:133))

According to Höche, the table should be read as follows: Of the 27,501 times the verb *live* is recorded in the BNC, it occurs in the COC 699 times, while in 26,802 cases the verb is used in other types of constructions. The COC, on the other hand, has a frequency of 3,139; that is, all other verb constructions (i.e. 10,203,161) of an overall amount of 10,206,300 verb constructions in the BNC belong to other categories of constructions. 10,176,359 of these constructions neither involve a COC nor the verb *live*. The figures in bold print serve as input for the soft ware tool *Coll.analysis 3*. See Höche (2009) for more details.

12. *OF* = observed frequency

13. According to Höche, of the 109 verbs that were tested for their collostructional strength with COCs, 30 verbs are measured as being repelled by the construction, 4 of them to a significant extent.

	<i>Collexeme</i>	<i>OF</i>	<i>Coll.strength</i>		<i>Collexeme</i>	<i>OF</i>	<i>Coll.strength</i>
(1)	say (R ₁)	1	40.8088888	(9)	cut (EV/R ₁)	1	1.3674997
(2)	do (EV/R ₁)	67	18.0000159	(10)	lose (EV/R ₁)	3	1.1659835
(3)	find (A)	2	9.4672782	(11)	describe (R ₂)	3	1.0300209
(4)	work (EV/R ₁)	1	6.0269432	(12)	love (A)	1	0.9467163
(5)	run (EV/R ₁)	2	2.7963248	(13)	talk (EV/R ₁)	5	0.7556484
(6)	develop (R ₂)	1	1.9016093	(14)	serve (EV/R ₁)	2	0.7284872
(7)	offer (EV/R ₁)	2	1.7625744	(15)	walk (EV/R ₁)	3	0.6960773
(8)	decide (EV/R ₁)	2	1.4339407				

Table 5n.2. Strongly repelled collexemes of the COC (Höche (2009:136, 298-300))

The data in Table 5n.2 show that the majority of the rejected verbs are found only once or twice in a COC and that these negative association between word and construction may not qualify as entrenched structures. See Höche (2009) for more details.

14. Another problem with Höche's analysis is that the instances in which verbs used

intransitively occur with COs are treated uniformly as those of COC-EV/R₁. Höche does not take into account the fact that a sentence like *She danced a beautiful dance* has some possible interpretations (i.e. the event-dependent type or the event-independent type). Thus, the token and type frequencies of EV/R₁ may include the cases in which verbs such as *die, laugh, live, smile* take COs regarded as non-eventive, for example, the ones in which the COs do not exhibit the indefiniteness effect and allow passivization. However, in any case, it is no doubt that the instances which have been not considered transitive constructions form a core of the network of COCs. Instead of incorporating COCs into the transitive construction, thus, I propose that they exist independently of any other constructions, as shown in Figure 5.8.

^{15.} See also note 8 to Chapter 3.

^{16.} In this respect, I agree with Iwata (2008a) that coercion effects should be taken to argue for the existence of lower-level constructions rather than that of higher-level constructions.

^{17.} Langacker (1991) defines subjectification as a semantic extension in which an entity originally construed objectively comes to receive a more subjective construal. For example, observe the following examples:

- (i) a. The balloon rose slowly.
- b. The hill gently rises from the bank of the river.

(Langacker (1991:218))

In (i-a), the verb *rise* designates a perfective process in which the trajector moves objectively through physical space. The meaning of *rise* in (i-b), on the other hand, clearly reflects the reorientation of motion from the objective to the subjective axis.

The configuration is stable through time, which renders the process imperfective. It is the conceptualizer who moves subjectively through the scene, mentally tracing an upward path along the hill's expanse, thus imposing a notion of directionality on the static situation (Langacker (1991:218)). With respect to subjectification, see also Langacker (1990, 1991, 1999) for more detailed discussion.

18. According Burzio (1986), weather verbs qualify as unaccusative verbs.

19. The noun *growth* can also be used to refer to plants which have recently developed or which developed at the same time, as illustrated below. However, such usage seems not to be observed in English COCs.

- (i) a. This helps to ripen new *growth* and makes it follower profusely.
- b. Pinch out the tips of the young *growths* to make for compact, bushy plants.

(COBUILD)

20. Iwasaki (2007) classifies the adjectives modifying COs into 'property adjectives' which enable us to construe a CO as a certain type (*happy, small, merry, sad*) and adjectives denoting processual characteristics such as temporal extension (*sudden, fast, brief, quick, slow*). However, the interpretation of a CO should not be ascribed only to its modification part. For example, take the adjective *traditional* as an example. Following Iwasaki's classification, *traditional* may be categorized as a property adjective. However, the following COC can be interpreted as an instance of the event-dependent COC:

- (i) In this welcome ceremony held for the visiting American President,

some children from the kindergarten nearby *danced a traditional dance*
between two very long speeches. (Horita (1996))

The CO *a traditional dance* in (i) is construed not as a type of dance but as a dancing-event. Sentence (i) means that children from the kindergarten nearby *traditionally* dance in the welcome ceremony held for the American President. Then, what kind of dance the children perform is irrelevant to this context. That is, *a traditional dance* can be replaced with *traditionally*. In this interpretation, sentence (i) is recognized as the event-dependent COC. In fact, sentence (i) is not compatible with the passive construction and the pronominalization construction, as shown in (ii):

- (ii) a. *A traditional dance was danced by some children from the kindergarten
between two very long speeches.
- b. Some children from the kindergarten danced a traditional dance
between two very long speeches. *They danced *it* in this welcome
ceremony.

Thus, we can consider that the construal of the CO of the UNERGATIVEVERB class construction may be dependent on context.

²¹. I am indebted to Shin Watanabe (personal communication) for pointing out example (118) to me.

Chapter 6

Related Issues

6.1. Introduction

The network of English COCs developed and fleshed out so far in the preceding chapters integrates higher-level constructions (the event-dependent type and the event-independent type) and lower-level constructions (verb-class-specific constructions and verb-specific constructions), comprising information on available COC subtypes, verbs, CO-nominals, and semantic or functional factors. My description of COCs provides a comprehensive and coherent account of several issues associated with the constructions, i.e. constructional homonymity, idiomaticity, the argument/adjunct distinction, the unergative/unaccusative distinction, and the transitivity continuum, which have not been adequately addressed in previous studies.

In this chapter, I focus on a comparison of COCs (in particular the event-dependent construction and the `UNERGATIVEVERB` class construction) with other related constructions. Besides the intransitive construction with a manner adverb, COCs are frequently discussed in relation to two constructions: light verb constructions and reaction object constructions. These constructions have repeatedly been described as similar or related in some fashion (Jespersen (1942), Fillmore (1968), Yasui (1982), Quirk et al. (1985), Macfarland (1995), Mirto (2007), among others). By making an investigation and comparison of these supportive verb constructions (Mirto (2007)), I will reveal that COCs have no relation with them. Rather, it will be shown that COCs have close parallels with resultative constructions and the *that*-clause complements accompanying manner-of-speaking verbs, which have not been correlated with the

constructions (Kitahara (2007, 2008, 2009)).

Naturally, an exhaustive analysis of these constructions goes beyond the aim of the present investigation and could be the theme of a separate and comprehensive study. Therefore, the description presented in this chapter focuses on selected aspects of these constructions, which I consider most relevant and interesting for this study.

6.2. COCs and Light Verb Constructions

First, let us aim at a comparison of COCs with light verb constructions. The term ‘light verb’ is originally used by Otto Jespersen, who speaks of the general tendency of Modern English to place an insignificant verb, to which the marks of person and tense are attached, before the really important data (Jespersen (1942:117)). Jespersen mentions that light verb constructions offer means of adding some descriptive trait in the form of an adjunct and thus the constructions form a parallel to COCs. Since Jespersen, it has been traditionally argued that COCs have some similarities to light verb constructions (Quirk et al. (1985), Kearns (1988), Macfarland (1995), Huddleston and Pullum (2002), Mirto (2007), Höche (2009) etc.). For example, nominals found in COCs are also used in light verb constructions, as illustrated in the following sentences:¹

- (1) a. They fought a long fight.
- b. They had a long fight.

(Quirk et al. (1985:751))

- (2) a. Marcy dreamt a wonderful dream.
- b. Marcy had a wonderful dream.

(Höche (2009:231))

As seen in (1b) and (2b), the light verb complement describes a conceptually reified version of the event denoted by the main verb. Such semantic feature seems quite similar to the CO of the construction which I call the event-dependent type. One might think that the event-dependent COC and light verb constructions have in common that the postverbal NP designates a specific instance of the event denoted by the verb. In fact, the light verb construction is often argued to equivalently paraphrase the verbal content expressed by the COC involving an eventive CO. Mirto (2007) even argues that sentence (3a) is a variant of (3b): (3a) is a construction in which the NP *a ferocious fight* contains a noun predicate and *fought* is a cognate support verb. He insists that (3a) conveys the same basic propositional content as (3b) and (3c):

- (3) a. The two boxers fought a ferocious fight.
 b. The two boxers had a ferocious fight.
 c. The two boxers fought ferociously.

(Mirto (2007:4))

Mirto refers to as *supportive verb constructions*, the COCs involving eventive COs, light verb constructions, and reaction object constructions (e.g. *She smiled her assent*).² That is, the event-dependent COC is grouped together with light verb constructions and reaction object constructions.

Light verb complements also show syntactic properties similar to the CO of the event-dependent type. Kearns (1988) and Dixon (2005) point out that light verb complements do not allow passivization:

- (4) a. *A groan was given by the man on the right. (Kearns (1988:5))

- b. *A swim (in the pool) was has/taken.
- c. *A push was given Mary.

(Dixon (2005:468))

Kearns further argues that light verb complements are not referential nominals but rather predicate nominals, pointing out that they do not allow modification by a relative clause and pronominalization, and that they must be indefinite (cf. Macfarland (1995)):³

- (5) a. ??The groan (which) he gave startled me.
- b. ??The deceased gave a groan at around midnight, and gave *another one* just after two.
- c. *Who gave *the* groan just now?

(Kearns (1988:6))

On the basis of the assumed close relation between the COCs involving eventive COs and light verb constructions, Fillmore (1968) proposes that both constructions possess an underlying CO, and the latter constructions should be derived from the former constructions. In his discussion of factitive case, i.e. the case assigned to effected objects, Fillmore proposes that there are contexts in which the case category F (= factitive) may be left lexically empty, and that certain words classified as Vs may be inserted specifically into frames containing dummy Fs. Both the event-dependent COC and light verb constructions can then be seen as dummy constructions for such instances. The former construction offers a dummy noun, and light verb constructions a dummy verb (pro-V). First, the noun object is copied from the verb, giving rise to the CO form (e.g. *dream* + \emptyset \rightarrow *dream* + *dream*). In the resulting construction, the

NP is assigned F. In a second step, the original verb is replaced with a pro-V, yielding a light verb construction with a nominal still carrying F (e.g. *dream + dream* → *have + dream*) (cf. Höche (2009)). It seems obvious that Fillmore's description of these constructions is based on the syntactic or semantic similarities that have been claimed to hold between them.

However, it is wrong to treat the event-dependent COC in the same way as light verb constructions. First, light verb constructions are used much more frequently in naturally occurring language than the event-dependent COC. Through a careful examination of about 700 of the most common English verbs, Dixon (2005) found that about 25 % can occur in at least one of light verb constructions, HAVE A VERB (e.g. *have a romantic smile*), TAKE A VERB (e.g. *take a long walk*), or GIVE A VERB (e.g. *give an embarrassed cough*).⁴ According to Dixon, these forms are described as commonly carrying an overtone of friendliness and intimacy and as occurring far more frequently in colloquial styles of English (Dixon (2005:461)). However, COCs (including the event-independent type) are argued to convey a rather orotund style and to be generally used in formal styles of English (Chapter 1.1; Chapter 5.3.4).

Moreover, with respect to the semantic content of verb and object, light verb constructions and COCs involve two opposite mechanisms. In light verb constructions, the postverbal nominal inherits the conceptual content of the original verb and the substituted light verb simply serves to preserve the processual character of the described event (Höche (2009:238)). In COCs, on the other hand, the object repeats major parts of the verb's content and it can function as either an adjunct or an argument, depending on whether a speaker chooses to structure and interpret the event denoted by the verb. In contrast with light verbs, the verbs taking COs do not represent abstract, schematic events. Therefore, it is not reasonable to claim that English COCs should be

categorized as a member of supportive verb constructions.

In general, light verb constructions are divided into different classes of constructions which have distinctive and semantic properties (Wierzbicka (1982), Kearns (1988), Dixon (2005), Höche (2009)). As in the case of COCs, there is not one light verb construction which can be uniformly treated, but a family of constructions, each having unique properties (Höche (2009:234)). However, each light verb construction has semantic and functional properties quite different from both types of COCs.

First, let us consider the case of the HAVE A VERB type. According to Dixon (2005), the main difference between the HAVE A VERB type and its simple verb counterpart is of aspectual nature. The HAVE A VERB type is considered to emphasize the activity and the fact that the subject indulges in it for a certain period. The subject is not trying to walk or swim to get anywhere; they are just ‘having a walk’ or ‘having a swim.’ Thus, one can say *I had a walk in the garden after lunch yesterday*, while we would not use *I had a walk in the garden from dawn until dusk yesterday* (Dixon (2005:469)). Such semantic nuance is never observed in COCs. Additionally, the HAVE A VERB type describes some volitional act where the subject must be animate:

- (6) a. That child had a roll down the grassy bank.
- b. *That stone had a roll down the grassy bank.

(Dixon (2005:469))

In contrast, COCs (i.e. the event-dependent type) do not require that the event denoted by the verb be a volitional one and the subject be animate:

- (7) a. Crime in London has dropped the highest drop in twenty years.
 b. It thundered the loudest thunder.

These examples show that the semantic and functional properties of COCs do not correspond to the HAVE A VERB type.

As regards the GIVE A VERB type, the construction has the ability to express a ditransitive relation, a feature which it inherits from the full verb *give*.

- (8) a. *My boss gave me a sweet and encouraging smile*, balanced a mushroom on a piece of fried bread and conveyed it to his mouth.
 b. Josie fluffed out some of the tail-feathers on a costume for the upcoming number, and *gave the matter some thought*.

(BNC)

In (8), the deverbal noun is preceded by another noun which refers to an entity being the aim (recipient) of the action or benefiting from it (Höche (2009:243)). Höche points out that there are examples in which COCs also merge with the ditransitive construction:⁵

- (9) a. Diana looked thoughtful as Bruce took her hands in his, *she smiled him a smile* that conveyed all her feelings of love and affection for him.

(<http://www.jlaunlimited.com/eFiction1.1/viewstory.php?sid=4299&textsize=0&chapter=7>)

- b. *Prayed them a prayer*, gave them a key I wanted to spread the joy that had overfilled my spirit. (<http://keshanicole.tripod.com/>)

However, there are strong doubts about whether COCs can express a ditransitive relation, preserving the characters of the events represented by the constructions. The question of how the examples in (9) are to be handled must await more detailed study of ditransitive constructions than yet been carried out.

Finally, let us turn to the semantics of the TAKE A VERB type. As Dixon points out, the TAKE A VERB type has relatively limited use in British English, being restricted to a subset of those verbs that occur in the HAVE A VERB type. However, there are semantic differences between the TAKE A VERB type and the HAVE A VERB type. One of the main differences between the former and the latter emerges from the focus on the physical effort involved on the part of the subject. To give a concrete example, it is more appropriate to say *A baby's having a bath* instead of *A baby's taking a bath* (cf. Quirk et al. (1985)). For the latter sentence implies that the baby took over the initiative for the activity (Höche (2009:247)). Both the event-dependent COC and the event-independent COC have no such semantic property.

Another difference is of aspectual nature. Wierzbicka (1982) suggests that the difference between the TAKE A VERB type and the HAVE A VERB type is that the former refers to a unitary action, having a definite starting and end-point, whereas the latter refers to an arbitrary chunk of an activity. Observe the following examples:

- (10) a. I breathe a deep breath and try to relax.
b. I take a deep breath and try to relax.

(Höche (2009:248))

According to Höche, the sentence in (10a), an instance of the event-dependent COC, is neutral with respect to the “direction” of the breathing, i.e., it can refer to the inhaling or

exhaling of air or the complete cycle of breathing in and out, whereas the sentence in (10b) focuses on the initial part of breathing, i.e., it supports the “inward-reading,” with the agent functioning as the source and sink of the activity of inhaling air. It is by now clear that COCs behave differently from the TAKE A VERB type.

The above discussions indicate that COCs should not be treated in the same way as light verb constructions. Consequently, it seems implausible to consider that the event-dependent COC can be replaced with a light verb construction.

6.3. COCs and Reaction Object Constructions

It is well known that unergative verbs involving bodily expression, which can be either visual or oral, may be followed by a certain kind of NPs other than COs:

- (11) a. He smiled *his thanks*.
b. I kissed *my farewell/my good-bye*.
c. Mr. Noah waved *good-bye*.
d. She nodded *her approval/her comprehension*.
e. Mary bowed *acceptance/her acknowledgements*.
f. He breathed *his relief*.

(Yasui (1982:80))

In (11), the postverbal NPs refer to particular emotions or attitudes of the subjects, whereas the verbs describe actions which are performed to express the associated emotions or attitudes. For example, sentence (11a) means that he expressed his thanks by smiling (Yasui (1982:85)). The constructions containing such objects of conveyed reaction are referred to as *reaction object constructions* (Levin (1993), Huddleston and

Pullum (2002)).

It has so far been argued in the literature that reaction objects cannot undergo passivization and pronominalization, as shown in (12) and (13):

- (12) a. *Her assent was smiled. (Huddleston and Pullum (2002:305))
b. *A cheerful welcome was beamed by Sandra. (Levin (1993:98))
c. *Grateful thanks were smiled by Rilla. (Massam (1990:180))
d. *Satisfaction was smiled by John. (Omuro (1997:819))
- (13) a. *Pauline smiled thanks and Mary smiled *them*, too.
b. *George nodded agreement, so I nodded *it*, too.
(Kogusuri (2009c:36))

Taking into account the unacceptability of (12) and (13), one may feel that reaction objects should be categorized as adverbial adjuncts. For adverbial adjuncts also do not allow passivization or pronominalization:

- (14) a. *This morning was arrived by John.
(cf. John arrived this morning.)
b. *The wrong way was gone by George.
(cf. George went the wrong way.)
(Jones (1988:95))
- (15) He told me to read them in that way_i but I didn't read them (in) *it*_i.
(Postal (1994:83, fn.24))

On the assumption that reaction objects are adjuncts, it may be possible to consider

that the reaction object construction is a special form or a variant of the UNERGATIVEVERB class construction involving an eventive CO which functions as a predicate appositive. Notice also that these two constructions are ones in which the so-called unergative verbs can take overt object complements (cf. Chapter 5.5.5). Mirto (2007) proposes that reaction objects are predicate nominals, focusing on the fact that a sentence such as *She nodded her approval* can be paraphrased as ‘she approved (of) something by nodding.’ According to Mirto, the postverbal NP *her approval* appears to be predicative, with *she* as its subject, while the verb *nod* should be analyzed as a supportive verb, which describes a means for expressing approval (Mirto (2007:5)). In this connection, Yasui (1982) points out that reaction object constructions are similar to so-called instrumental causatives (e.g. *John drank himself silly = John caused himself to become silly by drinking* (Herbert (1975:263))).

However, reaction objects are not adjuncts (predicate nominals) but rather arguments which function semantically as resultant objects. Felser and Wanner (2001) argue that reaction objects are arguments taken by unergative verbs, providing three pieces of evidence for their syntactic status (cf. Wanner (2000)). First, there are examples where a reaction object appears as the subject of a passive:

(16) Warm thanks were smiled at the audience.

(Felser and Wanner (2001:108))

Kogusuri (2009c) points out that similar examples can be found in naturally occurring language:

(17) a. On the day of departure, Glyndwr’s men assembled, a few mounted,

and wagons were ready to roll. *Final goodbyes were waved.*

(J.E. Anthony, *The Castle of the Ghost*; cited in Kogusuri (2009c:33))

- b. “You got a smoke?” the young black man asks the older white man who is pulling hard on a cigarette. “This is all I got.” “How about a drag?” Without hesitation it’s handed over. *Thanks are nodded.*

(*Newspaper of the Catholic Archdiocese of Atlanta, Local News Archive*; cited in Kogusuri (2009c:37))

- c. Unfortunately, just after *goodbyes were waved*, the plane ran off the runway and only finally stopped when its tail was high in the air and its nose buried deep in the mud.

(J. B. Hancock, *Lady in the Navy*; cited in Kogusuri (2009c:37))

As seen in the above examples, reaction objects behave differently from eventive COs which cannot undergo passivization and pronominalization (Chapter 4.6). Recall that eventive COs are not compatible with the passive construction, unless they can be construed as particular types (Chapter 5.5.5).

Second, reaction objects cannot be separated from the verbs by adverbials:

- (18) *She nodded gracefully her approval. (Felser and Wanner (2001:108))

Sentence (18) suggests that the reaction object must be adjacent to the verb, as is the case with a transitive object like that in (19):

- (19) *Paul opened quickly the door. (Stowell (1981:113))

In the case of eventive COs, on the other hand, adverbials are allowed to intervene between the verbs and the object complements, as illustrated in (20):

- (20) a. When the President of the Board of Trade, in full court costume, appeared upon the scene, in the midst of the very realistic long-haired sea-ladies, the audience was half shocked for a moment by the utter incongruity of the situation; but after a while they began to discover that the incongruity was part of the joke, and they laughed quietly a sedate and moderate laugh of suspended judgment.

(Grant Allen, *Philistia*)

- b. I have dreamed just now a strange dream.

(Peter G. Beidler, *Masculinities in Chaucer*)

Examples (20) shows that eventive COs do not need to satisfy the adjacency condition (Chapter 2.3.3; cf. Stowell (1981)).

Third, reaction objects can be modified by attributive adjectival passive participles:

- (21) a half-smiled goodbye (Felser and Wanner (2001:108))

In sentence (21), the reaction object *goodbye* is modified by the prenominal passive participle *half-smiled*. According to Kogusuri, further examples of the adjectival passive formation are found in corpora:

- (22) a. Soon President Lincoln gave him *a nodded permission* to accompany the Union armies even on the battlefields.

(*TIME* 1946, Web Concordancer; cited in Kogusuri (2009c:38))

- b. ... just as Lady Macbeth, the fiend-soul of the house, steps from the door, like the speech of the building, with *her falsely smiled welcome?*

(G. Macdonald, *A Dish of Oats* (2009:38))

Dryer (1985) maintains that the use of an adjectival passive participle is acceptable only if the head noun it modifies can be used as a direct object licensed by the verb which the participle is derived from in a grammatical sentence. Levin and Rappaport Hovav (1986) also mention that only the direct internal argument that is assigned a theta role by an underlying verb can be externalized as the head noun for an adjectival passive modifier (cf. Levin and Rappaport Hovav (1995), Mughazy (2001)). Note that (23b) is unacceptable, in contrast to (23a):

- (23) a. a badly written letter
b. *a hard-worked lawyer

(Levin and Rappaport Hovav (1995:11))

The head NP *letter* in (23a) is regarded as the internal argument of *write*, as in *John wrote a letter badly*. The *lawyer* in (23b), on the other hand, is looked on as the external argument of *work*, as in *A lawyer works hard*. The parallel acceptability of (21)-(22) and (23a) leads us to assume that reaction objects are internal arguments of the verbs, i.e. direct objects. Accordingly, reaction objects may be modified by attributive adjectival passives, since they are arguments.

Interestingly enough, when eventive COs are construed as particular types, they can be modified by adjectival passives:

- (24) a. a well-lived life
 (Sylvia Fleming Crocker, *A Well-Lived Life: Essays in Gestalt Therapy*)
- b. a never-before-danced dance
 (<http://prelectur.stanford.edu/lecturers/hofstadter/analogy.html>)
- c. a half-smiled smile (Anja Wanner (2009:75))

One might consider that there are similarities between reaction object constructions and one type of the event-independent COC, i.e. the type having the form [SBJ UNERGATIVEVERB_c (M) OBJ_c^{ARGUMENT}] (Chapter 5.5.2; Chapter 5.5.5). As discussed below, however, the syntactic and semantic properties of the former construction are quite different from those of the latter construction.

Kogusuri (2009c) proposes that reaction objects should be effected objects, rather than affected objects. A diagnostic for affectedness, namely the so-called *do to* test, confirms the semantic difference between affected objects and effected object (Fillmore (1968)). Compare the sentence *John ruined the table* with *John built the table*. According to Fillmore, only the former sentence with an affected object permits interrogation of the verb with *do to* (e.g. *What did John do to the table?*). The difference lies in whether the table is understood to exist antecedently to the subject's activity. In the latter sentence, the object does not exist prior to John's activity. Rather, it refers to something that resulted from John's activity. This means that effected objects do not pass the *do to* test.

It has been suggested in many previous studies that reaction objects are semantically effected objects (Jespersen (1924, 1927), Poutsma (1926), Yasui (1982), Martínez Vázquez (1998), Mirto (2007), among others). For example, in the sentence *She smiled her assent*, the subject signals her assent by smiling (Huddleston and Pullum

(2002:305)). Similarly, in *He nodded his agreement*, the subject expresses his agreement by nodding. In short, the objects express reactions which are realized by means of actions performed by the subjects. It is natural that such postverbal NPs do not pass the *do to* test:

(25) A: What did Mary do to her thanks?

B: *She smiled her thanks.

(26) A: What did John do to his agreement?

B: *He nodded his agreement.

(Kogusuri (2009c:40))

In addition to the *do to* test, Kogusuri presents three pieces of empirical evidence for the effectedness of reaction objects. Firstly, he focuses on the fact that effected objects are not allowed to appear in the subject position of the middle construction, in contrast with affected objects:

(27) a. This glass broke easily.

b. This bread cuts easily.

(Pinker (1989:106))

(28) a. *These cabinets {construct/build} easily.

b. *Wool sweater knits easily.

(Fellbaum (1986:17))

In (27), *this glass* and *this bread* denote pre-existing entities, respectively, whereas in (28) *these cabinets* and *wool sweater* are created by the actions denoted by the verbs.

Thus, it is assumed that the former verbs are affected objects, while the latter verbs are effected objects. The ungrammaticality of the latter examples shows that the subject of the middle must not be an effected entity. That is, the subject of the middle is understood to affect the event (Kusayama (1994:265)). Bearing this in mind, let us return to the case of reaction objects. As with (28), reaction objects cannot be subjects of middle constructions:

- (29) a. *Agreement nods easily.
b. *Forgiveness smiles easily.

(Omuro (1997:819))

The examples in (29) strongly suggest that the subject NPs *agreement* and *forgiveness* are the underlying effected objects of the verbs *nods* and *smiles*.

Another evidence for the effectedness of reaction objects comes from resultative constructions. Resultative constructions having the form [NP V NP RP] imply that the object NP may be affected by the action denoted by the verb (Simpson (1983), Jackendoff (1990), etc.).⁶ Thus, affected objects are semantically compatible with resultative constructions:

- (30) a. John dug the ground rough.
b. John painted the door green.

(Tanaka (1990:51))

Effected objects, on the other hand, are objects whose existence is brought about by the action denoted by the verb. It is predictable that effected objects do not appear in

resultative constructions:

- (31) a. ??John dug the grave rough.
b. ??John painted the portrait impressive and life-like.

(Tanaka (1990:51))

According to Tanaka (1990), the ill-formedness of (31a, b) is due to the occurrence of the result phrases *rough* and *impressive and life-like*, in addition to the effected objects *the grave* and *the portrait*.⁷ The same situation holds true for reaction objects:

- (32) a. ??He smiled his welcome noticeable.
b. ??He nodded approval open.

(Tanaka (1990:50))

Again, the ungrammaticality of (32a, b) indicates that reaction objects function semantically as resultant objects, rather than affected objects.

Also worth noting is that reaction objects contribute to the telicity of the events represented by the verbs. As often pointed out, the sentences involving resultant objects are incompatible with durative temporal adverbial such as *for hours* (Vendler (1957, 1967), Dowty (1979), Tenny (1994)):

- (33) a. Sue wrote {#in five minutes/for hours}.
b. Sue wrote a story {in five minutes/#for hours}.

(Harley (2005:43), with slight modifications)

Note that sentence (33a) is compatible with a durative temporal adverbial, while (33b) is compatible with an adverbial such as *in five minutes*, which represents a point in time, and not a temporal duration. Interestingly, reaction objects also cannot occur with durative *for*-phrases:

- (34) a. She sang {*in an hour/for an hour}.
- b. She sang her thanks {in an hour/*for an hour}.

(Aue-Apaikul (2006:126))

From the above considerations, Kogusuri concludes that reaction objects should be categorized as effected objects.

If his analysis is on the right track, it is reasonable to assume that reaction objects have the syntactic status as effected objects, i.e. syntactic arguments. Along with providing a semantic account of reaction objects that are parallel to effected objects, Kogusuri affords a very straightforward view of the syntactic nature of the object NPs. As seen in (18), reaction objects must satisfy the adjacency condition for Case assignment. The same applies to the case of effected objects denoting created entities such as *a house*:

- (35) *John built yesterday a house. (Kogusuri (2009c:43))

In addition, as regards pronominalization, reaction objects and effected objects show the same syntactic behavior. Effected objects refer to entities which come into existence by the actions performed by the subjects. Therefore, they are not presupposed like affected objects:

- (36) a. *John built a house in Boston and Sam built *it* in Philadelphia.
b. *Mary wrote a book for her pleasure and Jane wrote *it* for money.

(Matsumoto (1996:208))

It would be impossible to imagine that the same house which John built in Boston was built again by Sam in Philadelphia. Hence, the unacceptability of (36a) results. The same is true of (36b). Like reaction objects, effected objects cannot become the antecedents of the object pronouns. These facts support Kogusuri's conclusion that reaction objects are effected objects.

Finally, Kogusuri tackles the question why many previous studies have argued that reaction objects are not passivized. As seen in (12), many researchers point out that reaction objects are not compatible with the passive construction. Note that all the examples they give contain a possessive pronoun or a *by*-phrase. According to Zubizarreta (1985), in many instances of passives, the NP in the *by*-phrase cannot stand as antecedent for the possessive pronoun in the subject, as exemplified in the following:

- (37) a. John_i loves his mother_i.
b. *His_i mother is loved by John_i.
c. John_i played his_i role.
d. *His role_i was played by John_i.

(Zubizarreta (1985:255-256))

Kogusuri argues that the same holds for all the examples previous studies give to support the claim that reaction object constructions cannot undergo passivization. Consider the following examples:

- (38) a. *Her_i thanks were smiled by Rilla_i. (Massam (1990:180))
 b. *Her_i assent was smiled. (= (12a))
 c. *A cheerful welcome_i was beamed by Sandra_i. (= (12b))

Sentence (38a) has the same illicit structure as (37b, d), in which the possessive pronoun *her* is not bound by the antecedent NP *Rilla*. Although sentence (38b) lacks a *by*-phrase which contains the antecedent of *her*, the sentence is ruled out because no appropriate coreferential relation is established. In sentence (38c) lacking a possessive pronoun, on the other hand, *a cheerful welcome* is assumed to involve a bounded element (i.e. *Her cheerful welcome was beamed by Sandra), since the object NP is construed as an entity which belongs to the subject (Chapter 2.3.1; Massam (1990)).⁸ Therefore, the sentence is judged unacceptable.

Now, let us turn to the case of the event-independent COC having the form [SBJ UNERGATIVEVERB_c (M) OBJ_c^{ARGUMENT}]. The COC does not show the same syntactic behavior as reaction object constructions:

COC and *do to* test

- (39) A: What did he do to the beautiful dance?
 B: He danced the beautiful dance.
- (40) A: What did Takanori do to his own life?
 B: He lived his own life.
- (41) A: What did he do to Tom Cruise's smile?
 B: He smiled Tom Cruise's smile.

COC + middle construction

- (42) a. The dance dances beautifully (cf. People can dance the dance

beautifully).

- b. The song sings beautifully (cf. People can sing the song beautifully).

COC + resultative construction

- (43) He held a number of engineering patents, owned a manufacturing firm, built a good-sized talent agency and *lived the playboy life to the end*.

(Frank Cullen, Florence Hackman, Donald McNeilly, *Vaudeville, Old & New: An Encyclopedia of Variety Performers in America*, Vol. 1)

- (44) In Nancy Spero's work, glamorous figures can march into and out of an advertisement/Hollywood present while heroic Vietnamese peasant women conjure a particular moment in historical time and *pagan goddesses dance the "dildo dance" into eternity*.

(Carol Becker, *Zones of Contention: Essays on Art, Institutions, Gender, and Anxiety*)

- (45) Where can the Level Two take us in this next phase...that is up to all of us to come together and *dream the dream into reality*.

(<http://www.visionarymusic.com/newsletters/2006/VMM5-7-06.html>; cited in Höche (2009:268))

As seen in (39)-(41), the noneventive CO of the UNERGATIVEVERB class construction passes the *do to* test. Additionally, the noneventive CO can become the subject of the middle, as in (42). Though Höche deals with the CO of the *sing-song* type as a resultant object (Chapter 5.3.3; Höche (2009)), it can appear in the subject position of the middle construction: The CO *song* can function as an affected object. More important is that this type of COC is semantically compatible with the resultative construction, as exemplified in (43)-(45). Take (44) as an example. In an exhibition, Nancy Spero, a famous American artist, printed a row of "dildo dancers" directly onto

the gallery wall – repeated images of an ancient Greek woman dancing with two large dildos between her legs. As a result, the dance metaphorically moves to the state of immortality: In the picture the dancers continue to dance forever and thus the “dildo dance” gains immortality. The possibility of merging the former construction with the latter construction undoubtedly underlines the status of its noneventive CO as an affected object. Note also that this type of COC containing a possessive pronoun allows passivization, as exemplified in (46):

- (46) a. Anyway, with Selina here, *my life is being lived in white underpants*.
b. For twenty years *my life has been lived within the Left*, and the companionship and creativity of many of the people I have met have changed me.

(BNC)

All these examples indicate that there is no similarity between the UNERGATIVEVERB class construction and reaction object constructions, though both are constructions in which unergative verbs can take overt object complements. From this I draw the conclusion that COCs should not be put in the same category as light verb constructions and reaction object constructions. All in all, COCs are not supportive constructions. In the following subsections, we will find a striking parallelism between COCs and other linguistic phenomena, resultative constructions and the *that*-clause complements following manner-of-speaking verbs, which has not been discussed yet.

6.4. COCs and Resultative Constructions

In the preceding chapters, my proposed account revealed that English COCs form

not a homogeneous category, but rather a heterogeneous one which consists of two independent constructions, the event-dependent type and the event-independent type (Chapters 4 and 5). In comparison with the event-independent COC, the event-dependent COC is idiosyncratic in that the postverbal element behaves not as an argument, but as an adjunct, and further specifies the notion that is implied by the lexical semantics of the verb. Such properties, however, are not limited to the event-dependent COC. Kitahara (2007, 2008) argues that there are striking parallels between the construction involving an eventive CO and one type of resultative constructions, the adjunct resultative construction (Iwata (2006a)).

In this section, I show that the event-dependent COC is remarkably similar to the adjunct resultative construction. First, in accordance with Iwata (2006a), I argue that resultative constructions form a complex category consisting of two types, the adjunct resultative construction and the argument resultative construction. Next, I draw parallels between the event-dependent COC and the adjunct resultative construction.

6.4.1. Two Types of Resultative Constructions

In the literature, sentence (47a) is often cited as an instance of resultative constructions, along with sentence (47b):

- (47) a. The river froze solid.
b. The joggers ran the pavement thin.

According to Iwata (2006a), however, the former type behaves differently from the latter type, so that the two types of resultative constructions need to be handled differently. The result phrase of the former type can be omitted without affecting the

well-formedness, whereas that of the latter type cannot:

- (48) a. The river froze. (Iwata (2006a:457))
b. *The joggers ran the pavement.

(Levin and Rappaport Hovav (1999:200))

On the basis of this behavioral difference, the former type is referred to as the adjunct resultative construction, while the latter type is referred to as the argument resultative construction.^{9, 10}

Interestingly, the result phrase of the adjunct resultative construction does not describe a newly introduced result state. In sentence (47b), an instance of the argument resultative construction, the verb *run* does not entail the state of being thin. On the other hand, in sentence (47a), an instance of the adjunct resultative construction, the verb *freeze* entails the state of being solid. This is further confirmed by the following definition from *LDOCE* online:

- (49) If a liquid or something wet freezes or is frozen, it becomes hard and solid because the temperature is very cold. (*LDOCE* online)

Thus, it is clear that the result phrase *solid* simply further specifies a change implied by the verb meaning. The same holds true for the following:

- (50) John painted the wall black.

In example (50), while the verb *paint* does not imply that something becomes black, it

clearly contains the notion “color” as its lexical semantics. It goes without saying that one cannot paint a wall without giving it a color. Therefore, the result phrase of the adjunct resultative construction is not a result state independent of the verb meaning. Rather, it is further specifying the notion that is implied by the verb meaning.

Note in passing that the result phrase of the adjunct resultative construction allows for an intensifier interpretation. To give a concrete example, the adjunct resultative construction in (51a) can be paraphrased by (51b), in some circumstances:

- (51) a. The lake froze solid.
b. The lake froze completely.

(Iwata (2006a:458, fn.7))

In this case, the result phrase of the adjunct resultative construction further specifies the degree to which the freezing event has been carried out. The result phrase *solid* is used to further specify the result state lexically entailed by the verb *freeze*. The reason why sentence (51a) does not result in redundancy is that the state of being solid is intensified.¹¹

Let us continue with the investigation of the adjunct resultative construction and the argument resultative construction. The semantic property of the result phrase of the adjunct resultative construction manifests itself with respect to the possibility of *wh*-question. As shown in (52) and (53), the result phrase of the adjunct resultative construction can be a reply to the question with *how*, whereas that of the argument resultative construction cannot:

- (52) A: How did the puddle freeze?

B: Solid.

(53) A: How did s/he beat the metal?

B: *Flat.

(Iwata (2006a:469))

The reason why (52) is fully acceptable is that one can ask about the specific character of an implied result state, but not that of a non-implied one as in (53).

Moreover, according to Levin and Rappaport Hovav (1999), one remarkable aspect of resultative constructions is that they have the semantics “X becomes Y by V-ing.” In fact, sentence (54a), an instance of the argument RC, can be paraphrased by (54b):

(54) a. The joggers ran the pavement thin. (= (47b))

b. The joggers caused the pavement to become thin by running.

(Levin and Rappaport Hovav (1999:199))

On the other hand, sentence (55a), an instance of the adjunct resultative construction, cannot be appropriately paraphrased by (55b):

(55) a. The pond froze solid.

b. The pond got solid/solidified by freezing.

(Levin and Rappaport Hovav (1999:206))

A crucial fact about sentences like (55a) is that the freezing event and the state change of becoming solid are co-extensive and unfold at the same time:

- (56) a. The pond froze solid. (= (55a))
b. At the same time as the pond froze, its surface became solid.

It is not impossible to spell out what sentence (56a) means explicitly by means of such a periphrastic expression as (56b). In the adjunct resultative construction, the change of state that the result phrase represents is co-extensive with the event denoted by the verb.

There are still further behavioral differences between the adjunct resultative construction and the argument resultative construction. As is well known, in resultative constructions, a spatial path (*into the soup*) and a PP for a change of state (*from crunchy*) cannot co-occur:

- (57) *The vegetables went from crunchy into the soup. (Goldberg (1995:83))

Goldberg (1995) argues that this is because a change of state is a metaphorical motion and that one cannot traverse both a literal path and a metaphorical path at the same time. Goldberg therefore proposes the following constraint:

- (58) *The Unique Path Constraint*

If an argument X refers to a physical object, then more than one distinct path cannot be predicated of X within a single clause. The notion of a single path entails two things: (i) X cannot be predicated to move to two distinct locations at any given time *t*, (ii) the motion must trace a path within a single landscape. (Goldberg (1995:82))

However, as Iwata points out, the adjunct resultative construction is not subject to this

constraint. Consider the following:

- (59) a. He spread the butter thin. (Washio (1997:17))
b. He spread the butter thin on the bread. (Iwata (2006a:463))

In sentence (59a), an instance of the adjunct resultative construction, when the verb *spread* takes the result phrase *thin*, Goldberg would predict that this result phrase does not co-occur with a spatial path PP. But, as in (59b), the two phrases appear at the same time.

All these pieces of evidence show that resultative constructions are not monolithic. It is quite reasonable to distinguish the adjunct resultative construction from the argument resultative construction.

6.4.2. The Parallelism between the Event-Dependent COC and the Adjunct Resultative Construction

Now we recognize that there are striking parallels between the event-dependent COC and the adjunct resultative construction. First, in either construction, the postverbal element, the CO or the result phrase, can be omitted (Chapter 2.2.2; cf. Moltmann (1989)):

- (60) John died (a painful death).
(61) The river froze (solid).

Note that *a painful death* in (60) and *solid* in (61) are omissible, respectively. This means that the postverbal element of each construction functions syntactically as an

adjunct, rather than an argument.

Secondly, each construction can be a reply to the question with *how*:

(62) A: How did Miss Maple smile?

B: She smiled a deprecating smile.

(63) A: How did the puddle freeze?

B: Solid.

(= (52))

Horrocks and Stavrou (2003) observe that the result phrase of the adjunct resultative construction can be questioned with *how*, because one can ask about the specific character of a lexically encoded result state, but not that of a non-encoded one, as in (63). Likewise, the CO of the event-dependent type also denotes the specific character of a lexically encoded event, together with the modification part (Chapter 4.6). Therefore, the event-dependent COC can be a reply to the question with *how*, as shown in (62a).

Thirdly, either postverbal adjunct further specifies the notion that is already implied by the verb meaning. The CO of the event-dependent COC further specifies the manner, etc. implied by the verb meaning, whereas the result phrase of the adjunct resultative construction does the change of state. Besides, recall that the CO of the event-dependent COC and the result phrase of the adjunct resultative construction allow intensifier interpretations (Chapter 4.6).

Fourthly, in either construction, what the postverbal adjunct represents is co-extensive with the event denoted by the verb:

- (64) a. He smiled a beautiful smile.
 b. At the same time as he smiled, his facial expression became beautiful.
- (65) a. The pond froze solid.
 b. At the same time as the pond froze, its surface became solid.

(= (56))

In example (64a), ‘to smile’ and ‘a beautiful smile’ are co-extensive and unfold at the same time. Therefore, it is possible to spell out what example (64a) means explicitly by means of such a periphrastic expression as (64b) (Chapter 4.6; cf. Kasai (1980)). Similarly, the result phrase of the adjunct resultative construction does not describe a newly introduced result state. The main event and the change of state are different aspects of one and the same event, rather than two distinct events. Thus, sentence (65a) can be periphrastically expressed by using (65b).

One more point to be noticed about these two constructions is that the host NP, i.e. the NP of which the postverbal adjunct is predicated, is not grammatically encoded. In the case of the argument resultative construction, the result phrase is predicated of the direct object:

- (66) a. They yelled themselves_i hoarse_i.
 b. The joggers ran the pavement_i thin_i.

(Iwata (2006a:465))

As shown in (66), this predication relation is grammaticalized so strongly that the host entity finds its way into the direct object position even when the verb is normally thought to be intransitive. On the other hand, according to Iwata, the same is not true

for the adjunct resultative construction. Consider the following:

- (67) a. There was a sudden noise in the corridor outside and then several bumps before the door opened wide.
- b. I closed my eyes tight for once and placed my palms together.
- (Iwata (2006a:465))

The verb *open* may be followed by the result phrase *wide* as in (67a), and *close* by *tight* as in (67b). Note here that the predication relation does not hold between the AP and its apparent host. The subject entity in (67a) cannot be said to be wide as in (68a), nor can the direct object in (67b) be said to be tight as in (68b):

- (68) a. ?*The door was wide.
- b. ?*My eyes were tight.
- (Iwata (2006a:465))

Likewise, sentence (69a) does not entail (69b).

- (69) a. He spread the butter thin. (= (59a))
- b. #The butter became thin. (Iwata (2006a:465))

The result phrase of the adjunct resultative construction simply further specifies an implied change. It does not require that the host NP is grammatically encoded. This property thus allows the result phrase of the adjunct resultative construction to be predicated of some implicit entity. This is further confirmed by the following

examples:

- (70) a. The door opened wide.
b. At the same time as the door opened, its aperture became wide.
- (71) a. I closed my eyes tight.
b. At the same time as I closed my eyes, my muscle of eyes became tight.
- (72) a. He spread the butter thin. (= (59a))
b. At the same time as he spread the butter, its thickness became thin.

In (70a)-(72a), the host NPs are not explicitly expressed. However, by using periphrastic expressions, one can identify what entity the result phrase of the adjunct resultative construction is predicated of; indeed, *its aperture*, *my muscle of eyes*, and *its thickness*, are implicit hosts. It seems significant to note that the host of the result phrase of the adjunct resultative construction is involved in our body of knowledge evoked by the verb. For example, when one asserts that in (70a) the verb *open* implies the state of being wide, one is actually drawing an inference, aided by the knowledge that it is the aperture that becomes wide. Without such knowledge, i.e. frame-semantic knowledge (cf. Chapter 3, n.4; Fillmore (1977, 1982), Lakoff (1987), Langacker (1987, 1991)), one cannot understand what sentence (70a) means. The result phrase of the adjunct resultative construction is predicated of what is evoked by the verb frame; that is, it highlights different facets of the verb frame.

Similarly, the modifier of the event-dependent COC does not also request that the host NP is explicitly expressed (Kitahara (2007, 2008)). Consider the following:

- (73) a. He smiled a beautiful smile. (= (64a))

- b. He died a heroic death.
- c. He danced a beautiful dance.

In (73), the modifiers are not directly predicated of the object noun and the subject. This is confirmed by the following:

- (74) a. His smile was beautiful.
- b. His death was heroic.
- c. His dance was beautiful.
- (75) a. He became beautiful by smiling.
- b. He became heroic by dying.
- c. He became beautiful by dancing.

Sentences (73a-c) cannot be appropriately paraphrased by (74a-c) or (75a-c). It is natural to assume that the modifier of the event-dependent COC is directly predicated not of the object or the subject, but rather of some entity which is implied by the lexical semantics of the verb, as is shown in the following examples:

- (76) a. He smiled a beautiful smile.
- b. At the same time as he smiled, his facial expression became beautiful. (= (64))
- (77) a. He died a heroic death. (= (73b))
- b. At the same time as he died (has the good grace to die), his mode of death became heroic.
- (78) a. He danced a beautiful dance. (= (73c))

- b. At the same time as he danced, his movement became beautiful.

As is the case with the result phase of the adjunct resultative construction, the modifier of the event-dependent COC highlights different facets of the verb frame, *his facial expression* in (76b), *his mode of death* in (77b), and *his movement* in (78b). Thus the CO of the event-dependent type can have the same content with the intransitive construction with the corresponding manner adverbial (Chapter 5.4). There is no doubt that each of the event-dependent COC and the adjunct resultative construction has an implicit host.

Now the parallelism between the event-dependent COC and the adjunct resultative construction is evident. In the next subsection, we will consider from a typological perspective why the event-dependent COC and the adjunct resultative construction parallel each other.

6.4.3. A Typological Study of the Event-Dependent COC and the Adjunct Resultative Construction

In the previous subsection, we have captured the parallelism between the event-dependent COC and the adjunct resultative construction. Of course, I will not claim that the event-dependent COC and the adjunct resultative construction belong to the same category. The event-dependent COC and the adjunct resultative construction each are independent constructions. First, they differ in what kind of verbs can appear. To give an example, change of state verbs such as *break* cannot appear in the event-dependent COC (Chapter 5.5.2), whereas they can in the adjunct resultative construction:

- (79) a. *The glass broke a crooked break. (Takami and Kuno (2002:134))
 b. The fuselage broke open. (Iwata (2006a:475))

In addition, the syntactic form of the event-dependent COC is different from that of the adjunct resultative construction. While the syntactic representation of the former is [NP V NP], that of the latter is [NP V (NP) RP]:

- (80) a. Sam smiled a beautiful smile.
 b. The river froze solid. (= (47a))
 c. He spread the butter thin. (= (59a))

It seems uncontroversial that the event-dependent COC and the adjunct resultative construction do not belong to the same category and that they are independent of each other.

However, it is not by chance that some parallels are drawn between the event-dependent COC and the adjunct resultative construction. Here it is most important to shift our focus on their semantic structure. The event-dependent COC and the adjunct resultative construction share the same semantic structure: The postverbal adjunct is used to further specify a component of lexically encoded meaning. Such a semantic structure is fundamental and ubiquitous, and serves a useful cognitive and communicative function, as illustrated in the following:

- (81) a. Arthur rushed *quickly* to the door.
 b. Arthur ambled *slowly* across the lawn.
 c. Arthur murmured *softly* in Bertha's ear.

- d. Arthur was shouting *loudly*.

(Cruse (1986:108))

According to Cruse (1986), in each sentence in (81), the meaning of the adverb is encapsulated in the verb meaning. That the manner is lexically encoded is supported by the fact that the adverb cannot be replaced by its antonym without affecting the acceptability:

- (82) a. ?Arthur rushed *slowly* to the door.
b. ?Arthur ambled *quickly* across the lawn.
c. ?Arthur murmured *loudly* in Bertha's ear.
d. ?Arthur was shouting *softly*.

(Cruse (1986:108))

One might expect the examples in (81) to be pleonastic or redundant. However, this is not the case. Cruse mentions that in these cases, instead of redundancy, there is an intensification of the adverbial notion (cf. *very very good*). Recall that such semantic properties are observed in the event-dependent COC and the adjunct resultative construction. Something similar occurs in *a bad headache* and *a terrible catastrophe*. Additionally, Iwata (2006a) argues that the same thing can be of path PPs:

- (83) a. Bill entered/left/exited (the room) *through the bathroom window*.
b. Bill crossed (the street) *to our side*.
c. The cream rose *to the top*.

(Goldberg and Jackendoff (2004:557))

The verbs in (83) incorporate paths: *enter* “to go into,” *cross* “to go across,” and *rise* “to go upward.” The path PPs *through the bathroom window*, *to our side*, *to the top* further delineate these inherent paths (Jackendoff (1990), Goldberg and Jackendoff (2004)). I call constructions such as (81) and (83) *further-specifying constructions*.

Now I propose that the event-dependent COC and the adjunct resultative constructions should be also dealt with as further-specifying constructions. For these two constructions have in common that the postverbal element further specifies the notion implied by the verb. In other words, the event-dependent COC and the adjunct resultative construction are motivated by the same semantic structure, though they are independent constructions.¹²

The close semantic relation between the event-dependent COC and the adjunct resultative construction is supported by cross-linguistic considerations. Kitahara (2007, 2008) points out that many languages permit the event-dependent COC and the adjunct resultative construction. For example, French allows for the adjunct resultative construction:

- (84) J’ai noué les lacets de mes chaussures bien serré.
‘I tied the laces of my shoes very tight.’

(Washio (1997:29))

In sentence (84), the result phrase *serré* does not agree with its seeming host *mes chaussures*, despite the fact that adjectives must agree in French. If the result phrase agrees with *mes chaussures*, it should be *serrés*. Therefore, there is no doubt that sentence (84) is an instance of the adjunct resultative construction, for the result phrase is not predicated of any grammatically encoded host. Interestingly enough, in French,

the event-dependent COC is also possible:

(85) a. Jean-Pierre a dansé une grande danse.

‘Jean-Pierre danced a grand dance.’

(Pereltsvaig (1999:537))

b. Jean-Pierre a vécu une vie heureuse.

‘Jean-Pierre lived a happy life.’

Sentences (85a, b) can be construed as instances of the event-dependent COC.

Next, let us investigate whether Japanese permits both the adjunct resultative construction and the event-dependent COC. As shown in (86a, b), the adjunct resultative construction is possible in Japanese.¹³

(86) a. Ike-ga kachikachi-ni koot-ta.

The pond-NOM solid freeze-PAST

‘The pond froze solid.’

b. Boku-wa me-wo kataku toji-ta.

I-TOP eye-ACC tight close-PAST

‘I closed my eyes tight.’

The event-dependent COC, on the other hand, is not perfectly felicitous:

(87) a. Boku-wa utsukushii odori-wo odot-ta.

I-TOP beautiful dance-ACC dance-PAST

‘I danced a beautiful dance.’

smile-PROG

‘He is smiling a uncanny smile alone, in a meaning manner.’

(Sakunosuke Oda, *Shigatsubaka*)

The COs in (88a, b) can be appropriately paraphrased by the corresponding adverbials:

(89) a. *nagai nemuri-wo nemuri-tsuzukete-kita*

long sleep-ACC sleep-PRF

‘have slept a long sleep’

b. *nagaiaida nemuri-tsuzukete-kita*

for a long time sleep-PRF

‘have slept for a long time’

(90) a. *bukimina warai-wo warat-teiru*

uncanny smile-ACC smile-PROG

‘smiling an uncanny smile’

b. *bukimini warat-teiru*

uncannily smile-PROG

‘smiling uncannily’

The CO *nagai nemuri-wo* in (89a) can be replaced with the corresponding adverbial *nagaiaida* as in (89b). In this case, the CO further specifies how long the activity denoted by the verb has been carried out. Likewise, the CO *bukimina warai-wo* in (90a) can be paraphrased by the corresponding manner adverb as in (90b). Thus, it seems not implausible to think that examples (88a, b) are instances of the event-dependent COC.

Moreover, in Japanese there are examples in which COs allow intensifier interpretations:

- (91) a. hita hashiri-ni hashiru
 ‘run without stopping’
 b. hira ayamari-ni ayamaru
 ‘beg someone’s pardon earnestly’
 c. doshaburi-ni furu
 ‘rain in torrents’

The examples in (91) differ from (88) in that each of the COs co-occurs with the particle *ni* and further specifies to what degree the activity is carried out. For instance, the CO *hashiri-ni* in (91a) further specifies (emphasizes) the degree to which the action denoted by the verb *hashiru* is carried out. We should class sentences (91a-c) as the event-dependent COC.

As is the case with the above languages, Chinese also permits for the adjunct resultative construction and the event-dependent COC:

- (92) a. Ta tu hong le qiang.
 He paint red ASP wall
 ‘He painted the wall red.’
 b. Wo jinjindi bi shang le yanjing.
 I tight close ASP eye
 ‘I closed my eyes tight.’
- (93) a. kan yi-kan

look a-look

‘have a look’

(Zhou (1999:264))

b. ting yi-ting

listen a-listen

‘have a listen’

In examples (93a, b), the COs *y-kan* and *yi-ting* repeat the form of the verb *kan* and that of *ting*, respectively. These COs function semantically as intensifiers. For example, (93a) can be paraphrased by such an expression as *look briefly*. Thus, it is assumed that this type of COC may be semantically equivalent to light verb constructions in English, especially the HAVE A VERB type (section 6.2). Thus the COs *yi-kan* and *yi-ting* do not function as arguments. This is confirmed by the following:

(94) a. kan yi-kan Xiaoli

look a-look Xiaoli

‘have a look at Xiaoli’

(Zhou (1999:275))

b. ting yi-ting yinyue

listen a-listen music

‘have a listen to music’

The event-dependent COC in Chinese can take a direct object, other than the CO. It seems uncontroversial that the COs in (93) and (94) are not arguments but rather adjuncts.¹⁵

It is worth noting here that the event-dependent COC in Chinese does not require modifiers for the CO:

- (95) a. *kan yi kepade kan
look a uncanny look
'have an uncanny look'
- b. *ting yi rexinde ting
listen a hard listen
'have a good listen'

As we observed in Japanese and Chinese, there is variation in the event-dependent COC among languages. However, it is evident that both the event-dependent COC and the adjunct resultative construction are possible in a variety of languages.

Construction Grammar puts emphasis on the idea that constructions are language-specific (cf. Goldberg (1995, 2006), Langacker (1999)). However, we should not overlook that constructions are comparable across languages in terms of their function and their semantic structures (Croft (2001)). Although the concept of a universal construction type does not play a role in contemporary construction grammars, in my opinion, reference to cognitive semantic structures would allow us to be successful in identifying universal or cross-linguistic construction types.

6.5. The *That*-Clause Complements of Manner-of-Speaking Verbs

In Chapter 5, I proposed that the so-called argument/adjunct distinction should be gradient, rather than clear-cut. In fact, in the UNERGATIVEVERB class construction, the CO functions as an adjunct or an argument, depending on how a speaker structures and

interprets the event described by the verb (Chapter 5.5.5). This clearly means that the argument/adjunct distinction may be a semantic one rather than a syntactic one.

A question that now arises is whether such argument/adjunct ‘alternation’ is restricted to COCs or is of more general applicability. In this connection, Kogusuri, Kitahara, Yoshida, and Kodaira (2007), Kogusuri (2009a, 2009b), and Kitahara (2009) make intriguing observations. They point out that the *that*-clause complements of manner-of-speaking verbs can also function as adjuncts or arguments, depending on how a speaker construes a profiled event. The following subsections will show that manner-of-speaking complements should be pairings of form and meaning.¹⁶

6.5.1. The Adjunct Status of Manner-of-Speaking Complements

In English, some unergative verbs (e.g. *shout, scream, howl, shriek, murmur, mumble, grunt*, etc.) can take *that*-clauses as their complements:

(96) Mary screamed/whispered that it was a mistake.

(Kogusuri, Kitahara, Yoshida, and Kodaira (2007:141))

In example (96), the verbs *scream* and *whisper* are followed by *that*-clause complements.¹⁷ In the literature, such verbs are called *manner-of-speaking verbs*, which are categorized as verbs referring to intended acts of communication by speech and describing physical characteristics of the speech act (Zwicky (1971:223)).

Manner-of-speaking verbs appear to designate the same verbal utterance as verbs of saying such as *say* and *tell* do. However, their complement clauses behave rather differently from those of verbs of saying. Firstly, the complement clauses of manner-of-speaking verbs are syntactically optional, whereas those of verbs of saying

are not:

- (97) a. Mary {murmured/screamed/whispered}.
b. *She said/mentioned.

Secondly, the complementizer *that* cannot be omitted from *that*-clauses which immediately follow manner-of-speaking verbs:

- (98) a. Francis whispered *(that) we should turn down the stereo.
b. John said (that) there were cockroaches in the caviar.

(Kuwabara and Matsuyama (2001:28))

Note that the complementizer *that* is not likely to be omitted from the complement of the verb *whisper*, as shown in (98a), in contrast with that of the verb *say* as in (98b).

Thirdly, manner-of-speaking verbs do not allow *wh*-extraction out of their complement clauses, unlike verbs of saying:

- (99) a. *What_i did Martin shriek that there were t_i in the caviar?
b. What_i did John say that there were t_i in the caviar?

(Kuwabara and Matsuyama (2001:29))

One thing worth noting is that there may be a parallel between manner-of-speaking complements and temporal adverbial clauses. As often pointed out, *wh*-extractions out of temporal adverbial clauses are also unacceptable, as illustrated in (100):

(100) *Who_i did Mary cry after John hit *t*_i? (Huang (1982:503))

The ungrammaticality of (100) shows that *wh*-extraction from an adjunct clause cannot be allowed. Manner-of-speaking complements show the same syntactic behavior as adjunct clauses.

Fourthly, the complements of manner-of-speaking verbs cannot undergo passivization, while those of saying verbs can:

(101)a. *It was shouted by Morris that night was falling. (Zwicky (1971:232))

b. It is said that Bill is honest. (Tanaka (1991:71))

Given the general assumption that passivization applies to syntactic arguments, the unacceptability of (101a) may be ascribed to the syntactic status of the manner-of-speaking complement. That is, unlike the complements of verbs of saying, manner-of-speaking complements are adjuncts, rather than arguments.

Fifthly, manner-of-speaking complements and the complements of verbs of saying behave differently with respect to topicalization:

(102)a. *[That he was sick of not getting fed]_i, I think that Ben sighed *t*_i.
(Stowell (1981:399))

b. [That Mary was honest]_i, John says *t*_i. (Tanaka (1991:71))

Notice that the complement clause in (102a) cannot appear in the topic position, whereas that in (102b) can be topicalized to the sentence-initial position. It can be argued that manner-of-speaking complements do not allow topicalization, because of

their adjunct status.

The above examples indicate that the *that*-clause complements of manner-of-speaking verbs sharply contrast with those of verbs of saying. Therefore, linguists working in the generative paradigm have attempted to reduce these contrasts to the structural difference between manner-of-speaking complements and the complement clauses of verbs of saying, i.e. adjuncts vs. arguments. Many previous studies (Stowell (1981), Baltin (1982), Kuwabara and Matsuyama (2001), among others) argue that manner-of-speaking complements should be syntactically adjuncts, not obligatory elements. If these previous analyses are on the right track, it follows that the complement clauses following manner-of-speaking verbs are adjuncts, whereas that of verbs of saying are arguments.

Next, let us turn to the semantics of manner-of-speaking complements. Hirose (1986a, b) points out that there are semantic similarities between manner-of-speaking complements and direct-speech complements. For example, as seen in (103a, b), direct-speech complements do not allow passivization and *wh*-extraction, like manner-of-speaking complements:

- (103)a. *"I am a genius in mathematics," was said by John. (Hirose (1986a:315))
b. *Who did Ralph say, "is a spy.?" (Hirose (1986b:86))

As Dixon (2005) mentions, the direct-speech complement is used to report the actual words which may have been uttered. To give an example, the sentence *John said, "Mary broke the window"* cannot be replaced with *John said, "The window was broken"* without changing its truth value. Interestingly, the same situation holds true for manner-of-speaking complements:

(104)a. John grunted that Mary broke the window.

b. John grunted that the window was broken by Mary.

(Hirose (1986a:314))

According to Hirose, sentence (104a) is not synonymous with (104b). This means that the manner-of-speaking complement may also be an exact report of what the subject actually said, like the direct-speech complement. Incidentally, the complements of verbs of saying have semantic properties different from direct-speech complements. Hirose mentions that if (105a) is true, (105b) is also true. In other words, sentence (105b) can mean the same as what (105a) does, without changing its truth value:

(105)a. John said that Mary broke the window.

b. John said that the window was broken by Mary.

(Hirose (1986a:314))

(104) and (105) suggest that the complements of manner-of-speaking verbs and those of verbs of saying are not only syntactically but also semantically different.

In addition, manner-of-speaking complements cannot co-occur with such adverbs as *correctly*, *incorrectly*, *rightly*, *wrongly*, the use of which commits the speaker to either the truth or the falsity of the complement propositions:

(106)a. John correctly/incorrectly said that he was a genius in mathematics.

b. *John correctly/incorrectly mumbled that he was a genius in mathematics.

(Hirose (1986a:316))

As seen in (106), the complement clause of the verb *say* co-occurs with *correctly* or *incorrectly*, while that of the verb *mumble* cannot. In Hooper's theory (1975), manner-of-speaking verbs, like verbs of saying, are classified as assertives.¹⁸ Following Hooper, we might say that the use of a manner-of-speaking verb should by definition make the speaker "assert" the truth or falsity of its complement proposition (Hirose (1986b:143)). However, this is not the case. As example (106b) shows, manner-of-speaking verbs are "assertives" which cannot be used assertively.

Another thing worth noting is that direct-speech complements cannot also appear with truth evaluative adverbs:

- (107)a. *John correctly/rightly says, "The first president of the U.S. was an honest man." (Hirose (1986b:135))
- b. *Nancy incorrectly/wrongly says, "Kennedy was a hypocrite." (Hirose (1986b:136))

Sentences (107a, b) are unacceptable because of the presence of such adverbs as *(in)correctly*, *rightly*, and *wrongly*. For the use of these adverbs entails that the speaker takes the complement proposition to be true or false. Thus we can say that manner-of-speaking complements are semantically parallel to direct-speech complements. It seems reasonable to assume that the manner-of-speaking complement functions as an adjunct clause, which is used to report what the subject actually says.

6.5.2. The Argument Status of Manner-of-Speaking Complements

It is true that manner-of-speaking complements function as adjunct clauses. However, that does not mean that they cannot function as arguments. A closer look

reveals that the complement clauses of manner-of-speaking verbs cannot be treated uniformly as adjuncts. First, there are examples where manner-of-speaking complements are subject to *that*-omission:

- (108)a. I was aware of players from both sides running towards me and I shouted I would clear it. (BNC; cited in Kogusuri (2009a:191))
- b. ...I brushed past a girl as I went to the toilet and she yelled I'd done it deliberately. (BNC)
- c. She screamed she had to have both. (Bolinger (1972:33))

Unlike (98a), the examples in (108) show that manner-of-speaking complements allow *that*-omission depending on context.

Second, the complement clauses of manner-of-speaking verbs do not always block *wh*-extraction, as illustrated in (109):

- (109)a. What did John just whisper to you that he ate?
- b. Who did Bill mutter that He doesn't like?
- (Stowell (1981:406))

Contrary to the view that manner-of-speaking complements do not undergo *wh*-extraction (Kuwabara and Matsuyama (2001)), *what* and *who* in (109a, b) can be extracted from the complement clauses.

Third, there are many examples where manner-of-speaking complements can undergo passivization:

(110)a. It was whispered, by those who peered after her, that the scarlet letter threw a lurid gleam along the dark passage-way of the interior.

(Nathaniel Hawthorne, *The Scarlet Letter*)

b. It was murmured by some that Isaiah the prophet had written that by His stripes, we are healed, and also that 'there would be no beauty that we should desire Him.'

(Joy Richard Lawson, *Simply, Joy*)

c. In the early morning, it was shouted that they were bringing Kule in.

(Margaret Mead, *The Mountain Arapesh*; cited in Kogusuri (2009a:190))

As shown in (110), the *that*-clause complements of manner-of-speaking verbs can become passive subjects, in contrast with (101a).¹⁹

Fourth, manner-of-speaking complements can undergo *it*-pronominalization:

(111) She'd longed to hear him whisper that he loved her – but he hadn't.

Had he whispered *it* to Adrianna?

(BNC; cited in Kogusuri (2009b:113))

In (111), the complement clause *that he loved her* is substituted by the pronoun *it*. Given the examples in (108)-(111), it is wrong to treat manner-of-speaking complements uniformly as adjunct clauses.

What is more important is that there are examples where the complement clauses of manner-of-speaking verbs co-occur with truth evaluative adverbs:

(112)a. The next moment, as the waves receded, it would fail to my waist; but again it was up to my chest, and in spite of gleams of hope, despair

whispered truly that it was now higher up my chest than before.

(George Manville Fenn, *Begumbagh: A Tale of the Indian Mutiny*)

- b. In a whisper-down-the-alley, she *wrongly whispered* that the house was green. (Kogusuri (2009b:116))

As mentioned in section 6.5.1, the use of adverbs such as *truly* and *wrongly* entails that the speaker takes the complement proposition to be true or false. Hirose (1986a, b) argues that manner-of-speaking complements do not co-occur with such adverbs. However, in (112a, b), the complements do appear with *truly* and *wrongly*. The examples in (112) suggest that manner-of-speaking complements are semantically parallel to not only direct-speech complements but also the complements of verbs of saying, depending on context.

6.5.3. Two Types of Manner-of-Speaking Complements

As seen above, the complement clauses of manner-of-speaking verbs can function as adjuncts or arguments. To capture the complex nature of manner-of-speaking complements, Kogusuri (2009a, 2009b) focuses attention on the lexical semantics of manner-of-speaking verbs. According to Zwicky (1971), the lexical semantics of a manner-of-speaking verbs is composed of two parts: the component referring to an intended act of communication by speech, and the one describing the physical characteristics of the speech act. Such characterization is also found in *LDOCE* online:

- (113)a. *shout*
to say something very loudly

b. *whisper*

to speak or say something very quietly, using your breath rather than your voice

c. *yell*

to shout or say something very loudly, especially because you are frightened, angry, or excited

(LDOCE online)

From this Kogusuri proposes that the lexical semantics of manner-of-speaking verbs consists of two semantic components, the MANNER component and the SAYING component.²⁰ According to Kogusuri, the latter component is equivalent to the semantics of verbs of saying, whereas the former component is unique to manner-of-speaking verbs. In fact, as for verbs of saying, the MANNER component is not involved in their lexical semantics. This is confirmed by the following examples:

(114)a. To mumble is to say.

b. *To say is to mumble.

(Erteschik-Shir (1973:20))

The examples in (114) show that the verb *mumble* is semantically more complex than *say*. Following Kogusuri's proposal, the reason why the sentence *to say is to mumble* is unacceptable is because verbs of saying do not include the MANNER component in their lexical semantics.

The most important is that when the MANNER component is salient, even the complements of verbs of saying function as adjunct clauses. Note that sentences (115a,

b) do not allow *that*-omission and *wh*-extraction, unlike (98b) and (99b):

(115) a. *John said very loudly Mary is a genius. (Kogusuri (2009a:198))

b. ?*What_i did he say loudly that John would buy *t_i*? (Starke (2001:32, fn.6))

By adding the manner adverb *loudly*, the MANNER component becomes prominent. Thus, it is considered that the complement clauses in (115a, b) can function as adverbial clauses. Incidentally, as for temporal adverbials and goal PPs, *that*-omission and *wh*-extraction are still possible, as in (116) and (117):

(116) a. They said last year the economy would be better by now.

b. I said to Mary (that) he was in error.

(Doherty (2000:25))

(117) a. What_i did John say last year that Bill Clinton would do *t_i*?

b. Who_i did Mary say to you that John loved *t_i*?

(Kogusuri (2009a:198))

These examples suggest that the MANNER component corresponds to the adjunct status of the *that*-clause complement, while the SAYING component corresponds to the argument status. To make the point explicitly, the syntactic and semantic properties of a complement clause may be based on which semantic component is salient, in other words, how a speaker construes a profiled event denoted by the verb. Therefore, Kogusuri claims that various behaviors of manner-of-speaking complements are restricted by the MANNER components of the verbs (Kogusuri (2009a:194)).

Now we can predict that manner-of-speaking complements can function as

arguments, if the MANNER components of the verbs are faded out or backgrounded.

The validity of this prediction is confirmed by the following examples:

(118)a. Using a very serious whisper, John whispered to me Clark was Superman.

b. Using a very serious whisper, what_i did John whisper to you that Clark was *t_i*?

(Kogusuri (2009a:195))

(119)a. Using a very loud shout that I had never heard, John shouted to me Clark was Superman.

b. Using a very loud shout that you had never heard, what_i did John shout to you that Clark was *t_i*?

(Kogusuri (2009a:195))

In (118), *using a very serious whisper* specifies the MANNER component of the main verb, preceding the main clause. As a result, the SAYING component of the verb is relatively salient, whereas the MANNER component is backgrounded. Thus the complement clauses allow *that*-omission and *wh*-extraction. The same holds true for (119).

Moreover, in contexts where the MANNER component is not salient, the complement clause of the verb can co-occur with a truth evaluative adverb. Let us reconsider the examples in (112). For example, in (112b), the *that*-clause complement accompanying the verb *whisper* co-occurs with the adverb *wrongly*.

(120) In a whisper-down-the-alley, she *wrongly whispered* that the house was

green.

(= (112b))

Whisper-down-the-Alley is a game in which a lot of people stand in a line. The first person says something to the person on his or her right, and they repeat what they thought they heard to the person on their right. In such context, the MANNER component is backgrounded and then the SAYING component is relatively foregrounded. Hence, sentence (112b) is perfectly acceptable.

From the above considerations, I conclude that manner-of-speaking complements consist of two types: the construction in which the MANNER component is salient and the one in which the SAYING component is salient. The former type functions as an adverbial clause, while the latter type functions as an argument clause. As in COCs or dative alternation constructions, manner-of-speaking complements are available as alternate means of construing a given event. This observation lends empirical support to the idea that the argument/adjunct distinction should be gradient.²¹

6.6. Conclusion

The first two sections of this chapter was devoted to an exploration of possible similarities between COCs and supportive verb constructions, i.e. light verb constructions and reaction object constructions, which have been alleged to exist by many previous studies. By focusing on syntactic and semantic properties of these constructions, I shed light on the fact that there are actually no parallels between COCs and supportive verb constructions. Through a close examination of these constructions, it was shown that COCs (especially the event-dependent type) do not mean the same as light verb constructions and the CO of the UNERGATIVEVERB class construction is not a resultant object or effected object. Therefore, COCs should not be put in the same

category as light verb constructions and reaction object constructions.

As discussed earlier, COCs form a heterogeneous category which consists of the event-dependent type and the event-independent type. Compared to the latter construction, the former construction is more idiosyncratic in that the postverbal element behaves as an adjunct, and further specifies the notion that is implied by the lexical semantics of the verb. In addition, these two types of COCs form a continuum in the *UNERGATIVEVERB* class construction. Such properties, however, are not limited to COCs. I demonstrated that the proposed analysis can be applied to other linguistic phenomena which have not been correlated with the constructions, the adjunct resultative construction and the complement clauses of manner-of-speaking verbs. In the remaining two sections, I made two points: 1) The event-dependent COC and the adjunct resultative construction are constructions which should be dealt with as further-specifying constructions, since they are independent constructions but motivated by the same semantic structure in which the postverbal element further specifies the notion implied by the verb; 2) like COCs, manner-of-speaking complements can function as adjuncts or arguments, depending on how a speaker structures and interprets the event described by the verb, i.e. whether the *MANNER* component is salient or not. These findings suggest that the argument/adjunct distinction may be a semantic one rather than a syntactic one.

Notes to Chapter 6

^{1.} Höche's investigation of the BNC confirms that a great amount of nominals found in COCs are also used in light verb constructions. The following list provides an overview of selected nominals which are both observed in COCs and light verb constructions:

- (i) bite; breath; cough; cry; dance; dream; drink; feeling; fight; grin; jump;
laugh; prayer; run; scream; sigh; sleep; smell; smile; talk; taste; thought;
walk (Höche (2009:232))

Furthermore, she assesses their frequency of occurrence in the corpus. See Höche (2009) for more detailed information.

^{2.} See section 6.3 for a detailed examination of reaction object constructions.

^{3.} According to Mirto (2007), types and distribution of determiners also indicate the predicative nature of light verb complements. As Huddleston and Pullum (2002) point out, the most usual determiner with light verbs is the indefinite article. This property seems to correspond to Higginbotham's view that predicate nominals must be indefinite (Chapter 4.6; Higginbotham (1987)). Brinton (1996) reports that the postverbal NP is normally preceded by an indefinite article. In fact, an investigation of the *Cobuild* corpus in search of COCs show that zero article and the indefinite article are used in almost three-quarters of the occurrences (7.7 % + 65.4%, respectively) (Rymen (1999), Davidse and Rymen (2006)). However, this does not prove that all COs are predicate nominals. As regards the argumenthood of COs, see Chapters 4 and 5.

4. As regards the DO A VERB type (e.g. *They did a slow dance*), see Höche (2009).
5. Zhou (1999) also points out that the ditransitive construction with a CO is permissible:

- (i) a. She walloped him a wallope.
- b. He laughed me a hearty laugh.

(Zhou (1999:282))

However, it is highly controversial whether these examples including (9a, b) are commonly used by English native speakers. In fact, Zhou mentions that such constructions are much more restricted in English. For details, see Zhou (1999).

6. RP = result phrase
7. One might think that the following are examples where an effected object appears in the resultative construction:

- (i) a. The architect built the bridge wide.
- b. The grandmother knitted this sweater too long.
- c. The artist drew her face sad.

(Basilico (1998:576-577))

The object NPs *the bridge*, *this sweater*, and *her face* may be considered to result from the actions denoted by the main verbs. Basilico, however, mentions that each of the sentences in (i) no longer simply asserts the existence of the direct object but now asserts that the direct object has a certain property. For example, sentence (i-a) not only states that the architect built the bridge, but also that the bridge has the property of

being wide. Because of this additional component of property ascription, there is a categorical predication and the direct object *the bridge* would be interpreted as a particular type. In other words, the bridge in (i-a) is not a simple effected object. The same holds true for (i-b) and (i-c). Therefore, it seems plausible that the examples in (i) are special instances of resultative constructions.

^{8.} Kogusuri (2009c) mentions that the coreference constraint on implicit possessive pronouns (e.g. **Grateful thanks were smiled by Rilla* = **Her grateful thanks was smiled by Rilla*) may be imposed at the level of semantics. For example, in the sentence *Rilla smiled grateful thanks*, the emotion of grateful thanks Rilla expressed by smiling is considered to be her own. That is, the correlation between the subject *Rilla* and the object NP *grateful thanks* is pragmatically foregrounded. Thus, the sentence does not allow passivization. In the sentence *Warm thanks were smiled at the audience*, on the other hand, the correlation between the subject and the object NP are pragmatically backgrounded and thus the sentence is judged acceptable. Kogusuri calls such effect *agent backgrounding*. All in all, the causal relation between the subject and the reaction object may determine whether they can be coreferential or not. See Kogusuri (2009c) for more details.

^{9.} Although Iwata later revised the terms *the adjunct resultative construction* and *the argument resultative construction* to *argument structure construction-based resultatives* and *verb-based resultatives* (Iwata (2008b)), for convenience of discussion, I use the former terms.

^{10.} Washio (1997) distinguishes three types of resultatives (strong, weak, and spurious resultatives). Washio's strong resultatives correspond to the argument resultative construction, and his weak and spurious resultatives the adjunct resultative construction. The distinction between weak and spurious does not seem necessary. For details, see

Iwata (2006a, 2006b).

^{11.} This intensifier interpretation is not available for all adjunct resultative constructions (e.g., *The vase broke into two*). See Iwata (2006a) for details.

^{12.} I argued in earlier studies that the event-dependent COC and the adjunct resultative construction may be linguistic manifestations of reference point ability (Kitahara (2007, 2008): In each construction, the frame evoked by the verb serves as a reference point for affording mental access to the desired host (i.e. implicit host). In other words, one conception serves as a reference point for purposes of establishing mental contact with another conception (Langacker (1999)). However, more research is necessary to demonstrate whether or not these two constructions are motivated by such a cognitive ability. Thus, I leave this issue for future research.

^{13.} Abbreviations used in the glosses of examples include the following: ACC= accusative, ASP = aspect, GEN = genitive, NOM = nominative, TOP = topic, PAST = past, PRF = perfect, PROG = progressive.

^{14.} Examples (86a, b) are cited from the following websites:

http://www.aozora.gr.jp/cards/000158/files/1504_14585.html

http://www.aozora.gr.jp/cards/000040/files/46168_22668.html

^{15.} Zhou (1999) argues that the CO such as *yi-kan* is part of a reduplicated verb and thus a reduplicated CO and the verb together form a V°. That is, it has to appear together with the verb as a lexical item. See Zhou (1999) for details.

^{16.} I am assuming, following a number of scholars (Langacker (1987, 1991, 1999), Goldberg (1995, 2006), Croft (2001, 2003), Taylor (2002), Iwata (2006c, 2008a), among others), that any linguistic unit pairing form and meaning can count as a construction, irrespective of the degree of schematicity, the size, etc. So *that*-clause complements are also constructions in this sense.

^{17.} Martínez Vázquez (2005) argues that the sentences in which manner-of-speaking verbs take *that*-clause complements or direct-speech complements illustrate the SOUND FOR SPEECH metonymy. For example, in the sentence *A writer in the Town Planning Review trumpeted that train-sheds were now obsolete*, the sound made by a trumpet is applied to a human domain: a person making the sound of a trumpet, thus, speaking in a very loud voice. Her analysis is intriguing, but it is absolutely speculative. For she does not explain why the complements of manner-of-speaking verbs can function the same as adverbial clauses or the complements of verbs of saying in some circumstances, as seen later (section 6.5.2).

^{18.} Manner-of-speaking verbs are classified as assertives because they can be used parenthetically (Zwicky (1971), Hooper (1975)), as exemplified in the following:

- (i) The line, she {moaned/growled}, was busy. (Zwicky (1971:225))

The parenthetical in (i), however, imply no claim to either the truth or falsity of the main proposition to which it is attached, unlike such sentences as *John is a fink, he thinks* (Hirose (1986b:156)). See Hirose (1986b) for more details.

^{19.} On the basis of the unacceptability of (102a), Kogusuri (2009a, 2009b) claims that when a manner-of speaking complement becomes a passive subject, the agent, which is realized as a *by*-phrase, must be suppressed (cf. Onuma (1973), Postal (1986)). However, this claim is untenable because the agents can be overtly realized as *by*-phrases, as seen in (110a, b).

^{20.} Kogusuri's assumption is based on the predicate decomposition approach, which is most extensively elaborated in the work of Jackendoff (1976, 1983, 1990) and more recently in Role and Reference Grammar (Van Valin and LaPolla (1997)) and in the

work of Croft (1990, 1991, 1993, 1994, 1998) (see also Levin and Rappaport Hovav (2005) and the references therein for more details). For more detailed discussion, see Kogusuri (2009a, 2009b).

²¹. Kogusuri (2009a, 2009b) further argues that the scope of negation and question can range over manner-of-speaking complements (cf. Goldberg (2006), Ambridge and Goldberg (2008)). See Kogusuri (2009a, 2009b) for details.

Chapter 7

Conclusion

7.1. Summary

This thesis has been concerned with explicating the nature of English COCs and related phenomena from a lexical-constructional perspective. Before concluding this thesis, I will briefly summarize the main findings of my lexical-constructional account of COCs for the purpose of a coherent presentation of the constructions.

Chapter 1 began by identifying the somewhat problematic status of English COCs with respect to their morphological, syntactic, and semantic idiosyncrasies. Traditional grammarians argue that the constructions are classified into at least two main types, the construction in which a transitive verb selects a CO from a wide range of object complements and the one in which an intransitive verb takes a CO only; they also point out that the CO can express the same meaning as the corresponding manner adverbial (Sweet (1891), Jespersen (1924, 1927), Quirk et al. (1985), Huddleston and Pullum (2002)). Naturally, a number of questions arise: 1) Why are COCs classified into two types? 2) Why is it possible that in one type of COCs the intransitive verb takes an overt object complement, i.e. CO? 3) Where does the equal status of the CO and the corresponding manner adverbial come from? 4) How are the two types of COCs related to each other? I emphasized the need of providing definitive answers to these four questions, to elucidate the nature of the constructions.

Chapter 2 pointed out problems with representative previous studies: Jones (1988), Moltmann (1989), Massam (1990), Macfarland (1995), Takami and Kuno (2002), and Kuno and Takami (2004). Neither of these reductionist analyses can account for

differences in syntactic and semantic behavior of COCs. The biggest problem with the reductionist approach is that the COCs in which the same verb occurs do not show the same syntactic and semantic behavior. In order to properly capture the complex nature of the constructions, we must abandon the idea that the syntax and semantics of the clause is projected exclusively from the specifications of the main verb. I mentioned that by taking constructions to be the basic units of language, we can avoid the problem of positing implausible and ad hoc descriptive devices to account for idiosyncratic properties of COCs.

The lexical-constructional approach proposed in Chapter 3 is characterized by the following three main features: 1) Categories are construction-specific, 2) heads are construction-specific, and 3) constructions are schemas (Croft (2001, 2003), Croft and Cruse (2004), Iwata (2006c, 2008a)). In line with Iwata (2006c, 2008a), I further emphasized the need for a detailed examination of verb meanings and introduced lower-level constructions such as verb-class-specific constructions and verb-specific constructions. At the same time, it was shown that the adopted lexical-constructional approach departs from the Goldbergian construction grammar in many ways, which were repeatedly pointed out in the remaining chapters.

Chapter 4 advanced an alternative analysis of COCs, which is based upon on a lexical-constructional perspective. I claimed that COCs consist of two types: the event-dependent type and the event-independent type. Each COC instantiates the higher order schema COGNATE OBJECT CONSTRUCTION (cf. Langacker (1991)). The event-dependent COC has the syntactic form [SBJ INTRVERB_c (M) OBJ_c^{ADJUNCT}] and the CO functions as a predicate appositive further specifying the notion that is implied by the verb meaning (Curme (1947), Inui (1949), Nakau (1994)). Moreover, its CO is co-extensive with the event denoted by the verb (Kasai (1980)). This property makes

possible two interpretations such as an event reading and a result reading, which has been often pointed out in the literature (Tenny (1994), Matsumoto (1996), Nakajima (2006)). I further pointed out that when the CO of the construction has no modifiers, through its repetitive nature, it functions as a kind of intensifier (Hashimoto (1998), Omuro (2004), Höche (2009)). The event-independent COC, on the other hand, has the syntactic form [SBJ TRVERB_c (M) OBJ_c^{ARGUMENT}] and has two different meanings, which correspond to the traditional distinction between an affected object and an effected object (cf. Höche (2009)). Unlike the event-dependent type, the event-independent type consists of two subtypes, the effected type and the affected type. This property is consistent with the fact that the construction allows various syntactic behaviors like the transitive construction. The characterization of the event-dependent COC and the event-independent COC was also supported by typological data from other languages (Pereltsvaig (1999)), cognitive linguistic accounts (Langacker (1991), Höche (2009)), and historical evidence (Yamakawa (1980), Osaki (1998)).

The main focus of Chapter 5 was to address the four questions given in the first chapter. My answers to the questions are summarized as follows:

- (1) My lexical-constructional account suggests that COCs form not a homogeneous category, but rather a heterogeneous one which consists of two independent constructions. As a result, the reason why the constructions are classified into two types is that they are not monolithic but form a complex category. Of special importance is that the use of these constructions often depends on how a speaker structures and interprets the event described by the verb. Thus, the event-dependent COC and the event-independent COC are different but related

constructions. To put it another way, they form a family of constructions, which are arranged around a prototype, i.e. the event-dependent COC (cf. Höche (2009)). Accordingly, the COCs which can be interpreted in two ways (ex. *Mary danced a beautiful dance*) show superficial constructional homonymy (Langacker (1990), Kitahara (2009); cf. Chomsky (1957)).

- (2) The reason why in one type of COCs, i.e. the event-dependent COC, the intransitive verb takes an overt object complement is simply that the construction involving the verb is a constructional idiom (Taylor (2003)). Contrary to Höche's (2009) analysis, there is no mismatch between the number of participant roles associated with the main verb and the number of argument roles of the construction. I argued that most instances of the event-dependent COC are considered compositional constructions, i.e. concord constructions (Michaelis (2003, 2004)). The proposed account is disarmingly simple.
- (3) The equal status of the CO of the event-dependent type and the corresponding manner adverbial comes from the relation between the adjective modifying the eventive CO and the adverbial modifying the verb, in which they must have the same conceptual content; i.e., a process is situated within the landmark region of the scale (Horita (1996)). However, the event-dependent COC is not exactly the same as the intransitive construction in the following respects: 1) The eventive CO allows an event reading and a result reading; 2) the unmodified eventive CO can function as an intensifier; and 3) using the event-dependent type enables us to add much more information to the verbal notion than using the intransitive construction (cf. Jespersen (1924), Huddleston and Pullum

(2002), Dixon (2005)). Hence, the event-dependent COC should be considered to exist independently of the intransitive construction, even if they are linked in construction taxonomies.

- (4) The answer to the question of how the event-dependent COC and the event-independent COC are related to each other is that these two constructions form a continuum in the UNERGATIVEVERB class construction, to the extent that the verb represents an activity or action involving a temporal process which may be under the subject's control and the eventive CO can represent a particular or identifiable type. The UNERGATIVEVERB class construction is assumed to be placed in the middle between the transitive pole (the TRANSITIVEVERB class construction) and the intransitive pole (the UNERGATIVEVERB class construction) of the continuum. My account lends support to the idea that the so-called argument/adjunct distinction should be gradient: The argument/adjunct distinction of the CO is based on whether or not the event denoted by the CO can represent a particular and recognizable type (Rice (1987), Langacker (1991)). Therefore, the argument/adjunct distinction may be a semantic one rather than a syntactic one.

Chapter 6 was devoted to a comparison of COCs, especially the event-dependent construction and the UNERGATIVEVERB class construction, with other related constructions. COCs have been frequently discussed in relation to supportive verb constructions such as light verb constructions and reaction object constructions (Jespersen (1942), Fillmore (1968), Yasui (1982), Quirk et al. (1985), Macfarland (1995), Mirto (2007), among others). However, by making an investigation and

comparison of these supportive verb constructions, I revealed that COCs have no relation with them, but rather they have close parallels with resultative constructions and manner-of-speaking complements, which have not been correlated with the constructions (Kitahara (2007, 2008, 2009)).

COCs form a heterogeneous category, which is composed of the event-dependent type and the event-independent type. Compared to the latter construction, the former construction is more idiosyncratic in that the postverbal element behaves as an adjunct, and further specifies the notion that is implied by the lexical semantics of the verb. More important is that these two types of COCs form a continuum in the *UNERGATIVEVERB* class construction. I argued that these properties are not limited to COCs. For example, there are striking parallels between the event-dependent COC and the adjunct resultative construction. These two constructions are independent constructions but motivated by the same semantic structure in which the postverbal element further specifies the notion implied by the verb (Iwata (2006a, 2006b, 2008b), Kitahara (2007, 2008)). I showed that the close semantic relation between these two constructions was further supported by cross-linguistic considerations, in particular the fact that the event-dependent COC and the adjunct resultative construction are possible not only in English but also in French, Japanese, and Chinese. Therefore, the event-dependent COC and the adjunct resultative construction are constructions which should be dealt with as further-specifying constructions

Furthermore, like COCs, manner-of-speaking complements can exhibit characteristic properties of both adjuncts and arguments, depending on how a speaker structures and interprets the event described by the verb (Kogusuri, Kitahara, Yoshida, and Kodaira (2007), Kogusuri (2009a, b), Kitahara (2009)). According to Kogusuri (2009a, b), the lexical semantics of manner-of-speaking verbs consist of the *MANNER*

component and the SAYING component. The latter component is equivalent to the semantics of verbs of saying, while the former component is unique to manner-of-speaking verbs. When the MANNER component is foregrounded, even the complement clauses of verbs of saying function as adjunct clauses (cf. Starke (2001)). Therefore, I proposed that the MANNER component corresponds to the adjunct status of the *that*-clause complement, while the SAYING component corresponds to the argument status. Indeed, manner-of-speaking complements can function as argument clauses, if the MANNER components of the verbs are backgrounded. These findings also give support to the claim that the argument/adjunct distinction may be a semantic one.

7.2. Concluding Remarks

By adopting a lexical-constructional approach, this work aimed to provide a comprehensive and coherent account of various properties of English COCs, showing that the proposed analysis can be applied to related linguistic phenomena, the adjunct resultative construction and the complement clauses of manner-of-speaking verbs. The proposed lexical-constructional account overcomes a number of problems with three mainstream approaches to the constructions, i.e. generative grammar approaches (Jones (1988), Moltmann (1989), Massam (1990), Macfarland (1995), etc.), discourse-functional approaches (Takami and Kuno (2002), Kuno and Takami (2004), etc.), and cognitive linguistic approaches (Langacker (1991), Horita (1996), Höche (2009), etc.). Therefore, if further investigations on the constructions are to be conducted, the lexical-constructional perspective should be taken into consideration. There may be still many things left to be resolved, but my immediate hope is that the construction grammar approach taken here will act as a stimulus for more research for elucidating the nature of the constructions.

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