

Title	The Function of the IT-Cleft Construction
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Citation	OUPEL(Osaka University Papers in English Linguistics). 2005, 10, p. 103-128
Version Type	VoR
URL	https://doi.org/10.18910/70799
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THE FUNCTION OF THE IT-CLEFT CONSTRUCTION*

1 Introduction

In this paper, I consider the *it*-Cleft Construction as (1). The term, Cleft, comes from the idea that a basic sentence splits into two parts in order that one of them may be highlighted (Jespersen 1949). Hereafter, the two parts are called X and Y as (2).

- (1) It was the book that John gave Mary.
- (2) [it be X that Y]

The title, the function of the *it*-Cleft Construction, is used in two ways in previous studies. One is that the function is to divide the proposition into two parts. The other is that the function is to give a particular discourse function to X and Y. Some researchers show that X receives Focus and Y Presupposition, and others shows that X and Y receive either Topic or Comment.

The overview is below. Traditionally, it is said that X shows Focus and Y Presupposition (Jackendoff 1972, Chomsky 1957, Lambrecht 1994, 2001). The representative sentence is (3). However, there are many counterexamples, whose discourse functions indicate that X shows Topic and Y Comment as (4).

- (3) A: Who kissed Mary?
 - B: It's John that kissed Mary.
- (4) The year 1979 was the lucky year of my life. The electronics company that I was working in decided to send me to university. And it was at that time that I met and later married my husband.¹

Jackendoff (1972) states that Focus is the part of the sentence that the speaker and the hearer don't share and Presupposition is the part that they share. The definition shows that *John* and *someone kissed Mary* in (3) are Focus and Presupposition. However, the referent time of *at that time* in (4) is mentioned in the previous sentence. This means that the phrase isn't Focus. The *it*-Cleft sentence discusses events in *1979*. Thus, *at that time* seems to be Topic.

Some researchers note that there are at least two subclasses (Prince 1978,

^{*} This is a revised version of my M.A. thesis submitted to Osaka University in 2006. A part of this paper was presented at the 8th meeting of The Pragmatics Society of Japan in 2005. I would like to express my gratitude to Yukio Oba and Sadayuki Okada for valuable suggestions. Thanks also to Paul A. S. Harvey for stylistic improvements. Of course, any remaining deficiencies in this paper are my own.

¹ The example (4) is created on the basis of the *it*-Cleft sentence found on a web page and checked by native speakers.

Declerck 1988, Hedberg 1988, 1990, to appear). One is [it be Focus that Presupposition] and the other is [it be Topic that Comment]. However, the idea has a crucial point to be discussed. This is the fact that an *it*-Cleft sentence belongs to either of the subclasses, but which subclass is suitable in the context is not explained. Quirk et al. (1986) notes that the choice depends on the context. For example, (5a) structured by [it be Focus that Presupposition] is acceptable, but (5b) structured by [it be Topic that Comment] has less acceptability.

(5) A: Who did Mary hit?
B: a. It's John that Mary hit.
b. ?? It's Mary/she that hit John. [it be Focus that Presupposition]

The opposite story is gained in (6). The subclass of [it be Focus that Presupposition] in (6a) isn't accepted, but the other subclass of [it be Topic that Comment] in (6b) is accepted.

- (6) John went to Osaka last year.
 - a. *It's Mary that Tom met there.

[it be Focus that Presupposition]

b. It's there that Tom met Mary.

[it be Topic that Comment]

From (5) and (6), it is certain that the choice of subclasses depends on the given context. The problem is what leads to the choice of the subclasses.

This paper consists of 7 sections. Section 2 discusses previous analyses. Theoretical backgrounds are shown in section 3. Phenomena presented by psychological fields are introduced. Especially, Figure/Ground segregation will be considered in detail. In section 4, I will propose that X is Figure and present a constraint on characteristics of Figure. Section 5 presents analyses. In section 6, further analyses are indicated. The final section, section 7, presents concluding remarks

2 Previous Analyses

In literatures on the *it*-Cleft construction, it is said that the function is to divide a proposition into two parts. However, there are two different views on what function each of X and Y has. The views are summarized in (7).

- (7) Two views
 - (i) Focus-based view: The construction gives Focus to X and Presupposition to Y.

(Jespersen 1949, Chomsky 1957, Chafe 1976, Lambrecht 2001)

(ii) Topic-based view: The construction gives either Comment or Topic to each of X and Y.

(Prince 1978, Declerck 1988, Hedberg 1988, 1990, to appear)

Before introducing the two views, I turn to the confusing terms.

2.1 The Terms, Focus/Presupposition and Topic/Comment

Differences between the terms are nothing but labels named by researchers. The definitions differ from one person to another, but show the same thing in some cases. Focus and Presupposition in Lambrecht (1994, 2001) correspond to Topic and Comment in Hedberg (1988, 1990). In the following, the definitions of Focus, Presupposition, Topic and Comment in Lambrecht (1994, 2001) are shown. After that, Topic and Comment in Hedberg (1988, 1990) are introduced.

Let us consider (8). Words by capital letters indicate strong stress.

- (8) Focus/Presupposition and Topic/Comment in Lambrecht (1994, 2001)
 - a. A: What did the children do next?

B: The children went to SCHOOL. (Predication) [Topic [[Comment 1

b. A: Who went to school?

B: The CHILDREN went to school. (Identification) [Focus [[Presupposition]

He uses Topic/Comment when the sentence is related to predication as (8a). In contrast, Focus/Presupposition is used when the sentence is related to identification as (8b). As for Hedberg (1988, 1990, to appear), she defines Topic/Comment as (9). The definitions come from Gundel (1988).

- Topic: An entity, E, is the topic of a sentence, S, iff, in using S, the (9) a. speaker intends to increase the addressee's knowledge about, request information about or otherwise get the addressee to act with respect to
 - Comment: A predication, P, is the comment of a sentence, S, iff, in using S the speaker intends P to be assessed relative to the topic of S. (Gundel 1988)

Broadly speaking, Topic shows what the proposition tells about in the given context, and Comment shows the proposition about the Topic.

Topic/Comment in Hedberg (1988, 1990, to appear) (10)

a. A: What did the children do next?

The children went to SCHOOL. (Predication) 1

[Topic [[Comment

b. A: Who went to school?

> B: The CHILDREN went to school. (Identification) 1 [Comment [Topic

In (10a), Topic is the children, because the sentence tells about the children. Comment is went to SCHOOL, because the predicate shows the proposition about the Topic, the children. In (10b), Topic is someone went to school, and Comment is the CHILDREN.

The point is that she uses Topic/Comment in spite of sentential types as opposed to Lambrecht (1994, 2001). Lambrecht uses the terms on the basis of sentential types.

2.2 Focus-based View

This view originates from Jespersen (1949). The representative sentence is (11). Lambrecht (1999) presents (12) as the definition of Cleft constructions.

- (11) It's John that kissed Mary. [Focus [Presupposition]
- (12) A Cleft Construction is a complex sentence construction consisting of two clauses, a matrix clause containing a copula whose non-subject complement is a focus phrase and a relative (or relative-like) clause, one of whose argument is coindexed with the focus phrase.

(Lambrecht 1999)

In this view, the most troublesome problem is the definition of Focus and Presupposition. Various definitions have been presented in previous works. Two definitions are representative. One is related to information status or discourse functions. The other is based on stress. As mentioned above, Jackendoff (1972) defines Focus as the information that the speaker and the hearer don't share, and Presupposition as the information that they share. As for definitions based on stress, Chafe (1974) notes that Focus is marked by a nuclear accent. However, the two definitions are open to question, considering (13) and (14).

- (13) A: Who did John meet in Paris?
 - B: It was Mary that John met there.

[Focus][Presupposition]

- (14) A: Tom took a trip to Paris.
 - B: It was there that John met Mary. [?Presupposition][?Focus]

According to Jackendoff (1972), (13) can be regarded as the *it*-Cleft Construction, while (14) cannot. *Mary* in (13) is information that the speaker and the hearer don't share, while *there* in (14) is information that they share, which is clearly mentioned in the antecedent sentence. In addition, Y in (14) cannot be regarded as Presupposition, because the information is not shared. Thus, (14) is not captured by his definition.

As for the accent definition, counter examples are also gained. Chafe (1974) notes that Focus is marked by a nuclear accent. However, Kaitenböck (1993) shows that *it*-Cleft sentences at 19% in his corpus data have no nucleus accent in X. In addition, Declerck (1988) notes that *JOHN* in (15a) is stressed strongly, while *there* in (15b) is stressed weakly. Thus, (15b) doesn't meet the criterion that Focus has a nucleus accent.

(15) A: I hear you met someone in Paris?

- B: a. Yes. It was JOHN that I met there.
 - b. Yes. It was there that I met JOHN.

(Declerck 1988: 240)

Focus-based view doesn't capture (14) and (15b) in the definition that X shows Focus and Y Presupposition.

2.3 Topic-based View

As opposed to Focus-based view, Topic-based view works well on (14) and (15b). In this view, the *it*-Cleft Construction gives either Topic or Comment to each of X and Y. This view originates from Prince (1978). She shows that X doesn't always indicate Focus or New information. She presents many examples indicating New information in Y as (16). For this, she concludes that the *it*-Cleft Construction should be divided into at least two subclasses: stressed-focus *it*-Clefts [it be New that Old] and informative-presupposition *it*-Clefts [it be Old/New that New]. ## means that the sentence is used in the first line of the article.

(16) a.	[cupping cheeks]	'It's here I look li	ke Mina Davis.'	
		[Old][New]	
b.	## It was just abo	out 50 years ago th	nat Henry Foad gav	ve us the
	[New][New	
	weekend.			
]			
			(Princ	e 1978: 898-899)

However, this is not the end of the story. Declerck (1988) goes one step further and distinguishes informative-presupposition Clefts into two subclasses: unstressed -anaphoric-focus Clefts [it be Old that New] and discontinuous Clefts [it be New that New]. (17) is a stressed-focus *it*-Cleft. (18) is an unstressed-anaphoric-focus Cleft and (19) is a discontinuous Cleft. (20) shows their information structures.

(17)	I've heard that Mary is in love with someone. It's John that Mary [New][Old
	loves.
(18)	I've heard John made the marriage proposal to Mary in Paris. It's
	[Old_
	there that she was born and grew up.
][New]
(19)	##It was in 1979 that Margaret Thatcher became the first female
	[New][New
	Prime Minister of the United Kingdom.
]

(20)			
(20)	Subclass	X	Y
	Stressed-focus it-Clefts	New	Old
	Unstressed-anaphoric-focus Clefts	Old	New
	Discontinuous Clefts	New	New

Hedberg (1988, 1990, to appear) analyses various *it*-Cleft sentences with Topic/Comment on the ground of the observations above. The way of determining the status of elements is based on the definition in (9) and the primary stress. The primary stress falls on Comment. Three subclasses mentioned in (20) correspond to (21) in her definitions. Hereafter, I use CT, TC and CC for subclasses.

(21)			
(-1)	Туре	X	Y
	CT: [It be COMMENT that TOPIC]	Comment	Topic
	TC: [It be TOPIC that COMMENT]	Topic	Comment
	CC: [It be COMMENT that COMMENT]	Comment	Comment

Through examples, I show how her proposal works and present a problem with them. Let us consider (22).

(22) A:	I hear you met someone in Paris?	
B: a.	Yes. It was JOHN that I met there.	
	[Comment][Topic]	
b.	Yes. It was there that I met JOHN.	
	[Topic][Comment]	(=15)

(22a) is regarded as CT and (22b) TC, because the primary stress falls on X in (22a) and Y in (22b). *I met there* in (22a) can be regarded as Topic, because the proposition tells about *I met someone in Paris* and at the same time *there* in (22b) can be Topic because the proposition tells about an event in *Paris*. Therefore, it is certain that her proposal determines the type of the *it*-Cleft sentence. However, a critical point remains to be asked, considering (23)-(25). (-a) sentences are CT and (-b) sentences are TC. Their acceptability is summarized in (26).

- (23) a. A: I hear Tom took a trip to Paris. B:??It was Mary that John met there.
 - b. A: I hear Tom took a trip to Paris.
 - B: It was there that John met Mary.
- (24) a. A: I hear John met someone in Paris.
 - B: It was Mary that John met there.
 - b. A: I hear John met someone in Paris.
 - B: It was there that John met Mary.
- (25) a. A: Who did John meet in Paris?
 - B: It was Mary that John met there.
 - b. A: Who did John meet in Paris?

B:??It	was	there	that.	John	met	Mary.

(26)			
		a.(CT) [It be C that T]	b.(TC) [It be T that C]
	(23)	×	
	(24)		
	(25)		×

(26) shows that the (-a) sentence occurs in (24) and (25), but doesn't in (23), while the (-b) sentence occurs in (23) and (24), but in (25). This means that both types don't always occur in the given context. The problem is that Topic-based view can explain which type an *it*-Cleft sentence belongs to, but cannot explain which type is suitable in the context.

3 THEORETICAL BACKGROUND: FIGURE/GROUND SEGREGATION

In this section, I introduce Figure/Ground segregation first proposed by Rubin. To start with, Let us consider the well-known face/vase illusion shown in (27)

(27)



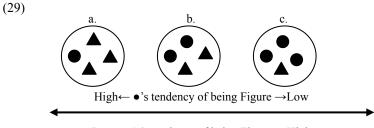
You will notice the two ways of perceiving the picture as two faces or a vase and cannot see the two at the same time. Still, you can easily switch between the two ways of looking at the picture. What lies behind the phenomenon is called Figure/Ground segregation. Figure/Ground segregation means that we cannot perceive an entity without segregating our stimulation or intention. The foreground in the shape is called Figure, and the background Ground. In (27), when you interpret the shape as two faces, the two faces become Figure. In contrast, when you interpret the shape as a vase, the vase becomes Figure. The situation that the shape has two possibilities and we can easily switch between the two as (27) is called Figure/Ground inversion.

Examining our visual experience more carefully, we notice that what we single out as Figure seems to have special properties. Representative properties are shown in (28). Figure is what arrests our attention more and Ground is what arrests our attention less.

- (28) Characteristics of Figure and Ground
 - a. Figure tends to have form or shape, whereas Ground tends to be formless.
 - b. Figure appears to lie in front of the ground, and Ground appears to extend more or less continuously behind it.
 - c. Figure is more likely to be identified and remembered, and to be associated with meaning.

(Oyama 2000)

In the next place, I consider tendencies of Figure/Ground segregation. (29) makes a difference from (27).



Low← **\(\Limes \)** 's tendency of being Figure →High

The most attractive graphic form in (29a) is , and thus becomes Figure, while the most attractive graphic form in (29c) is becomes Figure. In , and thus (26b), the attractive form is either , and thus either or can become or Figure, where the situation is the same as (27). The arrow below (29a)-(29c) indicates their tendencies. This means that it is easy to see two possibilities in (29b), but it is hard to see two possibilities in (29a) and (29c). In (29a), you can easily regard Figure, but the possibility that is Figure is much less.

The next subsection shows Talmy (2000) applying Figure/Ground segregation to languages. In 3.2, another aspect of Figure/Ground will be introduced. The aspect is related to the proposal in section 4.

3.1 Talmy (2000)

Talmy was a pioneer in applying Figure/Ground segregation to languages. Talmy (2000) focuses attention on the relationship between two participants and explains (30) and (31) with this phenomenon. (F) and (G) indicate Figure and Ground.

- (30) a. The bike (F) is near the house (G).
 - b. ? The house (F) is near the bike (G).
- (31) a. John (F) is near Harry (G).
 - b. Harry (F) is near John (G).

(Talmy 2000: 314-15)

The problem is why we can use two sentences for one situation. Both (30a) and (30b) are the same situation. Talmy (2000) states that the choice of two sentences is determiend by whether the object is construed as Figure or not. In (30), when the speaker construes *the bike* is more attractive or Figure, he says (30a), while when the speaker construes *the house* is more attractive, he says (30b). The same relation can be applied to (31).

However, there are a difference between (30) and (31). (30b) receives less acceptability, while (31b) doesn't. The reverse relation between Figure and Ground in (30) shows asymmetry, but the relation in (31) doesn't. The difference is due to tendencies. Some objects are easily construed as attractive. Talmy (2000) shows the definition of Figure and Ground as (32) and the characteristics related to tendencies as (33).

- (32) Definitional Characteristics
 - (i) Figure has unknown spatial (or temporal) properties to be determined.
 - (ii) Ground acts as a reference entity, having known properties that can characterize the Figure's unknown.
- (33) Associated Characteristics
 - (i) Figure
 - a. More movable.
 - b. Smaller
 - c. geometrically simpler (often pointlike)
 - d. more recently on the scene/ in awareness of greater concern/relevance
 - e. less immediately perceivable
 - f. more salient, once perceived
 - g. more dependent
 - (ii) Ground
 - a'. More permanently located
 - b'. Larger
 - c'. geometrically more complex
 - d'. more familiar/expected of lesser concern/relevance
 - e'. more immediately perceivable
 - f'. more backgrounded, once Figure is perceived
 - g'. more dependent

(Talmy 2000: 315-316)

The difference between (30) and (31) is explained by associated characteristics. In the case of (30a), the more attractive object is *the bike*, because *the bike* is smaller and more movable than *the house*. This meets the characteristics in (33). Thus the interpretation that *the house* becomes Figure is less acceptable. In contrast, (31a) and (31b) have the same acceptability, because both objects are human, and thus there is no difference. Further, the characteristics in (33) show only tendencies. Thus *the house is near the bike* is not always barred from the use, even if it contravenes the associated characteristics. In fact, the context in (34) allows the sentence to be acceptable.

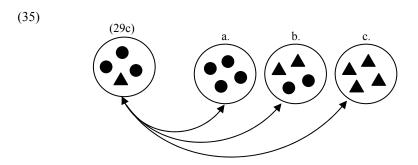
(34) The bike is ridden by a famous individual in a small town who parks it in the same spot known by all, and where I am trying to tell a new friend how to get to house. (Talmy 2000: 316)

The context in (34) allows *the house* and *the bike* newly to accord with two associated characteristics, namely, with "less versus more familiar" and "of greater/less concern". The additional characteristics permit their felicitous use as Figure and Ground respectively, in the new context.

The point is that Talmy (2000) applies the Figure/Ground segregation in psychological studies to languages. The reason why we can say two sentences toward a situation is due to the Figure/Ground segregation. He also represents characteristics of Figure in (33), just as psychological fields note in (28). In addition, some contexts allow a peripheral sentence to be acceptable within the limit of the definition in (32), even if the sentence contravenes the characteristics in (33).

3.2 Another Aspect of Figure/Ground Segregation

This subsection shows another aspect of the Figure/Ground segregation. The aspect appears when two shapes are compared. Let us consider (35).



The left graphic form in (35) is (29c) where is construed as Figure. However, when (29c) and each graphic form of (35a)-(35c) is compared, an interesting fact emerges. When (29c) and (35a) are compared, the attractive form in (29c) is the dissimilar to in (35a), while when (29c) and (35c) are compared, the in (35c). And when (29c) and (35b) attractive form in (29c) is the similar to are compared, the attractive form in (29c) is either the dissimilar in (35b) or the similar in (35b). The point is that it is certain for in (29c) to be the attractive form, and thus that is Figure. However, it can be two-type Figures, being compared with each graphic form of (35a)-(35c). One is related to similarity, and the other is dissimilarity. Hence, the former is called Similar Figure, and the latter Dissimilar Figure. The aspect is also gained from the psychological studies (Oyama 2000).

(36) a. 8 persons are in the room, but there is one unknown person.

b. 8 persons are in the room, but there is one known person.

Imagining each situation, you will notice that the most attractive person in (36a) is the unknown person and the most attractive person in (36b) is the known person. Thus, one person becomes Figure in that he is different from the others, but the statuses are different. One is Figure as unknown and the other is known. In other words, one is Dissimilar Figure, and the other is Similar Figure. This aspect will be applied to the *it*-Cleft Construction in 4.

4 Proposal

This paper proposes (37) as the function of the *it*-Cleft Construction.

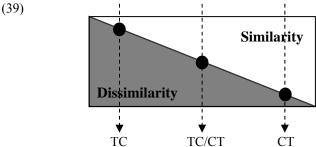
In the *it*-Cleft Construction, [it be X that Y], X is consistently Figure. However, Figure has two types, Similar Figure and Dissimilar.

Subsection 4.1 shows characteristics of Figure in the *it*-Cleft Construction, just as psychological studies present (28) and Talmy notes (33). What has to be kept in mind is that another aspect introduced in 3.2 is applied to the *it*-Cleft Construction. In the proposal, *X is consistently Figure* corresponds to in (29c) of (35) and two type Figures are based on the relationships between (29c) and (35a)-(35c).

4.1 The Similar/Dissimilar Figure Constraint

(38) shows a characteristic for X to be Figure. The constraint in (38) determines which Figure occurs in X in the given context. (39) shows the tendencies in (38).

(38) Similar/Dissimilar Figure Constraint: The type of X is determined by comparing the antecedent sentence with the *it*-Cleft sentence. When they share great similarity, X tends to be Dissimilar Figure, which corresponds to CT. In contrast, when they share great dissimilarity, X tends to be Similar Figure, which corresponds to TC. And when the degree of sharing is at about the same level, X tends to be either Dissimilar Figure or Similar Figure, which corresponds to CT and TC.



Four things have to be noted about the constraint. The first is to show how the constraint corresponds to another aspect in 3.2. The first part in (38), when they share much similarity, X tends to be Dissimilar Figure, is the same relation between (29c) and (35a). The next part, when they share much dissimilarity, X tends to be Similar Figure, is the same relation between (29c) and (35c). The last part, when the degree of sharing is at about the same level, X tends to be either Dissimilar Figure or Similar Figure, is the same relation between (29c) and (35b). Moreover, the constraint shows nothing but a tendency as (28) in psychological works and (33) in Talmy's work. Therefore, it-Cleft sentences that are not captured by the constraint are seen in actual contexts. In such cases, I consider that they are related to other factors as just (30b).

The second is the reason why the antecedent sentence is required. This is due to the fact that *it*-Cleft sentences are not interpreted by themselves. For example, the hearer cannot understand what (40a) and (40b) mean. In (40a), the hearer cannot understand what *that* refers to, and likewise in (40b), the hearer cannot understand what the *it*-Cleft sentence means.

(40) a. ??##That is beautiful.

b. ??## It was Mary that John met there.

Moreover, (40b) can be interpreted in various ways, according to context. This is shown in (41a)-(41c). (41a) has less acceptability, while (41b) and (41c) don't. Thus, acceptability of *it*-Cleft sentences is not determined without context.

(41) a. A: I hear Tom took a trip to Paris.

b. A: I hear John met someone in Paris.

c. A: Who did John meet in Paris?

The third is about similarity and dissimilarity. Similarity is shared elements between the antecedent sentence and the *it*-Cleft sentence. From the viewpoint of the speaker, that is what the speaker expects the hearer to access. In contrast, dissimilarity is non-shared elements and what the speaker expects the hearer not to access.

The fourth is concerned with the definition of Figure. Figure have been used as New information in some discourse studies, but Figure in this paper can include both New information and Old information. Figure in this paper means elements to which the speaker pays most attention. As mentioned above, Figure has two types. Similar Figure is related to similarity and Dissimilar Figure dissimilarity. The reason why both similarity and dissimilarity can be Figure is gained from necessities of discourse as well as the psychological viewpoint in (35). Let us consider (42). The lines mean propositions.



The left line means the proposition of the antecedent sentence and the right line the proposition of the following sentence. (42a) shows that the antecedent proposition and the posterior proposition share a little propositions and (42c) that they share few propositions. The shared proposition in (42a) is the similarity between the two. This similarity can be important because the posterior proposition cannot be interpreted without the similarity. This is realized in (43).

(43) a. A: I hear Tom took a trip to Paris.

B:??John met Mary.

b. A: I hear Tom took a trip to Paris.

B: There, John met Mary.

In (43a), the hearer doesn't understand what the sentence says, because (43aB) doesn't show similarity. On the other hand, the hearer can understand what the proposition says in (43b), because *Paris* can be the similarity between (43A) and (43bB). Thus similarity is so important that it can be Figure.

Dissimilarity is also considered important, because the posterior proposition doesn't show anything without dissimilarity. Let us consider (44).

(44) a. A: Who kissed Mary?

B: ?? Someone kissed Mary.

b. A: Who kissed Mary?

B: John kissed Mary.

In (44a), dissimilarity is not gained, because *someone* in (44aB) is implied by *who* in (44A). On the other side, there is dissimilarity between *who* and *John* in (44b). Thus, (44a) is less acceptable and (44b) isn't.

The two-type Figures above are supported by Gundel (1988). She proposes two principles: the Given Before New Principles (State what is given before what is new in relation to it) and the Things First Principle (provide the most important information first). The Given Before New Principle implies that similarity should precede dissimilarity and the Things First Principles implies that both similarity and dissimilarity can come first, because they are crucially important to how the message is understood.

The point in this section is that the Similar/Dissimilar Figure Constraint determines which Figure occurs in X. The two-type Figures are supported by necessities of discourse as well as the psychological motivation in (35).

5 ANALYSES

This section shows how the proposal and the Similar/Dissimilar Figure Constraint work well through examples. Typical examples are picked up in 5.1 and actually used *it*-Cleft sentences are taken up in 5.2.

5.1 Typical It-Cleft Sentences

(3) and (4) in section 1 are first picked up. After that, (23)-(25) used for indicating the problem of previous works are analyzed. Furthermore, *it*-Cleft sentences where *in my opinion* occurs in X are focused on. Let us consider (45).

(45) A: Who kissed Mary?

B: a. It's John that kissed Mary.

b. ??It's Mary/she that John kissed.

Examining similarity and dissimilarity between (45A) and (45B), the dissimilarity appears between *who* and *John*, and the similarity is except for them. Thus, the *it*-Cleft sentence has relatively great similarity. For this reason, the context in (45B) requires X to be Dissimilar Figure, according to the Similar/Dissimilar Figure Constraint in (38). The reason why (45b) has less acceptability is that *Mary* in (45b) belongs to similarity. This is inconsistent with the context required by the constraint. (46) shows the opposite story to (45).

- (46) a. The year 1979 was the lucky year of my life. The electronics company that I was working in decided to send me to university. And it was at that time that I met and later married my husband. (=4)
 - b. The year 1979 was the lucky year of my life. The electronics company that I was working in decided to send me to university. And? it was my husband that I met and later married at that time.

The dissimilar elements between the previous sentence and the *it*-Cleft sentence in (46) are everything except for *at that time* and *I*. Thus, the *it*-Cleft sentence has relatively great dissimilarity. From this, the context in (46) requires X to be Similar Figure, according to the Similar/Dissimilar Figure Constraint. Consequently, (46a) is acceptable, but (46b) has less acceptability, because *husband* indicates dissimilarity.

The justification of the proposal and the constraint is also gained through (47)-(49). They have been used to show problems with previous analyses.

(47) a. A: I hear Tom took a trip to Paris.

B: ??It was Mary that John met there.

b. A: I hear Tom took a trip to Paris.

B: It was there that John met Mary. (=23)

(48) a. A: I hear John met someone in Paris.

B: It was Mary that John met there.

b. A: I hear John met someone in Paris.

(49) a. A: Who did John meet in Paris?

B: It was Mary that John met there.

b. A: Who did John meet in Paris?

B: ??It was there that John met Mary. (=25)

Note that all (-a) sentences are CT and all (-b) TC. The differences are contexts indicated by each A of (47)-(49). (50) shows similar and dissimilar elements in each sentence.

(50)

	Similarity	Dissimilarity
(47)	Paris	I, hear, Tom, took a trip, John, met, Mary
(48)	Paris, John, met	I, hear, Mary
(49)	Paris, John, met	Mary

From (50), the *it*-Cleft sentence in (47) has relatively much dissimilarity, and thus the constraint requires X to be Similar Figure. In contrast, the *it*-Cleft sentence in (49) has relatively much similarity, and thus the constraint requires X to be Dissimilar Figure. And in (48), the degree of sharing is at about the same level, and thus the constraint requires X to be either Similar or Dissimilar Figure. These predictions are consistent with (26), which indicates acceptability judgments in (47)-(49). (26) is given below again for convenience.

(51)

,			
		a.(CT) [It be C that T]	b.(TC) [It be T that C]
	(43)	×	
	(44)		
	(45)		×

(=26)

I turn now to some *it*-Cleft sentences where *in my opinion* occurs in X. Takami (1988, 1991) notes that the phrase is less important information and thus never occurs in X. To be more accurate, the phrase *in my opinion* never occurs in X of CT, because he examines only CT, not TC and CC. This is shown in (52).

(52) a. *Whose opinion will Janet marry that young man in ?

b. *It is in my opinion that Janet will marry that young man.

(Takami 1991: 441)

He notes that the question-word in interrogative sentences and X in the *it*-Cleft Construction must be more important information. Therefore, *in my opinion* regarded as less important information cannot occur in interrogative sentences as (52a) and the *it*-Cleft Construction as (52b). However, the phrase can occur with a suitable context as (53).

(53) "Last Samurai" touched many people. But it is in my opinion that this is not a great movie, both for its story line and character development.

The *it*-Cleft sentence in (53) is judged to be TC as opposed to CT in (52b). Considering the usage, the phrase seems to be used when the speaker tells own opinion to someone's opinion in the previous sentence. Thus, the phrase can be the implicit similarity between them, and require the following message to be the speaker's opinion different from someone's opinion, namely dissimilarity. For this reason, the phrase requires X to be similarity and Y dissimilarity. This is consistent with the context required by TC and thus the phrase can occur in TC, but cannot in CT.

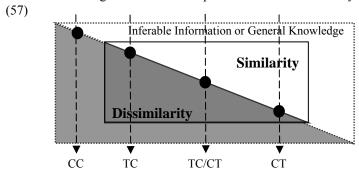
5.2 Actually Used It-Cleft Sentences

The examples in 5.1 have some similarities between the antecedent sentence and the *it*-Cleft sentence. However, there are many *it*-Cleft sentences that have no similarity linguistically. This section focuses on such *it*-Cleft sentences. Let us consider (54) and (55).

- (54) So I learned to sew books. They're really good books. It's just the covers that are rotten. (Prince 1978: 896)
- (55) ## It was in 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom. (=16)

The covers in (54) is not linguistically mentioned in the previous sentence, and likewise in 1979 in (55) has no similarity, because the sentence is used in the first line of the article. ## means that the sentence is used in the first line of the article. To capture such sentences, this paper adds the instruction in (56) to the Similar/Dissimilar Figure Constraint in (38). (57) summarizes both (38) and (56).

(56) Similarity includes information inferable from the context and general knowledge shared by the speaker and the hearer. X in TC is either a linguistic expression or inferable information, while X in CC is general knowledge which both the speaker and hearer can easily access.



In the case of (54), it is clear that the previous sentence and the *it*-Cleft sentence tell about *BOOK*, and thus *the cover* can be inferable from the context. From this, *the cover* can be Similar Figure and the sentence is judged to be TC. In (55), the *it*-Cleft sentence has no similarity, because the *it*-Cleft sentence is used in the first line of the article. From this, it is easily expected that the *it*-Cleft sentence consists of all dissimilar elements. However, *in 1979* can be similarity, because the referent time indicated by *in 1979* can be accessed by both the speaker and the hearer. That is to say, the phrase can function as a time-space for the hearer to associate the following proposition with it. Thus, *in 1979*, is regarded as general knowledge and the sentence is judged to be CC. The instruction that X in CC has to be general knowledge is supported by (58).

- (58) a. ##It's George Bush that delivered his first speech in 2001.
 - b. ?##It's ?John that delivered his first speech in 2001.
 - c. ?? ##It's a man that delivered his first speech in 2001.

The sentences in (58) are all CC. The concreteness of Xs sinks as (58a)-(58c). *George Bush* can be easily accessed, but *a man* cannot. Their acceptability judgments become more and more wrong in a sequential order. *George Bush* is regarded as general knowledge, but *a man* isn't. The reason why (58b) is marked by a single question is that the hearer can identify the referent if he knows the referent of *John*, but he cannot if he doesn't know that particular John.

In this section, I have dealt with typical *it*-Cleft sentences in 5.1 and actually used *it*-Cleft sentence in 5.2. Previous works don't explain which type is suitable in the context. This has been explained by the proposal, the Similar/Dissimilar Figure Constraint in (38) and the instruction in (56).

6 FURTHER ANALYSES

This section focuses on what constituent occurs in X. Previous works note that various constituents occur in X (Prince 1978, Quirk et al. 1986). Treating with all potential constituents in X is so difficult that I narrow the constituents down to NP, PP, adjectives and manner adverbs. NP and PP are regarded as typical constituents, but adjectives and manner adverbs as peripheral (Deline 1989, Kaltenböck 1993, Hedberg to appear). They can occur in X with suitable contexts (Yasui 1978). However, it is not clear what makes the constituent acceptable. Let us consider (59)-(61).

- (59) a. ## It was in 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom.
 - b. *## It was 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom in.
- (60) a. It's Marks and Sparks you're going to work for.
 - b. It's for Marks and Sparks you're going to work.

- (61) a. ? It was to the school that my father went yesterday.
 - b. It was the school that my father went to yesterday.

PP is preferable to NP in (59), while NP is preferable to PP in (61). In (60), both NP and PP can occur in X. This means that both NP and PP occur in X. However, what determines the choice of either NP or PP proves problematic. This also applies to adjectives and manner adverbs in (62) and (63).

- (62) a. *It's beautiful that she is.
 - b. Is it black that you take it, or with cream and sugar?

(Bolinger 1972: 113)

c. It's dark green that we've painted the kitchen.

(Quirk et al. 1986: 1385)

- (63) a. *It's loudly that he spoke.
 - b. The keys stopped turning. The advisors fell silent. Herman Godfrey was quiet for a long time. When he spoke it was slowly that he spoke.

 (http://www.conjunctions.com/webcon/jackson.htm)

In general, adjectives don't occur in X as (62a), but occur in some cases as (62b) and (62c). Manner adverbs also usually don't occur in X as (63a), but occur in some cases as (63b). Previous works note that they can occur with a suitable context, but the reason why the suitable context makes them acceptable is not clear.

Toward the problems, I will present the Region Constraint as another characteristic of Figure in the next subsection. In 6.2, the relationships between constituents and three types of the *it*-Cleft Construction will be observed. The subsection in 6.3 shows how our cognitive abilities and the relationships in 6.2 are correlated.

6.1 The Region Constraint

I add the Region Constraint in (64) to characteristics of Figure.

(64) The Region Constraint: X has a region.

The term, Region, is used in Langacker's sense (Langacker 1987, 1991). Following Langacker's works, a noun is characterized as a region in some domain. Nouns like circle, point, line, and triangle designate bounded regions in two-dimensional space. Moment, instant and period are bounded regions in time. In contrast, prepositions, adjectives, verbs and adverbs designate relations. For example, prepositions designate a relation between two participants. In the case of the ball on the table, the preposition on designates the relation between the ball and the table. The point is that a noun designates a thing characterized as a region in some domain, while the others designate relations associated with something. Thus, the Region Constraint implies that NP has a high frequency. This is supported by previous work with data corpus. Deline (1989) notes that 158 examples in 245 show that X is NP and likewise

Kaltenböck (1993) states that 38 examples in 50 show that X is NP. In addition, the Region Constraint is motivated by psychological studies. The characteristics of being Figure in (28) indicate that Figure has form or shape. This corresponds to Region. In the followings, I will show how the Region Constraint functions. Clear examples are the contrast between nouns and verbs in (65).

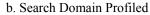
(65) a. A: Who kissed Mary?

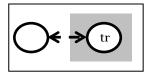
B: It's John that kissed Mary.

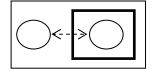
b. *It's teached English that he.

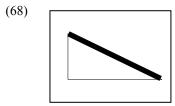
The Region constraint explains the unacceptability in (65b), because verbs don't designate a region. However, prepositions make a difference from verbs. Prepositions also designate a relation as verbs. Thus, the constraint predicts that PP doesn't occur in X. However, prepositional phrases may have a region in some cases. Let us consider (66) and (67). (66a) and (66b) correspond to (67a) and (67b). The bold line indicates profiling. This is a focused part when a word designates the meaning. For example, the word *hypotenuse* presupposes a right-angled triangle, and there one line of three is profiled as (68)

- (66) a. the book near the fire
 - Near the fire is almost too hot for comfort. (Langacker 1987: 176)
- (67) a. Relationship Profiled









The contrast between (66a) and (66b) shows that two *nears* presuppose the same relation associated with two participants, but make a difference on profiling. *Near* in (66a) profiles the relation between *the book* and *the fire*, while *near* in (66b) profiles a region in space indicated by *near the fire*. This is shown in (67a) and (67b). Thus prepositions designate a relation, but PP may have a region by profiling. Therefore, PP can occur in X in some cases and isn't excluded by the Region Constraint. (69) is the *it*-Cleft sentence where PP occurs in X.

(69) It's under the table that the ball was.

However, the story is not still end. Let us consider (70)-(72) as shown in (59)-(61).

- (70) a. ##It was in 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom.
 - b. *##It was 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom in. (=59)
- (71) a. It's for Marks and Sparks you're going to work.
 - b. It's Marks and Sparks you're going to work for. (=60)
- (72) a. ? It was to the school that my father went yesterday.
 - b. It was the school that my father went to yesterday. (=61)

The examples are problematic for the Region Constraint. Some cases are explained by the constraint. In 1979 in (70a) functions as a setting shown in Langacker (1987, 1991) or a space builder shown in Fauconnier (1994). The PP assigns a region or frame for the hearer to interpret the following proposition. For this reason, (70a) is acceptable. However, the NP, 1979 in (70b) doesn't function as PP in (70a). As for to the school in (72a), the lower acceptability is due to went to. Since the preposition to is strongly associated with the verb, go, they cannot be separated. As for (71), two possibilities are gained. The choice of the two depends on the speaker's construal. When the speaker construes that the PP has a region, PP is selected, while when the speaker construes that the PP doesn't have a region, NP is selected. Further analysis on PP and NP is beyond this paper. This is an issue for the future. The factor seems to be whether the constituent is regarded as an independent unit or not. For example, 1979 in (70b) doesn't function as a unit without in. To the school in (72b) would not be a unit, because to is connected with go strongly.

In the third step, Let us consider adjectives.

- (73) a. *It's beautiful that she is.
 - b. Is it black that you take it, or with cream and sugar?
 - c. It's dark green that we've painted the kitchen. (=62)

Yasui (1978) proposes that elements of X have nominal characteristics. The adjective in (73b) is a nominal usage, because *black* in (73b) is contrasted with *the coffee with sugar and milk*. The Region Constraint can also explain (73b), because there is a region implied by the adjective *black*. That is the black coffee. Moreover, the implied black coffee is NP, and thus has a region. This explanation is also applied to (73c). The place or region painted with *dark green* is obviously the kitchen. Thus the adjective *dark green* implies the painted place or region. That's why adjectives can occur in X, when the adjectives imply a region. The reason why (73a) is unacceptable is related to regions implied by the adjective *beautiful*. The adjectives in (73b) and (73c) have implicitly determined regions. The adjective in (73a) also has a region, but too many potential regions are gained. For example, she is beautiful in terms of her personal appearance, her character, her voice and so on. Thus, the region is not clear.

In the previous subsection, the Region Constraint has explained the distribution of NP, PP and adjectives. However, manner adverbs are different from them. The constraint doesn't explain manner adverbs, because they modify verbs and thus there is no room for a region to be associated with them. In the following, manner adverbs will be considered in detail.

As mentioned in (63), manner adverbs don't occur in X without a suitable context. To capture the distributions, I make an observation on what context makes manner adverbs in X acceptable. The way of the observation is to examine the relationships between them and three-type *it*-Cleft constructions. This leads to an interesting fact. Manner adverbs can occur only in CT. (74) is CT, because the *it*-Cleft sentence shares every element except for X with the antecedent sentence. (75) and (76) show that manner adverbs don't occur in TC and CC.

- (74) The keys stopped turning. The advisors fell silent. Herman Godfrey was quiet for a long time. When he spoke it was slowly that he spoke. (=63)
- (75) a. He slowly walks to me. *It's slowly that his work is like a baby learning to walk.
 - b. He slowly walks to me. It is just like a baby learning to walk.
- (76) *##It was slowly that he spoke.

As for TC, it is too hard to imagine the context with manner adverbs in X, because the X in TC shows similarity between the antecedent sentence or context and the *it*-Cleft sentence. In (75a), the interpretation that *slowly* showing the similarity between them is never gained. If the similarity about *slowly* appears, the sentence could be like (75b). The similarity is indicated by *it*, which means his slow walk. The reason why manner adverbs don't become similarity is related to the function in the sentence. In general, manner adverbs are strongly associated with verbs. Thus, when the same manner adverb occurs in both sentences, the manner adverb in X modifies the verb in the *it*-Cleft sentence, not in the antecedent sentence. In addition, similarity in X must have a referential property related to the antecedent sentence or context, but manner adverbs don't have such properties, because they modify verbs, and do not refer to something in particular. The same story is applicable to CC in (76).

Turning to other constituents, we get different distributions from manner adverbs. (77) is on NP and (78) is on PP. They can occur in all three types.² Each (-a) is CT and (-b) TC. And each (-c) is CC.

(77) a. A: Who did Mary hit?

B: It's John that Mary hit.

- b. So I learned to sew books. They're really good books. It's just the covers that are rotten. (=54)
- c. ##It's George Bush that delivered his first speech in 2001. (=58a)

 $^{^2}$ Of course, there are some cases that NP and PP cannot occur in some types as mentioned above in 5.1. The point is the fact that NP and PP can occur in all three types, while manner adverbs can occur only in CT.

- (78) a. A: Where did you get that hat?
 - B: It's in Italy that I bought it.
 - b. The year 1979 was the lucky year of my life. The electronics company that I was working in decided to send me to university. And it was at that time that I met and later married my husband.

(=4)

c. ## It was in 1979 that Margaret Thatcher became the first female Prime Minister of the United Kingdom. (=16)

As for the adjectives, they show a similar distribution to manner adverbs.

- (79) a. A: What color did you paint the kitchen wall?
 - B: It's dark green that I painted the kitchen wall.
 - b. I painted the canvas dark green. ??It's dark green that I painted the kitchen wall.
 - I painted the canvas dark green. The color was painted on our kitchen wall.
 - d. ??##It's eccentric red that ABC Company painted the kitchen in 1889.

Adjectives can occur in CT as (79a). However, adjectives in TC as (79b) and CC as (79d) have less acceptability. (79a) are accepted, because they follow the Region Constraint. However, the interpretation that X shows similarity in TC and CC is never gained. The reason why adjectives don't occur in TC as (79b) and CC as (79d) is the same as manner adverbs. In general, adjectives are not used by themselves, but are strongly associated with nouns. Thus, it is difficult for the adjective to be the similarity, because the adjective modifies a noun in the *it*-Cleft sentence, but doesn't refer to the adjective in the antecedent sentence. The story is shown in (79b) and (79c). *The color* in (79c) refers to *dark green* strongly connected with *the canvas*. Thus, *the color* can be similarity in the subsequent sentence, while *dark green* in (79b) cannot. Moreover, two *dark green*s in (79b) have the same sense, but cannot be identified with each other. The *dark green* in the previous sentence modifies *the canvas*, while the *dark green* in the subsequent sentence modifies the *kitchen wall*. The same story holds in (79d). The observations above are summarized in (80).

(80)

Subclass	X	X's constituent
CT	Dissimilar Figure	NP, PP, adjective, manner Adv.
TC	Similar Figure	NP, PP, ??adjective, *mannerAdv.
CC	Similar Figure	NP, PP, ??adjective, *mannerAdv.

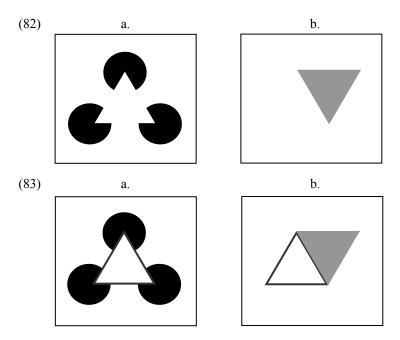
The Region Constraint works well in terms of NP, PP and adjectives. However, the constraint doesn't explain manner adverbs. Toward this, I have observed that NP and PP can occur in all three types, while adjectives and manner adverbs can only in CT.

6.3 Cognitive Abilities, Constituents and Contexts

This subsection shows why adjectives and manner adverbs can occur in the context required by CT and cannot in the context required by TC and CC. One of the cognitive abilities motivates the distributions. The related cognitive ability is shown in (81).



The shape in (81) is often used for indicating that we can perceive a deficient shape as a real shape and even deficient shapes can be Figure. In general, deficient shapes are formless, and thus it is unlikely that they could be Figure. The characteristic of being Figure in (28a) notes that Figure has form or shape, whereas Ground is formless. In (81), we can conceive the triangle as it is, though there is no clear triangle. It's the background that makes us perceive the shape. In other words, they can be Figure, given the suitable background. Thus, when the background is changed, the shape disappears as (82b) shows.



We can conceive the white shape as a triangle in (82a), while cannot in (82b). There is a gray triangle in (82b), but we cannot perceive the same white triangle in (82a). In contrast, if the shape has its boundary, we can perceive the same triangle in both (83a) and (83b).

It's the phenomenon that explains the reason why adjectives and manner adverbs can be Figure in CT and not in TC and CC. Their functions are to modify something and thus they are not independent elements, but deficient elements. This corresponds to the deficient shape in (81). The context required by CT makes them acceptable, because the context requires Y to be similarity, namely known information. Thus, the background is already established as black circles in (81). Therefore, though adjectives and manner adverbs are deficient, they can be Figure and occur in X. Moreover, the reason why they cannot occur in TC and CC is explained by (82) and (83). We cannot find the same white triangle in (82), while we can in (83). That is to say, there is no similarity between (82a) and (82b), but there is between (83a) and (83b). Deficient shapes cannot be similarity, because they cannot be interpreted as a real shape without a suitable background. Just as this, adjectives and manner adverbs cannot be similarity because of their deficiencies.

The point is that deficient shapes cannot be conceived as a real shape without established backgrounds. Just as this, adjectives and manner adverbs that are deficient in terms of their functions cannot be Figure without established contexts required by CT. Moreover, just as deficient shapes cannot be similarity in (82), adjectives and manner adverbs cannot be similar Figure required by TC and CC.

7 CONCLUSION

I have focused on the function of the it-Cleft Construction and proposed that X is Figure. However Figure has two types. One is Dissimilar Figure and the other is Similar Figure. The Similar/Dissimilar Figure Constraint determines which subclass tends to occur. Following the constraint, CT requires X to be Dissimilar Figure and TC and CC require X to be Similar Figure. The constraint is one of the characteristics of Figure. In addition to the characteristic, I have shown another characteristic. That is the Region Constraint. This constraint works well on what constituent occurs in X. Especially, the constraint works well on NP, PP and adjectives. It is noted that two constraints show just tendencies of being Figure. Thus, though manner adverbs cannot be captured by the Region Constraint, they can occur in X. The marginal usage is explained by our cognitive ability. Just as deficient shapes can be Figure when the backgrounds are established, deficient constituents as adjectives and manner adverbs can be Figure only when the backgrounds are already established. The backgrounds are realized by the context in CT. Moreover, just as deficient shapes cannot be perceived as similarity, adjectives and manner adverbs cannot be Similar Figure, which is realized by contexts TC and CC.

REFERENCES

- Bolinger, Dwight (1972) "A Look at Equations and Cleft sentences," in Evelyn Scherabon Firchow et al. (eds.), *Studies for Einar Haugen*, 96–114, Mouton, the Hague.
- Chafe, Wallace L. (1976) "Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View," in Charles Li (ed.), *Subject and Topic*, 25-55, Academic Press, New York.
- Chomsky, Noam (1957) Syntactic Structures, Mouton de Gruyter, Berlin.
- Declerck, Renaat (1988) Studies on Copular Sentences, Clefts and Pseudoclefts, Foris, Holland.
- Delin, Judy (1990) "A Multi-Level Account of Cleft Constructions in Discourse," *Proceedings of the 13th International Conference on Computational Linguistics, Coling* 90, 83-88.
- Fauconnier, Gilles (1994) *Mental Spaces: Aspects of Meaning Construction in Natural Language*, Cambridge University Press, Cambridge.
- Gundel, Janette K. (1988) "Universals of Topic-Comment Structure," in Michael Hammond et al. (eds.), *Studies in Syntactic Typology*, 209-239, John Benjamins, Amsterdam.
- Hedberg, Nancy (1990) *The Discourse Function of Cleft Sentences in English*, Ph.D. Dissertation, University of Minnesota.
- Hedberg, Nancy, and Lorna Fadden (to appear) "The Information Structure of *It*-Clefts, *Wh*-Clefts and Reverse *Wh*-Clefts in English," in Nancy Hedberg and Ron Zacharski (eds.), *The Grammar-Pragmatics Interface: Essays in Honor of Jeanette K. Gundel*, John Benjamins, Amsterdam.
- Jackendoff, Ray (1972) Semantic Interpretation in Generative Grammar, The MIT Press, Cambridge, Mass.
- Jespersen, Otto (1949) A Modern English Grammar on Historical Principles, VII, Ejnar Munksgaard, Copenhagen.
- Kaltenböck, Gunther (1993) "A Brief Discussion of *It*-Clefts in Spoken Texts," *Vienna English Working Papers* 2, 4-25.
- Lambrecht, Kund (1994) *Information Structure and Sentence Form: Topic, Focus and the Mental Representations of Discourse Referents*, Cambridge University Press, Cambridge.
- Lambrecht, Kund (1999) "Why Languages Have Cleft Constructions," Unpublished colloquium abstract, University of Texas, Austin.
- Lambrecht, Kund (2001) "A Framework for the Analysis of Cleft Constructions," *Linguistics* 39, 463–516.
- Langacker, Ronald W. (1987) Foundations of Cognitive Grammar vol.1: Theoretical Prerequisites, Stanford University Press, Stanford.
- Langacker, Ronald W. (1991) Foundations of Cognitive Grammar vol.2: Descriptive Application, Stanford University Press, Stanford.
- Oyama, Tadashi (2000) Sikaku Sinrigaku no Syoutai: Mie no Sekai eno Apurouti [Introduction to Visual Psychology: Approach to Visual Perception], Saiensu-Sya, Tokyo.
- Prince, Ellen (1978) "A Comparison of Wh-Clefts and It-Clefts in Discourse,"

- Language 54, 883-906.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik (1986) *A Comprehensive Grammar of the English Language*, Longman, Harcourt.
- Takami, Ken-Ichi (1988) "Preposition Stranding: Arguments against Syntactic Analysis and an Alternative Functional Explanation," *Lingua* 76, 299-335.
- Takami, Ken-Ichi (1991) "A Functional Approach to Preposition Stranding in English," in Heizo Nakajima (ed.), *Trends in Linguistics-S.A.R.*16, 414-453, Mouton de Gruyter, New York.
- Talmy, Leonard (2000) *Toward a Cognitive Semantics*, vol. I, The MIT Press, Cambridge, Mass.
- Yasui, Minoru (1978) Atarasii Kikite no Bunpou [A New Hearer-Oriented Grammar], Taisyuu-Kan, Tokyo.

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