Genericity in English Middle Constructions

You-Mee Sohn (Seoul National University)

Sohn, You-Mee. 2002. Genericity in English Middle Constructions. SNU Working Papers in English Language and Linguistics 1, 109-126. Middle constructions in English show several peculiar properties. This paper analyzes English middle constructions with respect to their generic meaning. It proposes that the genericity in English middle constructions is distinguished from that of other generic sentences, in that subjects in middles are "differentiated" from other entities. By proposing a constraint, we provide an account of well-formedness of middles in regard to adverbial modification and adjunct middles, which have not been properly explained. In addition, this paper attempts to clarify the genericity of an implicit argument in middles. The implicit argument, which is typically an agent, generally has generic meaning. We show that the assignment of a generic feature to the syntactically unrealized external argument allows us to interpret middle sentences with a generic agent except when they appear with a for-phrase. (Seoul National University)

Keywords: middle constructions, genericity, characterizing property, well-formedness constraint, implicit argument

1. Introduction

English middle constructions are involved with the corresponding transitives and ergatives as follows:

- (1) a. John broke the base.
 - b. This base breaks easily.
 - c. This base broke.

(1a) is a sentence with a transitive verb, (1b) is a middle sentence with the same verb, and *broke* in (1c) is an ergative verb.

The English middle verbs and ergative verbs have the same form as the corresponding transitive verbs but take the objects of transitive verbs as their subjects. The meaning is closer to that of passive verbs. Though middles are similar to ergatives syntactically like this, middles can be distinguished from er

gatives in some aspects. While ergatives represent a temporary event, middles are said to have some generic meaning. Thus, we try to clarify the meaning that English middle constructions have with respect to genericity.

This paper, first of all, introduces the basic properties of the English middle constructions roughly in the next section. In addition, we will review some of the previous approaches. In section 3, I will propose a semantic constraint for the English middle constructions, which properly shows the peculiar meaning of the middle constructions. Then, the genericity of the implicit argument in middles will be treated in section 4 including the analysis of *for*-phrases.

2. Review of Previous Studies

It is well known that middle constructions show some peculiar properties compared to the corresponding constructions. In this section, I introduce some properties of middles that are already agreed on by most linguists and review some of the previous studies on middles, which are the base of my own analysis.

2.1 Principal Properties of Middle Constructions

English middles, like stative verbs, do not describe actual events and so they do not appear in imperative or progressive forms as the following examples demonstrate:

(2) a. *Bureaucrats are bribing easily.b. *Bribe easily, bureaucrat! (Keyser & Roeper 1984)

As the examples show, middle sentences cannot represent specific events and they are usually used with simple present tense:

> (3) a. This book reads easily. b. The book sells well.

Second, English middles have an implicit argument that is typically an agent. The presence of the implicit argument in middles can be demonstrated if we compare middles with ergative predicates that do not have an implicit argument. While ergatives can appear with the phrase *all by itself*, middles cannot:

(4) a. The boat sank all by itself.b. *This book reads easily all by itself. (Fagan 1992)

As Keyser & Roeper (1984) and Fagan (1992) point out, the phrase all by itself means 'totally without external aid'. Thus, ergatives, which are agentless, can appear with this phrase whereas middles do not allow it.

However, the agent in middles is different from that in passives. The middles are unacceptable with a *by*-phrase or with a purpose clause:

- (5) a. The wall was painted on purpose.
 - b. The wall was painted by Harry.
 - c. The wall was painted to protect it against the rain.
- (6) a. *Wall paints easily on purpose.
 - b. *Wall paints easily by Harry.
 - c. *Wall paints easily to protect it against the rain.

(Ackema & Schoorlemmer 1995)

As shown in (5) and (6), middle sentences cannot appear with agent-related adverbials or with purpose clauses.¹

Third, the English middles generally appear with adverbs that modify the predicates, without which most middles are unacceptable:

(7) a. This book reads easily.

b. *This book reads.

Manner adverbials are the most common modifiers in English middles and locative adverbials are acceptable as well. But, the agent-oriented adverbs cannot appear in middles.

However, the adverbials are not syntactically necessary factors but semantically necessary ones in English middles since every middle

¹ This phenomenon seems to be more related with the fact that middles are non-eventive as referred above. Since these phrases are involved with specific time, they cannot appear with stative verbs.

sentence does not require adverbial modification, which will be treated again in the next section.

2.2 Review of Some Previous Approaches

There have been various studies on English middle constructions. They are roughly divided as movement approaches and lexical approaches.

Keyser & Roeper (1984), Roberts (1987), Carrier & Randall (1992) take the movement approaches. They basically assume that middle formation is similar to passivization. Their basic arguments are much the same: the external argument is suppressed in some way and the direct internal argument moves to the subject position in syntax. Their focus is usually on syntactic mechanism of middle formation and they use various syntactic tools like PRO.

Actually, they give relatively less explanation for the meaning of middle sentence and the semantic constraint for middle formation. To cover the limit of the syntactic analysis, they usually assume the Affectedness Constraint, which says that only the affected argument can be the subject in middle sentences.² However, they do not explain why the meaning and properties of middles are different from those of passives. Moreover, there are some counterexamples like the following:

(8) This book reads easily.

In (8), the subject *this book* is not affected but this middle sentence is acceptable.

Now let's look at the lexical approaches by Fagan (1988, 1992), Tenny (1992) and Ackema & Schoorlemmer (1995).

Fagan and Tenny, using the verb classification of Vendler (1967), suggest some aspectual constraints on the verb classes that can form middles respectively.³ According to Fagan (1992), only the activity and the accomplishment verbs form acceptable middles in English. But there are some counterexamples for this explanation as follows:

² Though Keyser & Roeper (1984) used the notion 'theme' and Carrier & Randall (1992) used the term 'direct internal argument, basically their assumption seems to be the same. 3 Vendler, Z. 1967. *Linguistics in Philosophy*. Cornell University Press, Ithaca, New York.

- (9) a. Glass breaks easily.
 - b. Bombs explode easily. (achievement verbs)
- (10) a. *Packages carry easily (to New York).
 - b. *The mountain sees easily.

(activity and accomplishment verbs)

Tenny, with the notion 'delimitedness', which is a modified affectedness constraint, says that only the accomplishment verbs and the achievement verbs can form middles. Her explanation also meets some counterexamples:

- (11) a. The car drives easily.
 - b. This pipe smokes nicely. (activity verbs)
- (12) a. *English learns easily.
 - b. *This article produces easily. (accomplishment verbs)

Ackema & Schoorlemmer (1995) suggest a constraint with the notion of 'action tier', which says that only the verbs with action tier can form middles. While Fagan and Tenny deal with verb classification in terms of the relation between a verb and its internal argument, Ackema & Schoorlemmer regard the external argument as an important factor: whether it is and Actor or not. But, there are some verbs with action-tier that do not form middles as follows:

- (13) a. *This book buys well.
 - b. *That issue discusses easily.
 - c. *This ball hits well.

Though these lexical approaches are very persuasive explanations in that they provide some semantic factors for middle formation, they have some limits. As shown above, they have many counterexamples to the proposed condition respectively. In addition, there are two problems both movement approaches and lexical approaches have in common: adjunct middles and adverbial modification, which will be discussed in the next section.

3. Characterizing Property

It has often been said that middle sentences have generic meaning. To clarify the 'generic' meaning of middle constructions, we first introduce the classification of 'genericity' and predicates.

According to Carlson & Pelletier (1995), there has been a distinction between two kinds of 'genericity'. The first is referring to a *kind*, in which NPs do not denote some particular entity but refer to a kind as underlined NPs in (14).

- (14) a. The lion is a predatory cat.
 - b. Lions are predatory cats.
 - c. Gold is a precious metal.

Actually, this kind of genericity is usually regarded as having generic interpretation.

The second is a kind of general property, which represents regularity or a characterizing reading and the middle construction belongs to this group like the following:⁴

- (15) a. John <u>usually/always/often/rarely/never</u> smokes a pipe. (adverbs)
 - b. John used to smoke a pipe. (an auxiliary in the past tense)
 - c. John is a pipe smoker. (agentive nouns as predicates)
 - d. This book is readable. (adjectives using -able)
 - e. This shirt washes easily. (middle voice)
 - f. John <u>has an inclination to</u> smoke a pipe. (idiosyncratic ways)

As shown in (15), this type of genericity is not as simple as the generic NPs. In this type, some specific words or phrases enforce a characterizing reading. Thus, they summarize some properties concerning characterizing genericity as follows:

⁴ Carlson & Pelletier mentioned that there can be some overlap between the two kinds of generic sentences in the case that generic NPs are the subjects in the characterizing type sentences like the following:

⁽i) a. Eggs mix well with cream.

b. Crystal vases break easily.

- (16) a. The property described by the verbal predicate is an "essential" property of some entity mentioned in the sentence. b. The subject (or other NP) of a characterizing sentence may be any type of NP.
 - c. Characterizing predicates may be habitual or lexical.

Thus, one of the most important points of this genericity may be said that they do not need generic NPs as their subjects.⁵

Middle constructions share the characterizing properties with other sentences of the same kind, but are distinguished from other constructions in some aspects. First, the lexical item (word or phrase) that gives characterizing meaning has no morphologically distinguished form in middles. In other words, the middle verbs have the same form as transitive verbs and so only with the verb form we cannot judge a sentence as a middle. Second, English middles are more closely related with events than other generic sentences. The following sentences show that middles can be used as progressive, though restricted.⁶

(17) a. This manuscript is reading better every day.b. Bureaucrats are bribing more than ever in Reagan's second term. (Roberts 1987)

Third, the tense of middle sentences is almost restricted to present unlike those of other constructions, which property is similar to that of the kind-referring generic sentences.⁷

⁵ This distinction is similar to the one discussed in Fagan (1988), who pointed out that middles differ from other generic propositions in that their surface subject are not required to be generic as in the following examples:

⁽i) a. This book reads easily.

b. This cow eats hay.

⁶ This, of course, does not mean that middles are eventive but just means that middles are different from other generic sentences, which cannot be used in progressive form under any condition like the following:

⁽i) a. *Lions are being predatory cats.

b. *Gold is being a precious metal.

⁷ Wagner (1977) points out that tenses other than the present are used in middles in very limited cases. This restriction of tense is not strict in other languages than English

- (18) a. John usually smoked a pipe.
 - b. The book was readable.
 - c. ?The shirt washed easily.

Finally, the characterized NPs are restricted to subject position in middles and the characterizing effect is "stronger" than in other sentences. Let's compare the following sentences:

- (19) a. John usually smokes a pipe.
 - b. This shirt washes easily.

While (19a) just describes the property of the subject *John*, (19b) seems to differentiate the subject *this shirt* from other shirts that cannot be washed easily.

Then, what is the semantic core of the middle constructions and how can it explain the peculiar properties middles have? As shown above, the predicates in middles play a role to distinguish the subject from the other entities. Thus, I propose the semantic constraint for middle constructions like the following:

(20) Well-Formedness Constraint for English Middle Constructions⁸

In middle sentences, the predicate phrase VP

i) must have the effect of differentiating the subject from other

and German. Thus, it seems that this restriction is not from the semantic ground but from the syntactic ground to avoid confusion that English middles have no morphologically distinguished form and thus it is difficult to distinguish them from ergatives in the past tense.

8 Recently, I found out a very similar approach to mine in Dowty (2001). He represents the characterization of middle constructions' meaning like the following:

(i) The Middle Verb Construction compares one object (implicitly) to other objects indirectly: via comparing the an ACTION performed on the first object, to the same action performed on the other objects; the actions are compared with respect of ease, difficulty, time needed, etc. in performing them.

Though this representation is basically much the same as my semantic constraint, I independently reached this conclusion and include the notion of genericity. In addition, by making a constraint, the acceptability of middles can be easily explained.

entities in the performative way or grade the VP implies, and

ii) must describe the general property of the subject.

(20i) means that the most important role of a middle sentence is to describe the distinguished property of the subject without regard to other factors (usually the underlying subject).9

This becomes more evident from the usage of middles. In general, middle sentences are not much used in colloquial English. They often appear in instructions or advertisements of some products. In advertising some products, they have the premise that anyone with respect to the products can use them and the ability or characteristics of the user are not important. Let's consider the following sentence:

(21) This umbrella folds up in the pocket. (Fagan 1992)

This sentence can be used to advertise some kind of umbrella since all umbrellas are not folding umbrellas and folding can be a merit of an umbrella.

From Dowty (2001), we can get another good example that explains the meaning of middles well in comparison with the *tough*-construction as follows:

- (22) a. The ceiling in this room touches easily (*because I have a tall ladder).
 - b. The ceiling in this room is easy to touch (because I have a tall ladder).

The middle sentence in (22a) represents the general property of the subject *the ceiling* and differentiates it from other ceilings. Thus, the ability of the 'toucher' must not play an important role and *because*-clause is not allowed. On the other hand, *tough*-construction does not have such an implication and *because*-clause is acceptable.

⁹ This is not much different from the concept 'responsibility' of Van Oosten (1986) basically, which is introduced again in Fagan (1992). She uses the concept for the distinction of buy and sell, which show different acceptability in middle formation. But, in this paper, the semantic constraint is applied to all middle sentences and is not a vague pragmatic factor.

By establishing the constraint (20), we can not only clarify the meaning of the middles but also explain two important properties of middles: adverbial modification and adjunct middles. As shown above, most of the English middle sentences have adverbial modification without which the sentences become unacceptable. But, there seems to have been no satisfactory explanation on this property. With the well-formedness constraint, the acceptability of middle sentences related to the presence of modifier can be easily explained. Let's look at the sentences shown in (7) again in (23).

(23) a. This book reads easily. b. *This book reads.

(23a) means that 'this book can be read easily compared with other books which cannot be read easily' and implies that this book is distinguished from other books. Thus the VP reads easily have the effect of differentiating the subject from other books and the sentence makes a well-formed middle construction. On the other hand, in (23b), the subject this book cannot be distinguished from other books because every book has the property (or purpose) to be read. Let's look at some more examples:

(24) a. Chickens kill easily. b. *Chickens kill. (Roberts 1987)

These sentences can be explained in the same way. *Chickens* belong to animals and have the possibility to be killed. And thus the *chickens* cannot be distinguished from other animals (or living things) only with 'kill' and must be modified by some adverbs.

But, adverbs are not necessarily required in every middle sentence, which is also well explained with this constraint. The constraint shows that the adverbs in middle sentences are not the syntactic factor but the semantic factor and thus can be replaced by some other informative factors in the sentences. Let's first consider the case in which pragmatic factors play the role of adverbs:

(25) a. Bureaucrats BRIBE.b. The bread DOES cut. (Roberts 1987)

In these examples, stress plays the role to give distinguished information. They mean that 'bureaucrats really bribe' and that 'the bread really cut' respectively.¹⁰

In very restricted cases, middle sentences can be used with no adverbial modifier at all:

(26) a. This dress buttons.

- b. This dress won't fasten.
- c. Glass recycles.
- d. 15" breast-plate ties on.

(Fagan 1992)

(26a) means that *this dress* is fastened with buttons rather than with zippers or with any other fasteners. That is, the verb *button* forms a middle sentence without any additional modifier whether syntactic or semantic, since the verb itself has the ability to characterize and to differentiate the subject. Of course, this is possible because every dress is not buttoned. In (26b), negation plays the role of adverbs and thus the subject *this dress* is distinguished from other dresses that are fastened. (26c) is acceptable since all materials can be classified according to whether they can be recycled or not. (26d) implies that only 15" breast-plate not 13" or 17" can be tied on. Here, the contrastive meaning makes the middle formation possible.

The second phenomenon that can be easily explained with the well-formedness constraint is adjunct middle formation, on which there have been very few studies.¹¹ In the adjunct middles, an adjunct (usually instrument adjunct) is used as the subject of the verb. We can find this kind of sentences in English, though not very common:

⁽²⁷⁾ a. The knife cuts well.

¹⁰ Keyser & Roeper (1984) also point out in their footnote that a sentence like *They bribe* with a contrastive intonation pattern can be interpreted as the middle. Though they use this phenomenon as the evidence that an adverb is not necessarily present in middles, this confirms again that what middle constructions require is not the adverbs as a syntactic category but as some semantic factors that can differentiate the subject from other entities. 11 In some articles, they say that there are no adjunct middles in English. However, though the number of the sentences of this kind is very limited, we may call the middle sentences whose subjects are from the adjuncts not from the objects (complements) adjunct middles.

b. The aluminum pan bakes higher and browns evenly. (Van Oosten 1986)

The subjects of the above middle sentences are from adjuncts not from the objects when the verbs are used as transitives. The subject of (27a) is the instrument and the subject of (27b) is the locative.

These adjunct middles cannot be explained by any account shown above, especially by syntactic approaches and thus they have been excluded from most of the discussions on middle constructions. However, adjunct middles are obviously a type of English middles and have to be dealt with in consistence with other middles. From this view, the semantic well-formedness constraint represented above gives a proper explanation since it requires only the semantic property of the superficial subject of the middle sentences: it must be differentiated from other entities. With this constraint, adjunct middles are easily included into middle constructions.

There still remain two important problems to solve in explaining adjunct middles as the same line with other middles. First, the process of middle formation must be different from that of middle sentences involved with direct internal arguments. Therefore, we have to provide a unified mechanism that can account for both kinds of middles or to provide separate mechanisms, which may be the second best, though. Second, the English adjunct middles are much more limited than general English middles and we must give some proper constraint for them.

4. Generic Agency of Implicit Argument

Now, let's consider another factor for generic meaning of middle sentences. Fagan (1992) says that in middles, unlike other generic sentences, the underlying subject of the middle is interpreted generically. She interprets the implied argument in middles as 'people in general' and so the sentence (28a) can be paraphrased as in (28b).

¹² Chung (2000) proposed causative approach for the English middles including adjunct middles. According to his analysis, English middles are causatives and "when an internal argument of a transitive verb and the event denoted by the verb are in the causative relation, the verb may form a middle." This approach seems to be similar to 'responsibility' of Van Oosten (1986) and has some problems that are not treated in this paper. See Sohn (in preparation).

- (28) a. This book reads easily.
 - b. People, in general, can read this book easily.

In most cases of middle sentences, this paraphrasing is possible. However, there are some sentences in which this interpretation is not possible as follows:

- (29) a. This book reads easily for PhD students.
 - b. *People, in general, can read this book easily for PhD students.

In this case, the meaning of (29a) is much closer to 'PhD students can read this book easily'.

With respect to this type of sentences, we need to examine a movement approach by Stroik (1992, 1999). He claims that the external argument of middle verbs is not syntactically suppressed but is represented as a VP adjunct. He takes the middle sentences with *for-PPs* as the evidences as follows:

- (30) a. Books about herself read quickly for Mary.
 - b. *Books about oneself read quickly for Mary.
 - c. *Books about himself read quickly for Mary.
 - b. *Books about themselves read quickly for Mary.

According to him, the NP in *for-PP* is the agent of the middle sentence and the reflexive must agree with it.¹³

Ackema & Schoorlemmer (1995) refute this explanation illustrating the following:

- (31) a. That book is too thick for Mary.
 - b. As far as translation is concerned, no Latin text poses a problem for Bill. (Ackema & Schoorlemmer 1995)

Since this kind of for-PP can appear in other sentences than middles

¹³ Though Stroik argues that middle formation is syntactic and the external argument must be realized as a VP adjunct to satisfy binding condition and introduces PRO for the representation of middle, I will leave open the binding problem in this paper.

as in (31), according to them, the NP in *for*-PP cannot be interpreted as the agent.

However, if we simply assume the *for*-PP can appear independently of middle sentences, the unacceptability of the sentences in (30) is not explained. Moreover, the meaning of *for*-PPs in (31) is not much different from that in middles. For example, (31a) implies that 'if Mary reads that book, it is too thick'. Thus, I infer that the NP in *for*-PPs in middles is the 'potential agent': though it is not a real agent, it has a possibility of being an agent when the event implied by the predicate happens.¹⁴

This becomes more evident if we compare *for*-PPs with *by*-PPs in passives. *By*-PPs generally represent the agent and thus are used in passive constructions, which require a real agent related to real events. The preposition *by* is also used in other constructions or phrases like *the destruction by the enemy* and the role is the same. Thus, the argument is not persuasive that *for*-PP cannot be an agent only because *for*-PPs are used in other constructions than middles.

By defining *for-PP* as 'potential agent', the second problem of Stroik (1992) raised by Ackema & Schoorlemmer (1995) can be solved. They say that the *for-PP* must be possible in every middle sentence if Stroik is right but this is not true illustrating the following example:

(32) These books don't sell (*for the average shopkeeper).

However, it is well known that the middle sentences with the verb *sell* like (32) are exceptionally related with an event.¹⁵ Thus, it is natural for this kind of middles not to appear with *for*-PP.

There are other differences between *by*-PPs and *for*-PPs. Though in some cases other thematic roles than Agent can appear in *by*-PPs as in (33), *for*-PPs do not allow it. This clarifies the role of *for*-PPs as 'potential

¹⁴ Ackema & Schoorlemmer (1995) call this PP an Experiencer PP and Zribi-Hertz (1993) terms it as 'point-of-view'.

¹⁵ See Fagan (1992). P.55.

⁽i) Harlequin Romances, worldwide, sell six copies a second.

She says that "these middles do not indicate how Harlequin Romances can be sold, they indicate how they are sold. Like all middles in English, these middles are not eventive. However, they involve events in a way that most middles do not. They generalize over events."

agent' more clearly.

(33) a. Bill was killed by Mary. (Agent)

b. The package was sent by John. (Source)

c. The letter was received by Bill. (Goal)

d. That Professor is feared by all students. (Experiencer)

Finally, let's consider the most important distinction between *by*-PPs and *for*-PPs, which is related with genericity. While the interpretation of the agent can be different according to the context in passives, the (potential) agent is always interpreted as generic without a *for*-PP in middles.

- (34) a. The lion was killed.
 - b. People, in general, killed the lion.
- (35) a. This book reads easily.
 - b. People, in general, read this book easily.

Whereas (34a) is never interpreted as (34b), (35a) always has the meaning (35b).

Thus, I propose a middle formation rule as follows, which is a revision of Fagan (1988).¹⁶

(36) For a middle verb, assign [+generic] to the syntactically unrealized external θ ole.

The difference from Fagan's is that (36) does not mention the externalization of the direct theta-role. In addition, since the generic feature is assigned only to the syntactically unrealized external theta-role, the realized 'potential agent' - the NPs in *for*-PPs - do not have this feature. Thus by (36), we can explain the generic agency in middles

¹⁶ The middle formation rule proposed by Fagan (1988) is as follows:

⁽i) a. Assign arb to the external θ ole.

b. Externalize the direct θ ole.

¹⁷ In HPSG framework, the crucial property of middle verbs such as valence, argument structure can be represented with the lexical rule. See Sohn (in preparation), in which I try to make an elaborate lexical rule including both syntactic and semantic information. In this paper, I focus on the semantic property of middles with respect to generic meaning.

without adopting additional syntactic category like PRO in Stroik (1992, 1999).

Actually, *for*-PPs appear very rarely in middle sentences compared to *by*-PPs in passives. In addition, there seems to be a little difference in the acceptability in the following sentences:

(37) a. Latin texts do not translate easily for Bill.b. This kind of cheese cuts easily for experienced cooks.(Rapoport 1999)

Assuming the two sentences are all grammatical, (37b) looks more natural than (37a).¹⁸ This implies that the more generic the potential agent is, the more acceptable in middles. This can be explained with regard to the well-formedness constraint (20ii) that middle sentences must describe the general property of the subject. When the potential agent is specified concretely as in (37a), it looks rather difficult to represent general property of the subject. Thus, it is less acceptable than (37b), in which the potential agent is a group with a common property. On the contrary, the following sentences are not acceptable:

(38) a. ??This book translates easily for general people. b. ??This book reads easily for general people.

This seems to be due to redundancy: since the sentences already imply that the agents are 'people in general' without *for*-PPs, there is no need of the *for*-PPs again.

Therefore, the implicit argument in middle sentences is basically interpreted generically and in cases with *for*-phrases, the NP in *for*-PP can be interpreted as the potential agent.

5. Conclusion

In this paper, I have tried to clarify the core meaning of English middle constructions. I claim that the genericity in English middles is related

¹⁸ Most of English natives I have consulted said that middle sentences cannot be used with *for*-PPs at all or that though it is possible, it looks very unnatural with PPs like *for Tom*.

with two factors: one is its characterizing property and the other is the generic implicit argument. Considering the characterizing property, I proposed a semantic constraint, which could be a proper answer for the acceptability of middle sentences. For the interpretation of the implicit argument, I used a generic feature. By assigning this feature to the syntactically unrealized external argument, the potential agent can be interpreted generically except for the few cases that there appears a for-NP phrase.

References

- Ackema, P. & M. Schoorlemmer. 1995. Middles and nonmovement. Linguistic Inquiry 26: 173-197.
- Carlson, G. N. & F. J. Pelletier, eds. 1995. *The Generic Book*. Chicago: The University of Chicago Press.
- Carrier J. & J. H. Randall. 1992. The Argument Structure and Syntactic Structure of Resultatives. *Linguistic Inquiry* 23: 173-234.
- Chung, T. 2000. Argument Structure of English Intransitive Verbs. *Studies in Generative Grammar* 10.2: 389-425.
- Dowty, D. 2001. The Semantic Asymmetry of 'Argument Alternations; (and Why it Matters). ms. http://ling.ohio-state.edu/~dowty/.
- Fagan, S. 1988. The English middle. Linguistic Inquiry 19: 181-203.
- Fagan, S. 1992. The Syntax and Semantics of Middle Constructions: A study with special reference to German. Cambridge: Cambridge University Press.
- Keyser, S. J. & T. Roeper. 1984. On the middle and ergative constructions in English. Linguistic Inquiry 15: 381-416.
- Rapoport, T. R. 1999. The English Middle and Agentivity. *Linguistic Inquiry* 30: 147-154
- Roberts, I. 1987. The Representation of Implicit and Dethematized Subjects. Dordrecht: Foris.
- Sohn, Y. In preparation. *On Middle Constructions in English*. PhD dissertation. Seoul National University. Seoul.
- Stroik, T. 1992. Middles and movement. Linguistic Inquiry 23: 127-137.
- Stroik, T. 1999. Middles and Reflexivity. Linguistic Inquiry 30: 119-131.
- Tenny, C.. 1992. The Aspectual Interface Hypothesis. In *Lexical Matters*, eds. I. A. Sag & A. Szabolsci, 1-27. Stanford, CA: CSLI Publications.
- Van Oosten, J. 1986. The nature of subjects, topics and agents: A cognitive explanation. PhD Dissertation. University of California, Berkeley.
- Zribi-Hertz, A. 1993. On Stroik's Analysis of English Middle Constructions. *Linguistic Inquiry* 24: 583-589.

126 Sohn, You-Mee

You-Mee Sohn youmees@freechal.com