

# From Opposition to Cooperation: Semantic Change of *with*

Seongha Rhee

(Hankuk Univ. of Foreign Studies & Stanford Univ.)

Rhee, Seongha. 2004. From Opposition to Cooperation: Semantic Change of *with*. *Korean Journal of English Language and Linguistics* 4-2, 151-174. A historical investigation reveals that English preposition *with* underwent a change from OPPOSITION to ASSOCIATION and further to ACCOMPANIMENT, where the first stage shows peculiarity in that the two concepts involved comprise an unusual set to form an extensional chain. Intrigued by this oddity, this paper aims to investigate the semantic structure of English preposition *with* from a grammaticalization perspective. We review mechanisms and models of semantic change and evaluate their adequacy with the semantic structure and change shown by *with*. Drawing upon the observed fact that *with* underwent the apparent antonymic semantic change, it is argued that such semantic change mechanisms as metaphor, metonymy, subjectification, and generalization have difficulties explaining the change, and that only the Frame-of-Focus Variation can effectively account for this peculiar change type. In terms of semantic change models, we argue that the Bleaching Model cannot effectively provide an explanation; that the Loss and Gain Model has problems in explaining the motivation of change directions; that the Metonymic-Metaphoric Model cannot be assessed at the current level of investigation; and that the Overlap Model and the Prototype Extension Model excellently account for the macro-level changes.

**Key Words:** semantic structure, preposition *with*, grammaticalization, meaning change, mechanisms

## 1. Introduction

This paper investigates the semantic structure of English preposition *with* from a grammaticalization perspective to determine the nature of its diachronic semantic change and its semantic network, and to evaluate the semantic change

mechanisms that have been widely discussed in current grammaticalization studies.

Prepositions as a grammatical category in English have an important status because they belong to a category that occurs with a high frequency, which is well illustrated in the fact that about 8 of the top 20 high frequency items are prepositions (Rhee 2004b). Furthermore, about 20 prepositions, accounting for the majority of the prepositions actively used in Modern English, belong to the top 100 high frequency items. The preposition *with* is the fifth most frequent item among prepositions (Johansson & Hofland 1989, British National Corpus) and the 14th of all English words according to the LOB Corpus<sup>1</sup>).

Semantic designations for individual words in English vary depending on lexicographers. This study largely draws on *Oxford English Dictionary* (1991, 2nd Edition, henceforth OED) for data and semantic designations, even though labels for domains or individual semantic designations do not follow OED for the sake of expositional clarity and convenience.

## 2. Preliminary: Mechanisms and Models

In semantic studies various notions have been proposed by the theorists, some of which are essential in discussing semantic aspects of linguistic forms. This paper largely focuses on the semantic change mechanisms and the models that have been proposed in grammaticalization studies, and we briefly review these two areas before we go into the analysis of preposition

---

<sup>1</sup>It ranks the 15th according to the part-of-speech tagged LOB Corpus; and the 17th according to Dubois Learning Center (Internet Data). Considering that the first 25 most frequent words make up about one-third of all printed material in English, and the first 100 make up about one-half of all written material in English (Dubois Learning Center, Internet Data), the ranking of *with* merits special attention, regardless of its minor ranking variation.

*with*.

## 2.1. Semantic Change Mechanisms

Semantic extension is by no means arbitrary. The extension pattern is constrained by the source lexeme (Heine 1997, Heine *et al.* 1991). A strongest position in this regard is the Source Determination Hypothesis (Bybee *et al.* 1994: 9-12), which states that "the actual meaning of the construction that enters into grammaticization uniquely determines the path that grammaticization follows and, consequently, the resulting grammatical meanings."

There is a large body of literature that testifies recognizable semantic extension patterns under such notions as metaphor, metonymy, subjectification, etc. Since different scholars have different views on semantic change in the course of grammaticalization, and use identical terms with different meanings, we briefly touch on each of the mechanisms referred to here.

### 2.1.1. Metaphor

Metaphor is typically defined as a conceptual mechanism of understanding and experiencing one kind of thing in terms of another (Lakoff & Johnson 1980: 5). Heine *et al.* (1991) argue that there is unidirectionality in metaphorical mappings of tenor and vehicle as the following:

- (1) PERSON > OBJECT > PROCESS > SPACE > TIME > QUALITY

It has been observed in numerous works that in the use and the structure of language in general, metaphor is a ubiquitous phenomenon (notably in research by Heine and his colleagues). An extreme position is found in Matisoff (1991: 384), who

suggested that grammaticalization may be viewed as a subtype of metaphor.

### 2.1.2. Metonymy

Metonymy, in contrast with metaphor, is a figure of speech whereby the name of an entity is used to refer to another entity that is contiguous in some way to the former entity (Heine *et al.* 1991: 61). Traugott and König (1991: 210-211) differentiate three kinds of metonymy as the following:

- (2) a. Contiguity in socio-physical or socio-cultural experience
- b. Contiguity in the utterance
- c. Synecdoche

However, more importantly, metonymy may occur at the conceptual level along the conceptual contiguity. For example, the focus change from on-going motion to future event at destination, as is shown in grammaticalization of English *be going to* futurity marker, is a good example of metonymy pushing the grammaticalization change.

### 2.1.3. Subjectification

Since the now-classic Traugott's (1982) exposition on semantic-pragmatic tendencies, which dealt with speaker involvement in semantic change, the notion of subjectification has been widely resorted to for explaining grammaticalization phenomena. Traugott (1982, 1988) and Traugott & König (1991) further claimed that the subjectification process is unidirectional.<sup>2</sup> Hopper and Traugott (2003[1993]), and Traugott (2003) further claim that subjective meaning often develop further to intersubjective meaning. Rhee (2002), in a discussion of semantic

---

<sup>2</sup>See, however, Rhee (2004a) for counter-examples of this process in Korean rhetorical constructions.

change of *against*, uses the concept more broadly and shows that there are human tendencies such as anthropocentricity and egocentricity involved in subjectification.

#### 2.1.4. Generalization

Still another mechanism to discuss is generalization. It has been noted by many grammaticalization scholars that the semantic change in grammaticalization often involves generalization (Bybee *et al.* 1994), whereby words lose their semantic specificity and become more general, and in turn, become compatible in larger contexts of use. This increases use frequency, which contributes to, or even qualifies for, development into grammatical markers.

#### 2.1.5. Frame-of-Focus Variation

Semantic changes are largely schematic. For this reason semantic changes usually involve image or event schemas. When schemas are extended or transferred, details of source images or events are generally ignored and only the schematic structures are preserved.

As has been noted by Navarro i Ferrando (2002), most widely accepted ways of accounting for the meanings of English prepositions are based on geometric, or topological, descriptions (Lindkvist 1950, Leech 1969, Bennett 1975, Quirk *et al.* 1985, Herskovits 1986, *inter alia*). However, as Talmy (1983) suggests, there are other aspects that language takes into account, such as trajector's geometry, site, path or orientation, the conceptualizer's perspective and point of view, the scope and reference frame of the scene, and force-dynamic patterns (Navarro i Ferrando 2002). Deane (1993) summarizes the three aspects of space that language users perceive and conceptualize as: (i) visual space images, (ii) manoeuvre space images, and (iii) kinetic space images (as cited in Navarro i Ferrando 2002: 211).

Lakoff (1987) persuasively presented an analysis of *through*,

*around, across, down, past, by*, etc. in English which reflect the different focus on part(s) of image schema, such as 'path' and 'end of path', and named this phenomenon as image schema transfer (IST).

Rhee (2000) shows cases of antonymic semantic change which seems to have resulted from variations of frame of focus (FFV) on source schemas. For example, English *out of* means association in certain cases as in (3a) and (3b), whereas in other cases it means separation as in (3c), (3d), and (3e).

- (3) a. It was out of my intention.: with intention; intentionally
- b. I asked out of curiosity.: with curiosity
- c. His behavior was out of decorum.: without decorum
- d. Fish cannot live out of water.: without/outside water
- e. We are out of milk.: without milk

This kind of antonymic contrast is produced by changing the frame of focus on the source schema. If the focus frame is telescopic, i.e. if the schema is viewed from afar, the two participating objects, i.e. trajector and landmark, are viewed as being together, thus bringing forth 'association' sense, as in (3a) and (3b); whereas, if the focus frame is microscopic, i.e. if the schema is viewed closely, the gap between the two participating objects becomes prominent, thus bringing forth 'separation' sense, as in (3c), (3d) and (3e) (see subsequent discussion in §3.2.3).

The use of FFV as grammaticalization mechanism resembles in many aspects the spatial scene approach proposed by Langacker (1987, 1992) where an idealized mental representation is composed of landmark and trajector in the schema. According to the spatial scene approach, ways of viewing spatial scenes are: (a) every spatial scene is conceptualized from a particular vantage point; (b) certain parts of the spatial scene can be profiled; (c) the same scene can be construed in different ways; and (d) the exact

properties of the entities that are conceptualized as TR and LM can vary (Tyler & Evans 2003: 53-54).

The major resemblance between the spatial scene approach and the FFV is that both utilize the schematic representation of an event. However, the major difference is that FFV is more dynamic because it allows for variable focus frame, thus enabling the distance adjustment. According to spatial scene approach, profiling and active zone are devices to make variable representations, but if the schema itself remains static, it is not clear how seemingly antonymic meanings can be derived from the identical spatial scene.

## 2.2. Semantic Change Models

Various models of semantic change have been proposed. Willet (1988) and Heine *et al.* (1991) suggested a typology of the models, according to which they can be grouped into five types, i.e. the Bleaching Model, the Loss-and-Gain Model, the Overlap Model, the Prototype Extension Model, and the Metonymic-Metaphorical Model.

### 2.2.1. The Bleaching Model

Since Gabelentz's (1901[1891]) notion of bleaching ('*Verbleichung*') was proposed, most grammaticalization phenomena have been characterized by the semantic weakening. According to this model the original gram has lexical contents and abstract contents, and only the abstract contents survive in the course of grammaticalization. This model effectively captures the fact that semantic change in grammaticalization in general involves generalization.

### 2.2.2. The Loss-and-Gain Model

Unlike the Bleaching Model, in which semantic loss is focused, the Loss-and-Gain Model places additional focus on semantic

gaining. According to this model the original gram has the image-schematic structure and the lexical meaning, and in the course of grammaticalization the lexical meaning becomes lost but a new meaning of the target domain becomes a part of the semantics of the gram. This model captures the fact that most semantic changes in grammaticalization involve semanticization of certain grammatical concepts that often develop from discourse pragmatics.

### **2.2.3. The Overlapping Model**

The two previously discussed models have difficulties in representing the gradual nature of grammaticalization, because they make use of dichotomy of the source and the target. The *Overlapping Model* emphasizes that there are always intermediate stages between the two, in which variable degrees of changes occur. The grams in intermediate stages often have both the source and the target characteristics. This model can effectively capture the gradual nature of not only semantic change but also phonological changes, fluidity of grammatical categories, directionality of language change, etc.

### **2.2.4. The Prototype Extension Model**

The *Prototype Extension Model* represents semantic change in a more comprehensive way by including semantic domains and semantic structures. This model places focus on how a category extends to a new category of non-prototypical meanings, and at the same time how the core sense in the prototype-like category shifts to a new core sense in the new prototype-like category. This model captures the fact that the newly emerged grammatical meanings develop their own semantic network with a new core meaning as the prototype in the category.



### 2.2.5. The Metonymic-Metaphorical Model

The most comprehensive modeling is presented by the Metonymic-Metaphorical model, which consolidates most of the valid aspects represented by other models. According to this model, the change comprises two levels: the macro-level where metaphor operates across domains, and the micro-level where metonymy operates with small-step context-induced reinterpretations. This model effectively captures the fact that both metaphor and metonymy have their roles in semantic change, and reconciles the two positions of the proponents of these two cognitive operations who are often at odds.

## 3. Semantic Network of *With*

We now turn to a discussion of preposition *with* focusing on its source, characteristics of semantic changes, and mechanisms of change at macro-structure, i.e. semantic domains, and micro-structure, i.e. individual prepositional meanings.

### 3.1. Sources

From the grammaticalization perspectives, researchers often investigate historical sources of grammaticalized grammatical markers, since the synchronic polysemous lexical semantic structures reflect the diachronic evolution of word meanings (notably, Sweetser 1990, Heine *et al.* 1991, Traugott & König 1991, Hopper & Traugott 2003[1993], Jurafsky 1996). Grammaticalized meanings of prepositions were often found to be traceable back to their initial spatial meanings (Genetti 1991, Kilroe 1994, Cuyckens 1999). Rhee (2004b), in a discussion of 20 most frequent English prepositions, shows that LOCATION surfaces as the predominant source for English prepositions. However, from the historical investigation of *with* it is not clear if it is entirely from a locational sense, even though it is evidently related to it.

According to OED, the OE form of *with* is *wi*, which originates from, or shares the origins with, Old Frisian *with*, Old Scandinavian *vi*, which was a shortening of Teutonic *\*wider-*. The prevailing senses of *with* in the earliest periods are those of opposition, like *against* (as is still apparent in '*at war with; compete with; go to law with*, etc.), and of motion or rest in proximity, like *towards*, and *alongside* (e.g., *be frank with; lose temper with*, etc.). These notions readily pass into figurative uses denoting various kinds of relations, among which those implying reciprocity are at first prominent (e.g. *communicate with*).

OED further states that the most remarkable development in the signification of *with* consists in its having taken over in the ME period the chief senses belonging properly to OE *mid* 'mid', which is cognate with Greek *meta* 'with'. These senses are mainly those denoting association, combination or union, instrumentality or means, and attendant circumstance (e.g. *with a hammer; with silence*, etc).

Furthermore, according to OED, there was the extension of *with* from the instrument to the agent, in which use it was current for different periods along with *of* and *through* and *by*, and *by* finally superseded all others at a later time (e.g. *inhabited with*, etc.).

In Modern English, the primary sense seems to be accompaniment (as e.g. in *go with a friend*, etc.), which has close connection with instrumentality derived from it. These two senses are not only conceptually close but also almost the equally primary senses of *with* in Modern English.

### **3.2. Semantic Structure and Change Mechanisms**

#### **3.2.1. Semantic Structure**

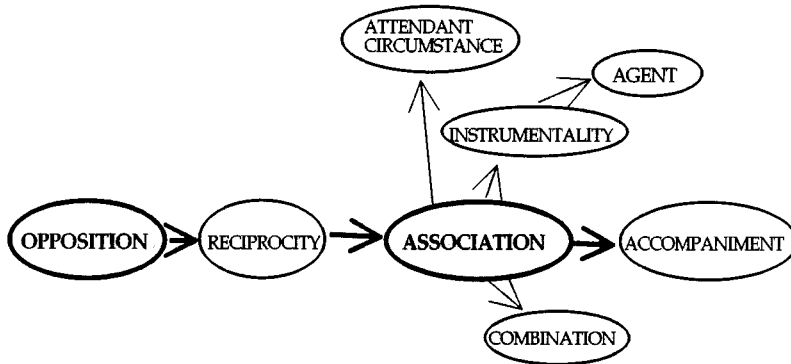
From the preceding discussion, the historical path of change in terms of semantic domains suggests the following generalization.

- (4) OPPOSITION > RECIPROCITY > ASSOCIATION > ACCOMPANIMENT  
COMBINATION  
ATTENDANT CIRCUMSTANCE  
INSTRUMENTALITY > AGENT

The above show that the (putatively) original semantics of *with* shifts from OPPOSITION to RECIPROCITY, then to various senses of ASSOCIATION, to AGENT and finally to ACCOMPANIMENT. The above are largely in consonance with sense classification provided in OED. According to OED sense designations and sense group classification, the three major semantic domains relate to OPPOSITION, ASSOCIATION and INSTRUMENTALITY/AGENCY. From the extension of these major semantic domains we come to the following observation: In a holistic picture, OPPOSITION is a concept that has cognitive distance from, and thus not easily accessible to, the other senses. ASSOCIATION, on the other hand, seems closely related to, or even identical with, COMBINATION and ATTENDANT CIRCUMSTANCE, and is easily extendable to INSTRUMENTALITY, and AGENTIVITY. Though it assumed primacy in historically later period, ACCOMPANIMENT is a directly derivable concept from ASSOCIATION. The dramatic transition from OPPOSITION to ASSOCIATION can be made possible through the mediation of the intervening sense RECIPROCITY. The conceptual link between OPPOSITION to RECIPROCITY can be motivated by the human understanding of the force dynamics in the physical world, where two objects *via-a-vis* each other are often conceptualized as being interactive in some sense, often motivated by the construal of entropy (Rhee 1996). The link between RECIPROCITY to ASSOCIATION can be relatively straightforward in that two entities concerned may constitute a separate class as compared to all other entities not participating in the interaction as a result of telescopic focus frame (see preceding discussion in §2.1.5). These extension patterns of semantic domains along the diachronic dimension can be schematically represented as in

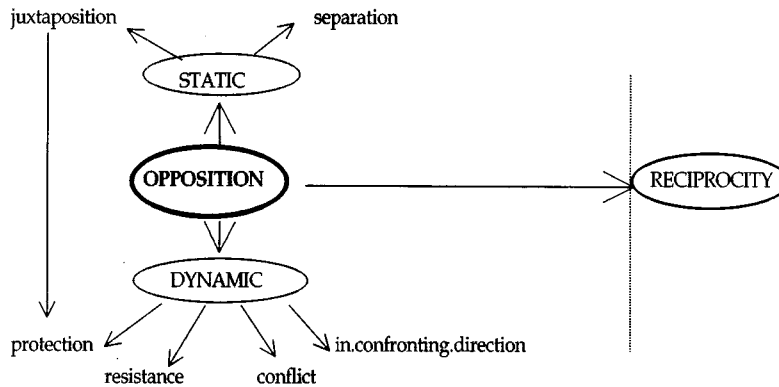
<Figure 1>.

<Figure 1> Semantic Domain Extension of *with*



On a micro-level, the preposition *with* engenders numerous significations that derive from these semantic domains. The senses of *with* in the OPPOSITION domain form the micro-level semantic structure as in <Figure 2>.<sup>3</sup>

<Figure 2> Semantic Network of OPPOSITION sense of *with*



<sup>3</sup>Senses included here are based on OED. However, while some of the entries in OED merit their listing as separate senses, they are too fine-grained for discussion, and some are even inadequate, for they constitute separate entries solely because they have special syntactic environments of use. Therefore, sense organizations presented in the present research are largely reconstructions from a cognitive linguistic perspective.

The semantic network of OPPOSITION sense in <Figure 2> shows that semantic extension involves highlighting various aspects of the OPPOSITION concept. For example, if the simple locational concept in opposition comes into focus, JUXTAPOSITION meaning is created. If two entities are placed together (juxtaposed) human propensity is to imagine some dynamic interaction in this particular relational configuration. Basically this interaction involves entities exerting force on each other and resisting such external forces for self-protection. This imagined scenario of dynamism brings forth such concepts as PROTECTION, RESISTANCE, CONFLICT, and CONFRONTING DIRECTION.<sup>4</sup> All these are excellent cases of subjectification, whereby the viewer's attitude is projected to two entities located in space, i.e. they attribute imagined force relationship to two entities. Creation of each of these senses can be best explained in terms of operation of the frame-of-focus variation, whereby the conceptualizer focuses one particular area/component of the image schema (like Langacker's active zone), depending on which one of the two entities (LANDMARK and TRAJECTOR) comes into focus. This kind of focus frame manipulation can create the SEPARATION sense when it assumes a microscopic frame in which the two entities are viewed with maximal distance, i.e. SEPARATION.

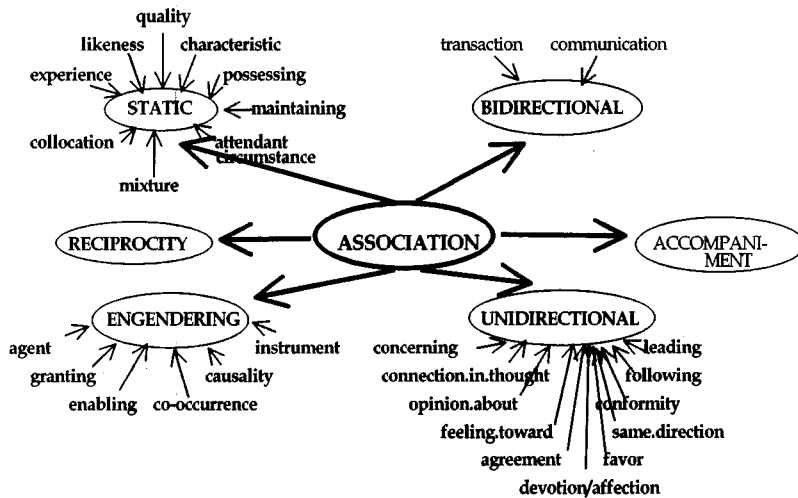
When this OPPOSITION sense is mediated by the RECIPROCITY sense the semantic extension goes further to another semantic core ASSOCIATION. When the ASSOCIATION sense becomes the prototype the RECIPROCITY sense, though it emerged earlier, becomes a part of the ASSOCIATION sense. The ASSOCIATION sense has many related senses, which can be further subdivided into four major groups along such parameters as static (i.e.

---

<sup>4</sup>Confronting Direction can be a static concept, or an intermediate concept between static and dynamic parameters. It is placed in the dynamic group by virtue of its confrontational, albeit imagined, interaction.

'associated') and dynamic (i.e. 'associating'), the latter constituting unidirectional associating, bidirectional associating, and engendering. This can be schematically presented as <Figure 3>.

<Figure 3> Semantic Network of ASSOCIATION sense of *with*



The semantic network shown in <Figure 3> shows various aspects of semantic extension. We can see that many senses within a semantic domain are in fact a cluster of related senses, as a result of usually very small step changes. For example, in the domain of STATIC ASSOCIATION senses form a conceptually contiguous chain of [attendant circumstance > maintaining > possessing > characteristic > quality > likeness > experience > collocation > mixture]. Likewise, in a long chain of senses in UNIDIRECTIONAL ASSOCIATION, clustering senses are in fact on a continuum of conceptual contiguity of [concerning > connection in thought > opinion about > feeling toward > agreement > devotion/affection > favor > same direction > conformity > following > leading].<sup>5)</sup>

<sup>5)</sup>It is to be noted, however, that these semantic chains proposed here are not necessarily the only options, and that these paths are not necessarily exactly those that these sense developments followed historically (in fact, it is often impossible to establish a strict order).

### 3.2.2. Change Mechanisms

In view of these semantic extension patterns, now we evaluate semantic change mechanisms.

Even from a cursory look, it is evident that there are many instances of metaphorical changes. For example, when BIDIRECTIONAL ASSOCIATION sense, primarily referring to material, physical association as in 'transaction' becomes extended to association by participating in communicative interaction as in 'communication', the transference involves non-material objects such as utterance or information. Metaphorical construal of communicative behavior is a commonly attested phenomenon across languages (Reddy 1979), and is well observing the ontological domain change from OBJECT > ACTIVITY (Heine *et al.* 1991). Likewise, such metaphorical transfers are shown in the transfer from physical domain to 'causality', and 'connection in thought', to name a few. These changes are excellent examples of transfer from concrete to abstract domains.

Metonymic transfers are often attested as well. In the ASSOCIATION domain, for example, the relations between 'collocation' and 'mixture' are metonymic relation in the sense that the latter is a subtype of the former. The senses of 'concerning', 'connection in thought', 'opinion about', 'feeling toward', 'agreement', devotion/affection', 'favor', etc. form a chain that is exemplar par excellence showing a gradual movement along the conceptual contiguity, a clear instance of metonymic operation.

Changes involving subjectification are numerous as well. Attributing speaker's judgment or attitude on the situation or event is particularly obvious in the OPPOSITION domain. I.e., static locational placement of objects is viewed as if the participating

---

What is more important is that these senses are conceptually related, and as all cognitive theorists would argue, this conceptual relatedness may in fact motivate such semantic changes.

objects are assuming self-protective action, resisting the force of the other, and thus creating conflict between them.

Generalization often involves loss of specificity. In a broad perspective, OPPOSITION, the earliest attested sense, carries a high level of specificity, because it inherently involves multiple entities, their concurrent placement on the spatial dimension, and their positions in particular configuration with respect to each other, i.e. in confrontational stance. In the later sense, i.e. ASSOCIATION, all semantic components other than the entities in concurrent spatial placement are all lost, thus making the semantic designation of *with* more general.

It is clear that for each mechanism there are instances where it was reasonably supposed to have been operative. However, the most important aspects of semantic changes are yet to be addressed with reference to the semantic change mechanism of Frame-of-Focus Variation (FFV). First of all, the semantic changes of *with* show certain peculiarities that some of them are in antonymic opposition as was pointed out earlier. For example, the semantic shift from OPPOSITION in Old English and Middle English as early as in *Beowulf*, to cooperative ASSOCIATION/ACCOMPANIMENT in Modern English, with such member senses as 'agreement', 'devotion/affection', 'conformity', etc., constitutes such an antonymic meaning change. There are other similar instances such as the one between 'following' and 'leading' senses in UNIDIRECTIONAL ASSOCIATION. Though not entirely antonymous, the semantic characterization between 'instrument' and 'agent' may also resemble antonymy in the sense that instrument and its user forms oppositional status contrast at certain conceptual level.

This type of changes poses a problem with semantic change mechanisms because the mechanisms proposed are largely in following a normal course, normal in the sense that the change from one to another is conceptually similar, rather than dissimilar;



or conceptually contiguous, rather than discontinuous. Viewed from this perspective, the antonymic change is rather a bizarre phenomenon, and constitutes a linguistic puzzle. This phenomenon cannot be explained with reference to metaphor because metaphor is a cross-domain change based on perceived similarity. Metonymy alone cannot explain it because it is a cognitive strategy operating on the basis of contiguity. Subjectification has its limitation in explaining this because 'opposition' *per se* cannot be subjectified as 'agreement' nor can 'following' as 'leading'. Generalization cannot be applied to this case because generalization, by definition, should have the semantic component of the later meaning already present in the original meaning, and therefore the earlier meaning is a subset of the later meaning. This is well illustrated in the change of [mental ability > general ability > root possibility] of English modal auxiliary *can* (Bybee *et al.* 1994), where 'root possibility' subsumes 'general ability' as its subset, which in turn subsumes 'mental ability'. Thus we come to a conclusion that metaphor, metonymy, subjectification, and generalization are all inadequate to explain the antonymic semantic change displayed by *with*.

This puzzle can be accounted for by resorting to the Frame of Focus Variation (FFV) as the mechanism. The FFV recruits the notions of focus and focus frame as its powerful components (see preceding discussion in §2.1.5). By means of manipulating the focus frame size through telescoping or microscoping, the participants in the image schema can be viewed either as being together (telescopic frame) or as being far apart (microscopic frame). The apparent antonymic semantics of OPPOSITION and ASSOCIATION is nothing but a natural outcome of frame adjustment (see also §3.2.1).

The semantic opposition between 'leading' and 'following' can be also accounted for by FFV. This is usually an outcome of the interaction of focus and frame. In a setting where there are two

objects, with the distance between them, and certain dynamics existing in the intervening distance, which is typical of relational image schema, the focus plays a crucial role in determining the direction of the perceived force. For example, in a schema where A is following B in microscopic frame, and the focus is on B, the meaningful skeleton is 'A following B', which is the most natural semantic designation of a lexeme that still retains lexical meaning. However, if the telescopic frame is assumed and the focus is placed on A, the original direction of the dynamics becomes cancelled (by ASSOCIATION), and the focused A takes the lead of B, thus creating 'A leading B' or 'A accompanying B' image.

This type of semantic change seems peculiar but such cases are often attested historically as in *puthta* 'adhere/stick.to' (MK) to *pwuthe* 'from' (ModK) in Korean (see Rhee 2000 for a detailed discussion). Other languages also join the list: *gen* in Chinese have both 'to [allative]' and 'from [ablative]' meanings, and so is French *à*. The peculiarity is even more serious when the lexical source is still transparent in form, even though it may be obscure to language users (cf. Korean ablative marker *-pwuthe* and its lexical source verb *pwuthta*, which is still an extant form in Modern Korean, but their association in the Korean speakers' mind is doubtful). This shows that conceptualization is a very powerful mechanism empowering a linguistic form with certain meanings even overriding its original semantic and morphological make-up, allowing for the creation of entirely opposite meanings.

### 3.3. Semantic Change Models

Since we have briefly reviewed the semantic change models in the preceding discussion (§2.2), now we shall discuss which of them models the semantic change patterns illustrated by *with* most effectively.

The Bleaching Model can deal with certain parts of semantic change, in which highly specific meanings were changed to a

more general meanings. However, at the macro-level of semantic change, such as from OPPOSITION to ASSOCIATION, or from ASSOCIATION to ACCOMPANIMENT, there does not seem to be a way of effectively explaining the shifts with the concept of 'bleaching'.

The Loss and Gain Model, in general, can be a powerful model because it can attribute any new senses as 'Gained' in the semantic change process, whereas any lost senses as 'Lost' in the process. For that reason, it can account for the semantic change with *with* to a certain extent. However, as an inherent problem of the model, it does not provide us with what elements are liable to loss and what elements are expected to be gained. In other words, this model cannot effectively show why adversative component in OPPOSITION is lost and why more cooperative component is added to create ASSOCIATION.

The Overlapping Model can effectively capture certain aspects associated with the semantic change here. This model is formed with such components as an earlier meaning, its later meaning, and a stage where the two meanings are compatible or ambiguous. Since it involves three stages, it usually applies to a broader frame of reference. This model can straightforwardly account for the fact that there was historically a stage where OPPOSITION was the primary sense (the earlier stage), that now ASSOCIATION and ACCOMPANIMENT senses are the primary senses (the later stage), and that many instances of usage are currently available, sometimes making multiple interpretations possible (the intermediate stage). Though we cannot go into the detail extensively, there are numerous instances where multiple senses are available, and this model seems to be compatible with the state of affairs of the semantic change of *with*.

The Prototype Extension Model is similar to the Overlapping Model in that both of them involve gradual domain change. The Prototype Extension Model, however, makes a reference to a

linguistic form's prototype, the core of which also gradually changes. This is in fact what is shown by *with*. For example, in the previous stage, all senses are the outcome of extension from the core (OPPOSITION) to periphery, and this core prototype gradually moves to ASSOCIATION through the mediation of RECIPROCITY in the intermediate stage. When ASSOCIATION becomes the core of the prototype there are numerous other senses extended from it. One of the important aspects of this model is that there is no wholesale change with the network organization when there occurs a domain change. This models the fact that there are senses that can come under more than one semantic domain. For example, RECIPROCITY can be cross-listed under OPPOSITION and ASSOCIATION because BIDIRECTIONAL ASSOCIATION is closely related to RECIPROCITY.

The Metonymic-Metaphoric Model is hard to assess with respect to semantic change of *with*, because it makes reference to metaphorical change and metonymic change at different levels, and this has to be established with each of the senses shown in <Figure 2> and <Figure 3>. Rhee (2004b), in a discussion of 20 English prepositions, shows that metonymic changes operating under apparent metaphoric change occurs at the level even below lexicographic sense designation levels. For example, in the metaphorical change (discussed earlier) from physical transaction to communication there should be intermediate transfers involving small-step (metonymic) changes. Establishing this for each sense should be well beyond the scope of this paper, but it should be empirically testable with in-depth research, even though it shall be an extremely large-scale enterprise. However, when the lexicographic senses involve metonymic changes, it is not entirely clear if succession of such changes should eventually lead to a metaphorical change. For example, the metonymic changes of [concerning > connection in thought > opinion about > feeling toward > agreement > devotion/affection > favor] do not seem to

involve clear metaphorical domain changes.

From the foregoing discussion, we can reasonably conclude that in the case of the semantic change of *with*, the Bleaching Model cannot effectively provide an explanation; the Loss and Gain Model has problems in explaining the motivation of change directions; the Overlap Model and the Prototype Extension Model excellently account for the macro-level changes; and the Metonymic-Metaphoric Model cannot be assessed at the current level of research, even though there are instances that do not fit this model.

#### 4. Conclusion

This paper investigated the semantic structure of English preposition *with* from a grammaticalization perspective. We reviewed mechanisms and models of semantic change and evaluated their adequacy with the semantic structure and change shown by *with*. Drawing upon the fact that *with* underwent apparent antonymic semantic change, we argued that such semantic change mechanisms as metaphor, metonymy, subjectification, and generalization have difficulties explaining the antonymic change, though certainly there are instances that are amenable to these models; and that only the Frame-of-Focus Variation can effectively account for this peculiar change type.

In terms of semantic change models, we argued that the Bleaching Model cannot effectively provide an explanation; that the Loss and Gain Model has problems in explaining the motivation of change directions; that the Metonymic-Metaphoric Model cannot be assessed at the current level of investigation; and that the Overlap Model and the Prototype Extension Model excellently account for the macro-level changes. Some of the unresolved issues that emerged in the course of the discussion should await future research.

### References

- Bennett, D. 1975. *Spatial and Temporal Uses of English Prepositions: An Essay in Stratificational Semantics*. London: Longman.
- Bybee, J. L., R. Perkins, and W. Pagliuca. 1994. *Evolution of Grammar: Tense, Aspect, Modality in the Languages of the World*. Chicago: University of Chicago Press.
- Cuyckens, H. 1999. Historical evidence in prepositional semantics: The case of English *by*. In A. J. Guy, T. B. Devriendt, and S. Geukens, eds., *Thinking English Grammar: To Honour Xavier Dekeyser, Professor Emeritus*, 15-32. Leuven & Paris: Peeters.
- Dubois Learning Center (internet data). [www.duboislc.org/EducationWatch/First100Words.html](http://www.duboislc.org/EducationWatch/First100Words.html).
- Evans, V. 2000. The structure of time: Language, meaning and temporal cognition. Doctoral Dissertation. Georgetown University.
- Gabelentz. 1901[1891]. *Die Sprachwissenschaft: Ihre Aufgaben, Methoden und Bisherigen Ergebnisse*. 2nd ed. Leipzig: Weigel Nachf.
- Genetti, C. 1991. From postposition to subordinator in Newari. In E. C. Traugott and B. Heine, eds., *Approaches to Grammaticalization*. 2 vols., 227-255. Amsterdam: John Benjamins.
- Heine, B. 1997. *Cognitive Foundations of Grammar*. Oxford: Oxford University Press.
- Heine, B., U. Claudi, and F. Hünemeyer. 1991. *Grammaticalization: A Conceptual Framework*. Chicago: University of Chicago Press.
- Herskovits, A. 1986. *Language and Spatial Cognition: An Interdisciplinary Study of the Prepositions in English*. Cambridge: Cambridge University Press.
- Hopper, P. J. and E. C. Traugott. 2003[1993]. *Grammaticalization*. 2nd edition. Cambridge: Cambridge University Press.
- Johansson, S. and K. Hofland. 1989. *Frequency Analysis of English Vocabulary and Grammar Based on LOB Corpus*. 2 vols. Oxford: Clarendon Press.
- Jurafsky, D. 1996. Universal tendencies in the semantics of the diminutive. *Language* 72, 533-578.
- Kilroe, P. 1994. The grammaticalization of French *à*. In W. Pagliuca, ed., *Perspectives on Grammaticalization*, 49-61. Amsterdam: John Benjamins.
- Lakoff, G. 1987. *Women, Fire, and Dangerous Things*. Chicago: The University of Chicago Press.
- Lakoff, G. and M. Johnson. 1980. *Metaphors We Live By*. Chicago: The University of Chicago Press.
- Langacker, R. W. 1987. *Foundations of Cognitive Grammar*. vol. 1. Stanford: Stanford University Press.
- Langacker, R. W. 1992. *Foundations of Cognitive Grammar: Descriptive*

- Application*. Stanford: Stanford University Press.
- Leech, G. N. 1969. *Towards a Semantic Description of English*. London: Longman.
- Lindkvist, K.-G. 1950. *Studies on the Local Sense of the Prepositions IN, AT, ON and TO in Modern English*. Lund: Berlingska Boktryckeriet.
- Matisoff, J. A. 1991. Areal and universal dimensions of grammaticalization in Lahu. In E. C. Traugott and B. Heine, eds., *Approaches to Grammaticalization*. 2 vols., 383-453. Amsterdam: John Benjamins.
- Navarro i Ferrando, I. 2002. Towards a description of the meaning of *at*. In H. Cuyckens and G. Radden, eds., *Perspectives on Prepositions*, 211-230. Tübingen: Max Niemeyer Verlag.
- Oxford English Dictionary* (OED). 1991. 2nd ed. Oxford University Press.
- Quirk, R., S. Greenbaum, G. Leech, and J. Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Reddy, M. 1979. The conduit metaphor—A case of frame conflict in our language about language. In A. Ortony, ed., *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Rhee, S. 1996. Semantics of verbs and grammaticalization. Doctoral Dissertation. The University of Texas at Austin. Seoul: Hankuk Publisher.
- Rhee, S. 2000. Frame of focus in grammaticalization. *Discourse & Cognition* 7, 79-104.
- Rhee, S. 2002. Semantic changes of English preposition 'Against': A grammaticalization perspective. *Language Research* 38, 563-583.
- Rhee, S. 2004a. Grammaticalization and lexicalization of rhetorical questions in Korean. *Studies in Modern Grammar* 35, 111-139.
- Rhee, S. 2004b. Semantic structure of English prepositions: An analysis from a grammaticalization perspective. Ms., Hankuk University of Foreign Studies.
- Sweetser, E. E. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge Studies in Linguistics 54. Cambridge: Cambridge University Press.
- Talmy, L. 1983. How language structure space. In H. Pick and L. Acredolo, eds., *Spatial Orientation: Theory, Research and Application*, 225-282. New York: Plenum Press.
- Traugott, E. C. 1982. From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalization. In W. Lehmann and Y. Malkiel, eds., *Perspectives in Historical Linguistics*, 245-271. Amsterdam: John Benjamins.
- Traugott, E. C. 1988. Pragmatic strengthening and grammaticalization. *BLS* 14, 406-416.
- Traugott, E. C. 2003. From subjectification to intersubjectification. In H. Raymond, ed., *Motives for Language Change*, 124-139. Cambridge: Cambridge University Press.
- Traugott, E. C. and E. König. 1991. The semantics-pragmatics of

- grammaticalization revisited. In E. C. Traugott and B. Heine, eds., *Approaches to Grammaticalization*. 2 vols., 189-218. Amsterdam: John Benjamins.
- Tyler, A. and V. Evans. 2003. *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition*. Cambridge: Cambridge University Press.
- Willet, T. 1991. A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language* 12, 51-97.

Seongha Rhee  
Building 260 Rm 239  
Stanford University  
Stanford, CA 94305 USA  
Phone: 650) 723-7473  
E-mail: srhee@hufs.ac.kr; shrhee@stanford.edu

received: April 1, 2004

accepted: May 27, 2004