The Semantic Network of *By* Revisited*

Miki HANAZAKI and Kozo KATO

1. Introduction

Prepositions are one of the most polysemous words in English; *by* being no exception. *Random House*, for example, claims that *by* has 22 usages to which we add the 23ed usage which is not in *Random House* but in *Random House English-Japanese Dictionary*; (1)-(22) are the usages of *by* listed in *Random House*.

(1)   ⟨near⟩ a home by a lake

(2)   ⟨over, through the medium of, along⟩ She came by the highway.

(3)   ⟨on, as a means of conveyance⟩ to arrive by ship

(4)   ⟨to and beyond a place⟩ We drove by the church.

(5)   ⟨during⟩ by day

(6)   ⟨not later than⟩ I'll be done by five o'clock.

(7)   ⟨to the extent, the amount of⟩ taller by three inches

(8)   ⟨from the evidence or authority of⟩ By his own account, he was there.

(9)   ⟨according to⟩ a bad movie by any standards

(10)   ⟨through the agency of⟩ The booklet was issued by the government.

(11)   ⟨from the hand or invention of⟩ a poem by Emily Dickinson

(12)   ⟨as a result, on the basis of⟩ We met by chance.

(13)   ⟨in support of⟩ to do well by one's children

(14)   ⟨after⟩ piece by piece

(15)   ⟨in multiplication⟩ Multiply 18 by 57.

(16)   ⟨in measuring, with another dimension of⟩ a room 10 feet by 12 feet

(17)   ⟨in division⟩ Divide 99 by 33.

(18)   ⟨in terms or amounts of⟩ Apples are sold by the basket.

(19)   ⟨begot or born of⟩ She had a son by her first husband.

(20)   ⟨having as a sire⟩ Equipoise II by Equipoise

(21)   ⟨one point toward on the compass⟩ North by North East

(22)   ⟨to, into⟩ Come by my office.

(23)   ⟨part that somebody touches⟩ She seized her by the hair.

In spite of the fact that "the importance of the question of polysemy ... was already

---

recognized in the historical-philological tradition," (Cuyckens & Zawada 2001 : ix) when it comes to the polysemy of prepositions, prepositions are, as Zelinsky-Wibbelt says, a "category which had long been neglected in linguistic inquiry."[1] (Zelinsky-Wibbelt 1993 : 1) Jackendoff (1973), Taylor (1993), to list some few, are also in accordance to express the scarce nature of such research.

We, in this paper together with Hanazaki & Kato (to appear) (henceforth H & K (to appear)), will try to explain the various uses of the preposition *by* — we will claim the following two points ; (1) its diverse uses can be explained by a unified theory, assuming that there is a single primary schema for each preposition, and that the other senses are derived from this schema in a principled way, which presuppositions widely shared among scholars of today, and (2) the primary schema has changed through history, hence the usefulness of a diachronic study.

2. Previous Studies and the Method to be Adopted

H & K (to appear) have reviewed the scarce previous studies on prepositions (Brugman (1981, 1988), Lakoff (1987), Dewell (1994), Kreitzer (1997), Ruhl (1989), Sandra & Rice (1995) and Tyler & Evans (2001, 2003)) and those on an individual preposition *by*, which are even more sparse. (Sakamoto (1993), Masamura (1989, 2002), Lindstromberg (1997), O'Dowd (1998), Ueno (1985) and Ueno & Kanasugi (1997a ,b))

Through the survey on the previous studies on prepositions, H & K (to appear) have concluded that "an analysis of a polysemous preposition must seek to find the meaning of the preposition itself, which should be distinguished from the information that can be inferred from the context, both linguistic and extra-linguistic."

Let us summarize the arguments there briefly. Brugman (1981, 1988), which are considered as the pioneering research on the polysemy of prepositions, as well as Lakoff (1987), which is a revised version of Brugman (1981), try to capture the meaning of *over* using the notions of TR (trajector) and LM (landmark) to denote the figure-ground relationship following Langacker's cognitive grammar. (Langacker 1987, 1991) However, H & K (to appear) assert that these studies are deficient in that they did not distinguish the meaning of the preposition itself and the meaning which can be inferred from the linguistic and extra-linguistic contextual information. Brugman (1981, 1988) and Lakoff (1987) argue that the meanings of *over* in (24) and (25) are different in that the former represents a dynamic sense and the latter a static sense. However, H & K (to appear) claim that it is more reasonable to attribute this difference to the verb they appear with, i.e., *fly* and *hang*, not to the difference in the meaning of *over* itself ;

(24)　The plane flew over.　　　　　　　　　　　(Lakoff 1987 : 516)

---

[1]　Zelinsky-Wibbelt says that there are only "lonesome riders" of about 6 who studied prepositions in spite of the "positive and realist" climate. (Zelinsky-Wibbelt 1993 : 2)

(25) Hang the painting over the fireplace. (ibid.: 524)

Through the overview of the previous studies on *by*, H & K (to appear) have seen that they are insufficient in that they do not offer a comprehensive theory which can explain all of the usages of *by* in (1)-(23). If a study aims to be exhaustive, it must try to capture all the usages in a semantic radial network following Lakoff (1987).

With these two observations, H & K (to appear) take a dynamic view, which attitude we will continue to take in this paper, i.e., dynamic in the sense that, first, it considers the interpretation of a sentential meaning as a process which relies on conceptual integration of contextual and background information, and, second, it incorporates the diachronic point of view and accepts shifts through time of the center in a semantic network.

To take such perspective, there are three methodological problems that we face ; (1) How can we distinguish one sense of *by* from another ? (2) How can we separate the meaning of the preposition from the contextual background information ? (3) How do we identify the center of the network ?

As for the first and second problems, we will follow Tyler & Evans (2001) ; to minimize the subjective nature of analysis, they suggest two criteria for determining whether a particular instance of a preposition counts as a distinct sense ;

> First, accepting the standard assumption that the primary sense coded for by prepositions is a particular spatial relation between a TR and an LM (although we will nuance what "spatial" means), for a sense to count as distinct, it must involve a meaning that is not purely spatial in nature and/or in which the spatial configuration between the TR and LM is changed vis-à-vis the other sense associated with a particular preposition. Second, there must be instances of the sense that are context-independent, instances in which the distinct sense could not be inferred from another sense and the context in which it occurs. (Tyler & Evans 2001 : 731-732)

Summarizing, to be recognized as a distinct sense, the meaning in question must not be purely spatial and that meaning should not be inferred from the context or from other senses. This can be checked, according to them, by a two-step methodology. Suppose we are to decide whether sense A and sense B are distinct. First, we abstract away the spatial relation of TR and LM of sense A. Second, we combine that resulting schema with the other information, both linguistic and extra-linguistic, in sentence B and see if we can infer the sentence meaning of B from it. If yes, it is not a distinct sense, and if no, we must supplement some meaning to the preposition. This methodology, having set some criteria, is less subjective in deciding whether it is a distinct sense or not, and, more importantly, a better solution for eliminating the contextual information from each sense as much as possible, leading way to the dynamic interpretation of a sentence.

As for the third problem, we will modify Tyler & Evans (2001, 2003) and Dewell (1984). Regarding the central meaning, it seems as if there are as many proposed central meanings as there are papers. This confusion is mainly caused by the fact that linguists have simply asserted what constitutes the primary sense appealing to intuition and their assumptions. For Tyler & Evans (2001, 2003), the center of the polysemous network is what they call "PROTOSCENE", i.e., "abstracted mental representation of *the primary sense* ... (which) consists of a schematic *TR* ... a schematic *LM*, ... and a conceptual configurational-functional *relation* which mediates the TR and the LM." (Tyler & Evans 2001 : 735, italics ours.) In other words, to decide what the center of the network is, one must, firstly, identify the primary sense and, secondly, construct a schema from the primary sense. They also suggest four pieces of evidence for narrowing the arbitrariness of the selection of a primary sense ; "(1) earliest attested meaning, (2) predominance in the semantic network, (3) relations to other prepositions, and (4) grammatical predictions." (2001 : 734) Summarizing, the center of the network, for them, is the spatial relationship between TR and LM of the primary sense, selected according to the above four criteria. This methodology is valid, for it tries to eliminate contextual information as much as possible through saying that the PROTOSCENE only consists of TR, LM, and its relation. However, it is troublesome in that it makes PROTOSCENE from the primary sense ; can we put confidence in the OED data for the first attested date ? ; what happens if the first attested date of two senses are almost the same ; what happens if the earliest attested meaning and the sense predominant in the semantic network is different, exactly which situation we find in the case of *by*. Dewell (1994), on the other hand, puts priority on the semantic network structure, rather than on the attested data or grammatical predictions, in deciding the center of the semantic network. Consequently, the center of the network he proposes is a central schema which may or may not be a schema abstracted from the primary (eg. most-frequently-used, first-attested-date) sense. Although his schemas are immune to the criticism that they represent the contextual information as well, by situating a schema which has predominance in the semantic network as the center of the network, he does not have to consider much of the primary sense, whose selection is quite arbitrary. Combining the good points of these two theories, the center of the semantic network that we propose will be the schema which is the most "productive" and which only consists of TR, LM and its relationship.

Summarizing, the method to be adopted here is as follows :

(26)   The method to be adopted assumes the following points ;

(26a) A polysemous word constitutes a radial network and all the meanings were at one time derived from the central schema or from a sense that can be tracked back to the central schema.

(26b) The distinct senses which constitute that network are distinguished by the two

criteria suggested in Tyler & Evans (2001). This method should also eliminate the contextual information as much as possible.

(26c) The center of the network is a central schema which has predominance in the semantic network, and which contains TR, LM and their relation.

In addition to the above three methodologies, we adopt (26d) as our guideline ;

(26d) The investigation examines not only the present-day usages, only which much research investigates, but also the usages in OE and ME periods, which, as a consequence, helps connect missing links in the radial network, and also which helps the approach to be "dynamic" in the sense that the study is diachronic.

3. The Network of *By*

H & K (to appear) have analyzed 719 present-day examples of *by* and categorized them into 10 different senses following (26b) ; in order to pursue a usage-based approach, most of the data are taken from corpuses. In addition to the present-day usages, H & K (to appear) have consulted several sources to check the usages of *by* in the OE and ME periods as well, which can be categorized, utilizing (26b), into 8 different senses. FIGURE 1 is the semantic network H & K propose for *by*, subsuming a total of 12 distinct schemata including 2 that are now extinct, and 1 idiomatic expression, shown in the form of triangle. The black marks (both triangles and circles) indicate schemata which still exist, and white ones extinct. The bigger circles indicate the center of the semantic network. Each schema is motivated through various connections, including metaphorical
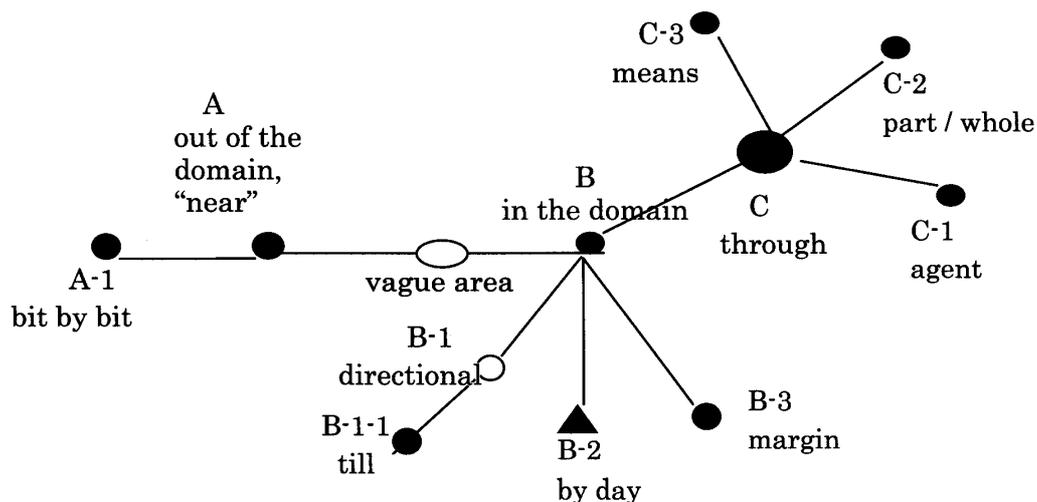

FIGURE 1 ： The Semantic Network of *By*

---

² Pragmatic strengthening is the notion from, for example, Köning and Traugott (1988).

and metonymical extension, and pragmatic strengthening also plays a part.[2]

As FIGURE 1 shows, the 12 schemata distinguished are categorized into three clusters, which we call (1) the *NEAR* cluster (on the left), (2) the *IN* cluster (at the bottom), and (3) the *THROUGH* cluster (on the right) respectively.

This paper explains the 6 schemata that were not explained in H & K (to appear) and 1 schema which was explained only briefly there. The 7 schemata to be clarified are those in the *NEAR* cluster, i.e., A ⟨out of the domain, "near"⟩ and A-1 ⟨bit by bit⟩, some in the IN cluster, i.e., B-1 ⟨directional⟩, B-1-1 ⟨till⟩, and B-3 ⟨margin⟩, and some in the *THROUGH* cluster, i.e., C-1 ⟨agent⟩, as well as the schema which used to be the central schema, ⟨vague area⟩.

3.1. *NEAR* cluster

The schemata in this cluster seem to designate the LM–TR relationship in which the TR holds a position close to LM. Many native speakers of English whom we consulted said that this is the main image that comes to their mind when they are asked what the central sense of *by* is. Most of the previous studies have also recognized this sense as the prototypical meaning. This cluster consists of two sub-clusters; ⟨out of the domain, "near"⟩ and ⟨bit by bit⟩.

3.1.1. ⟨out of the domain, "near"⟩

The examples for this schema are followings:

(27) The bomb went off as the police went by. (COBUILD)

(28) swear by God (Readers')[3]

(29) But as time goes by it just gets harder. (BNC)[4]

(30) Her Cenwalh gesalde Cuþrede his mæge. iii. þusendo londes be Æsces dune;
(Parker Chronicle A648(28 : 2) from Makino 1987 : 41)
"In this year Cenwalh gave his kinsman Cuthred three thousand hides of land by Ashdown."

(31) .and hu leohte be þære oþerne. (Boethius 58 : 5 fronm Makino1981 : 45)
"and how light by others (=by comparing with others)"

(32) .gif ic þe læde be þam wege. (Boethius 240 : 23 from Makino1981 : 46)
"if I lead you off the path"

Let us remind the reader that although some of the *by's* in this cluster, for example (27), seem to have a dynamic sense, it is the contextual information, *went* in (27), that adds the dynamic meaning in interpretation process.

---

[3] Readers'=English-Japanese Dictionary for the General Reader
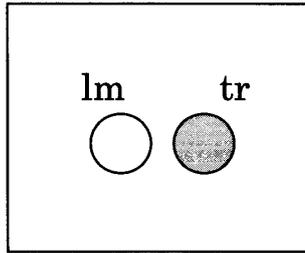
[4] BNC=British National Corpus

FIGURE 2
〈out of the domain, "near"〉

If we abstract away the schema from these *by's*, it will be something like FIGURE 2.

3.1.2. 〈bit by bit〉

The instances of 〈bit by bit〉 are seen in sentences as (33) and (34) ;

(33) I live for the moment day by day.   (COBUILD)

(34) piece by piece   (=(14))   (RANDOM HOUSE)

If we apply (26b) to (33) as in (33'), the meaning of the sentence becomes different.

(33') I live for the moment day 〈out of the domain, "near"〉 day.

The meaning of "things that happen gradually, not at all once" (COBUILD "by") is lost, hence this sense can be regarded as different from 〈out of the domain, "near"〉 and the meaning of gradualness, or in other words, PATH, must be added. Notice that it is not the contextual information that gives rise to the sequential meaning ; *live for the moment* do not have the consecutive meaning. In other words, it is not only the two objects that are referred to by this schema ; the LM and TR (in (34), for example, the *piece* and another *piece*) are "near" to each other, but there will be another TR (another *piece* in (34)) close to the TR which now acts as the LM. If we picture the relationship, it will be FIGURE 3-a.
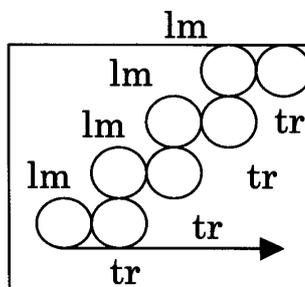

FIGURE 3-a
〈bit by bit〉

Adding the meaning of succession, PATH, may seem to go counter the methodology

adopted here, specially (26c) and (26b), i.e., the schema contains only TR, LM and its relation, and we must eliminate contextual information as much as possible. However, we can say that this notion of path evoked is not the movement of a TR, i.e., a contextual information. Rather, it is a consequence of having an end point related to a beginning point.

This view is close to that of Tyler and Evans (2003). In extracting the schema for the preposition *through*, they say, "the motion of path is distinct ... from the motion under-gone by a TR ... the concept of path requires a particular spatial goal, which is achieved by being connected to a spatial source by virtue of a series of contiguous points." (2003 : 217-218)

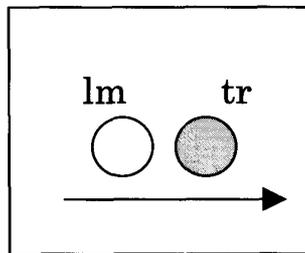With these considerations, the schema can be depicted as FIGURE 3, the abstract image of FIGURE 3-a ;

FIGURE 3
⟨bit by bit⟩

3.2. *In* Cluster
3.2.1. ⟨till⟩

This schema includes examples such as (35) and (36) ;

(35) Guaranteed acceptance if you apply by the following date.   (BNC)
(36) By 8 o'clock he had arrived at my hotel.   (COBUILD)

The *by*'s which will be classified in this schema are, by no means, close to the "nearby" idea, which sense most of the previous studies as well as native English
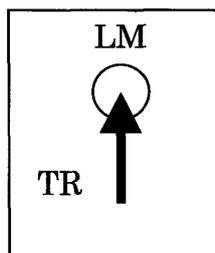
FIGURE 4
⟨till⟩

speakers whom we consulted claim to be the center of the network. We find this assertion shortcoming; if the date *you apply* is "nearby" the *following date*, it can be after as well as before the *following date*.

If we draw the relationship of TR and LM of the schema, it will be FIGURE 4;

Once again, the notion of PATH is evoked because of the clear end point, not by the trajectory of TR.

3.2.2. ⟨directional⟩

⟨Till⟩ seems to be an isolated schema, which has seemingly no connection to other schemata in the polysemous network of *by*. However, if we look at the instances of *by* in the OE and ME periods, we can easily see that this schema is related to the sense we classify as ⟨directional⟩, which is now extinct. The examples included in this schema are (37) and (38);

(37) Caucasus se beorg is be norþan and Indus seo ea be westan, and seo Reade Sæ be suþan.

"Mt. Caucasus is to the north and the Indian Ocean is to the west, and the Red Sea to the south".

(38) One sort by east, an other by west, did rise.

We will name this schema ⟨directional⟩ following OED; OED classifies this usage under the heading, "general direction of, towards." The schematic picture will be FIGURE 5;
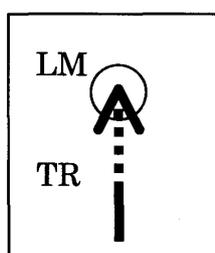

FIGURE 5
⟨directional⟩

The dotted line indicates that the end point is not focused. (For more detailed explanation for the focused/unfocused beginning/end point, see H & K (to appear).)

As is obvious form the figures, ⟨till⟩ and ⟨directional⟩ are related through metonymy.[5]

---

[5] The pattern of the extension of a polysemous network is made up by metaphor, metonymy and synecdoche. Metonymical transfer is the extension which, as Taylor (1995) argues, entails focalization of a part or the implication.

3.2.3. ⟨margin⟩

Another schema to be included in the *IN* cluster is ⟨margin⟩, which includes samples as (39) and (40) and can be pictured as FIGURE 6 ;

(39) Violent crime has increased by 10%.   (COBUILD)

(40) Success came when he defeated the SDP in 1987 by a slim majority to take up the Stockton South seat.   (BoE)[6]

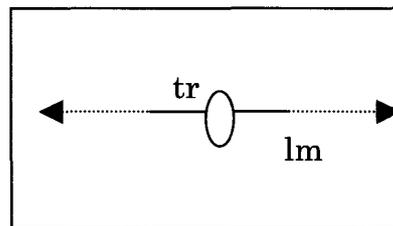In this schema, the LM extends, and the TR is placed in its stretch.

FIGURE 6 : ⟨margin⟩

This schema is a metaphorical extension of ⟨in the domain⟩.[7]

3.3. ⟨vague area⟩

It seems impossible to seek a relationship between ⟨out of the domain, "near"⟩ and ⟨in the domain⟩ ; i.e., in the former, TR is *outside* the LM, and in the latter, TR is *inside* the LM. However, if we look into OE and ME examples of *by*, we find those such as (41) and (42) ;

(41) þa vt-laȝes beoð swa stronge bi watere & bi londe.   (OED)
      The outlaws are so strong on water and on land.

(42) They commonly commanded both by sea and land.   (OED)

In these examples, which OED claims to be extinct, it is not specified whether the TR is inside the LM or outside the LM. In other words, this schema can be placed in the middle between ⟨out of the domain, "near"⟩ and ⟨in the domain⟩ as to connect the two ; both of them are synecdochial extension of ⟨vague area⟩.[8]

We can argue that this was the central schema for *by*. In (26c) we have argued that the center of the radial network is the schema that has prominence in the semantic

---

[6] BoE=Bank of English

[7] Metaphorical transfer involves a change in what Langacker (1987) calls "Semantic Domain". (See also Note 5.)

[8] Extension through synecdoche indicates a kind by the category or vice versa. (Seto (2000))

network, not the one which is a schema abstracted from the oft-used sense. Looking at FIGURE 1, we can say that this schema is in the middle of the radial category.

This idea is close to Ueno (1985) and Ueno & Kanasugi (1997a, b) : in arguing the central sense of *by*, they say that the central meaning of *by* is "vague nearness". (Ueno & Kanasugi 1997 a : 11) ; adding the exact distance, *two miles*, makes (43) ungrammatical, hence, the central meaning of *by* is "vague" nearness.

(43)   His house stands (*two miles) by the river.   (Ueno & Kanasugi 1997a : 11)

This idea of stating "vague nearness" as the central meaning of *by* encounters, as H & K (to appear) argue, the criticism that it is impossible to explain the *by*'s in, say, (6), (8), (10) and (23). However, we maintain this "vagueness" can be considered as the key concept to understand the central meaning of *by*.

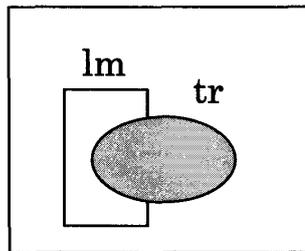If we descript this relationship of TR and LM, it will be FIGURE 7 ;

FIGURE 7 : ⟨vague area⟩

However, as we come back in 3.5, we must say that this schema is not the center of the semantic network of *by* any more. In other words, the center of the network changes, hence the importance of the diachronic point of view to a study of polysemy of prepositions.

3.4. *THROUGH* cluster

H & K (to appear) have examined the ⟨through⟩ schema and the three schemata that are connected to this ⟨through⟩ schema ; two in depth and one briefly. The four schemata differ in whether they focus the beginning / end or not as shown in TABLE 1.

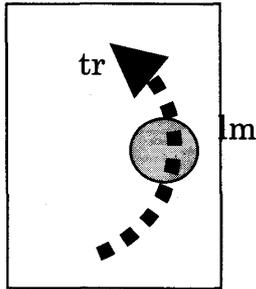| | | end point | |
		not focused	focused
beginning point	not focused	⟨through⟩	⟨part / whole⟩
	focused	⟨agent⟩	⟨means⟩

TABLE1 : The Difference Among the 4 Schemata in the *THROUGH* Cluster

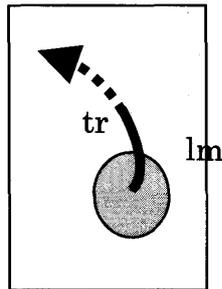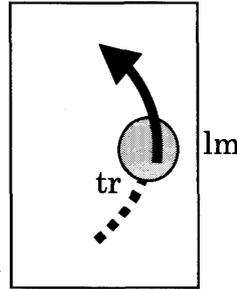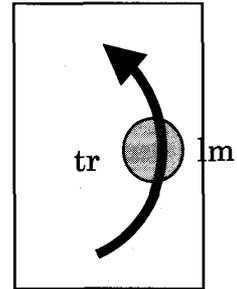| FIGURE 8	FIGURE 9	FIGURE 10	FIGURE 11
⟨through⟩	⟨agent⟩	⟨part/whole⟩	⟨means⟩

The four being related by their difference in focus, we can say these four are connected through metonymy. For convenience, we will list one example for each schema. Fore more detailed explanation for the 4 schemata as well as its connection to ⟨in the domain⟩, readers are referred to H & K (to appear).

(44)　⟨through⟩ I explained to you by a certain example.　　　　　(BoE)

(45)　⟨agent⟩ The feast was served by his mother.　　　　　(COBUILD)

(46)　⟨part /whole⟩ He caught her by the shoulder.　　　　　(COBUILD)

(47)　⟨means⟩ If you're traveling by car, ask whether there are parking facilities
　　　　nearby.　　　　　(COBUILD)

If we draw the TR-LM relationship of the four schemata they will be FIGURE 8, 9, 10, and 11 respectively.

Once again, the schemata in this cluster evoke the notion of path through having the beginning and end point. The solid line indicates that the beginning / end point is focused, the dotted line, not focused.

3.4.1.　⟨agent⟩

This is the usage that appears most frequently in present-day usages of *by*. An example included in this schema is (48) ;

(48)　The feast was served by his mother.　　(=(45))　　　　　(COBUILD)

H & K (to appear) have explained that this schema is related to ⟨through⟩ through metonymy, which observation Mustanoja (1985), Ueno (1997), Koike (1991), to list some few, support. Mustanoja says ; this usage "is an extension of the use of this preposition in the sense "along, through" to denote the channel or route and then the intermediary through which an action takes place." (Mustanoja 1985 : 374)

The remaining question is the following ; the notion of agent being so basic in our cognition, why is this schema relatively new ? *By* as the marker of agent became common

only around 15th or 16th century. Consult the statements below ;

> ... in ME, the number of preposition which can be used to introduce the agent increases to 6, i.e., *by, from, mid, of, through, with.* ... only three of those, i.e., *by, of, with*, remained in Modern English. (Koike 1991 : 12 translation ours)
>
> ... unambiguous ME instances where *by* indicates the agent of a passive verb occur from the end of the 14th century on ... This use becomes increasingly common in the 15th and 16th centuries. (Mustanoja 1985 : 374)
>
> ... in ME agentive *from* was gradually ousted by *of* (still used today with an ablative or source meaning) which in turn gave way to *by* around 1600. (Clark & Carpenter 1993 : 254)

Recognizing the fact it started to be used around 1400, the period when French influence to the English language was prominent, we can hypothesize that *by* expelled other prepositions as the marker of agent under the influence of French agentive marker *par*. Mustanoja (1985) and Koike (1991) are also in accordance with this idea. Mustanoja says ;

> The instrumental (=our "agent" ; H & K) use of *by* is much less common in OE than in ME. It seems reasonable to assume that the marked increase in the instrumental use of *by* in ME is - partly at any rate - due to the influence of OF *par*. Many phrases seem to be direct imitations of French models. (Mustanoja 1985 : 373)

However, as Ueno (1997 : 28) says this is only an assumption and it is hard to judge whether this change was affected by the foreign influence. This remains for the future research.

3.5. Central Schema

In 3.3, we have seen that ⟨vague area⟩ *was* the center of the radial category of *by*. However, looking at FIGURE 1, we can assert that the schema no longer holds the central position in the network ; the schema itself is extinct. If we notice the fact that the new ones are likely to emerge around the *THROUGH* cluster, the new ones, especially the most frequently used sense ⟨agent⟩, are likely to emerge we may be able to say that the center of the present-day usage of *by* is ⟨through⟩, hence, the central schema has changed through time.

A support for this analysis comes from our data of *Catholic Homilies* : the sense of *by* most frequently used in *Catholic Homilies* is ⟨in the domain⟩ by a considerable margin. If this is the case, we can safely assume that through pragmatic strengthening, the central schema has changed away from ⟨near⟩ toward the direction of ⟨through⟩ through ⟨in the domain⟩.

4. Conclusion

In this paper, together with H & K (to appear), we have examined the preposition *by*, and tried to explain its polysemous nature by depicting all the senses as related. We also attempted to avoid the redundancy of having contextual information included in the lexical meaning through carefully principled ways. In other words, we have proposed the following ; (1) we interpret a given utterance using a dynamic process of conceptual integration of contextual and background information ; (2) a polysemous preposition such as *by* forms a radial network structure motivated by metaphor and metonymy ; and (3) the primary schema has changed through history from ⟨vague area⟩ to ⟨through⟩, which shows the usefulness of a diachronic study.

Data Sources

Present-day Usage

British National Corpus / Bank of English, Cobuild / Kenkyusha's English-Japanese Dictionary for the General Reader / Random House Dictionary / Random House English-Japanese Dictionary / Taishukan's Genius English-Japanese Dictionary / Webster the Third

OE / ME

OED

Makino, T. (1981) "Boethius-ni Okeru Zenchishi-ni Tsuite (2)" [On the Prepositions in *Boethius*], *Komazawa Daigaku Gaikokugo Gakubu Kenkyu Kiyo* 10, 37-54.

——— (1987) "Paka Kuronikaru-no Zenchishi-ni Tsuite" [On the Prepositions in *Parker Chronicle*], *Komazawa Daigaku Gaikokugo Gakubu Kenkyu Kiyo* 16, 23-53.

Thorpe, B. (1844) *The Homilies of the Anglo-Saxon Church*. Vol.1. The Ælfric Society, London.

References

Brugman, C. (1981) *Story of Over*, master thesis, UC-Berkeley, Berkeley, California.

——— (1988) *The Story of Over : Polysemy, Semantics, and the Structure of the Lexicon* (Outstanding Dissertations in Linguistics). London : Taylor & Francis.

Clark, E. V. and K. L. Carpenter (1993) "The Notion of Source in Language Acquisition," in *Language Acquisition : Core Readings*. ed. Paul Bloom. London : Cambridge U.P. pp. 251 -284.

Cuyckens, H. and B. E. Zawada (2001) "Introduction," in *Polysemy in Cognitive Linguistics : Selected Papers from the Fifth International Cognitive Linguistics Conference*. eds. H. Cuyckens and B. E. Zawada. Amsterdam and Philadelphia : John Benjamins Publishing Company. pp.ix-xxvii.

Dewell, R. (1994) "Over Again : Image-Schema Transformations in Semantic Analysis," *Cognitive Linguistics* 5. pp.351-80.

Hanazaki, M. and K. Kato (to appear) "The Semantic Network of *By*," in *Studies in Modern*

English : the Twentieth Anniversary Publication of Modern English Association of Japan.

Jackendoff, R. (1973) "The Base Rules for Prepositional Phrases," in *A Festschrift for Morris Halle.* eds. S. Anderson and P. Kiparsky. New York : Holt, Rinehart and Winston. pp.345 -356.

Kato, K. and M. Hanazaki (2003) "The Semantic Network of *By*," paper read at the Twentieth Annual Meeting of the Modern English Association, Tokyo University of Foreign Studies, May 23rd, 2003.

Koike, K. (1991) "Dosashu-wo Michibiku Zenchi-shi-no Shiteki Kenkyu" [A Study on Prepositions Which Introduces Agent from a Diachronic Perspective], *Kokusaibunka-Kenkyu.* pp. 1-20.

Köning, E and E. C. Traugott (1988). "Pragmatic Strengthening and Semantic Change ; the Conventionalizing of Conventional Implicature," in *Understanding the Lexicon : Meaning, Sense, and World Knowledge in Lexical Semantics.* eds. W. Hullen and R. Schulze. Niemeyer : Tübingen. pp. 10-24.

Kreitzer, A. (1997) "Multiple Levels of Schematization : A Study in the Conceptualization of Space," *Cognitive Linguistics* 8. pp. 291-325.

Lakoff, G. (1987) *Women, Fire and Dangerous Things : What Categories Reveal about the Mind.* Chicago : University of Chicago Press.

Langacker, R. (1987) *Foundations of Cognitive Grammar vol.1 : Theoretical Prerequisites.* Stanford : Stanford U.P.

———— (1991) *Foundations of Cognitive Grammar vol.2 : Descriptive Application.* Stanford : Stanford U.P.

Lindströmberg, S. (1997) *English Preposition Explained.* Amsterdam and Philadelphia : John Benjamins Publishing.

Masamura, H. (1989) *Zukai Eigo Kihongogi Jiten* [*Picture Dictionary of English Basic Words*]. Tokyo : Kirihara-Shoten.

———— (2002) *Eigogogi Imegi Jiten* [*Dictionary of Images of English Words*]. Tokyo : Taishukan.

Mustanoja, T. F. A. (1985) *Middle English Syntax.* Tokyo : Meicho Fukyu Kai.

O' Dowd , E. M. (1998) *Prepositions and Particles in English : A Discourse-Functional Account.* New York : Oxford U.P.

Ruhl, C. (1989) *On Monosemy : A Study in Linguistic Semantics.* Albany : State University of New York Press.

Sakamoto, I. (1993) "Zenchi-shi *By*-no Jissen-teki Yoho-ni-tsuite" [On Practical Usage of Preposition *By*], *Kagoshima Daigaku Bunka Hokoku : Eigo, Eibungaku* 28-2. pp. 67-79.

Sandra, D. and S. Rice (1995) "Network Analysis of Prepositional Meaning : Mirroring Whose Mind-The Linguist's or the Language User's ?," *Cognitive Linguistics* 6. pp.89-130.

Seto, K. (2000) "Tagigo-no Kijyutu-ni Mukete" [Towards the Description of Polysemies], paper read at the Eighteenth National Conference of the English Linguistic Society of Japan, Konan University, November 18th, 2000.

Taylor, J. (1993) "Prepositions : Patterns of Polysemization and Strategies of Disambiguation," in *The Semantics of Prepositions : From Mental Processing to Natural Language Processing.* ed. C. Zelinsky-Wibbelt. Berlin and New York : Mouton de Gruyter. pp.151-175.

————— (1995) *Linguistic Categorization.* Cambridge : Oxford U.P.

Tyler, A. and V. Evans (2001) "Reconsidering Prepositional Polysemy Networks : The Case of *Over*," *Language* 77. pp. 724-765.

————— (2003) The *Semantics of English Preposition : Spatial Scenes, Embodied Meaning and Cognition.* Cambridge : Cambridge U.P.

Ueno, Y. (1985) *Eigo-no Shikumi* [*The Structure of English*]. Tokyo : Eichosha.

Ueno, Y. (1997) "Jyudotai-ni-okeru Dosashu Donyu Zenchi-shi-no Rekishi-teki Goi Imi-ron" [A Historical Lexical Semantic Study on the Prepositions Which Introduce Agents in Passives], *SELL* 13. Kyoto University of Foreign Studies. pp. 15-29.

Ueno, Y. and T. Kanasugi (1997a) "Eigo-no Imi Henka (1)" [Semantic Change in English (1)], *Kyoto Gaikokugo Daigaku Kenkyu Ronshu* 47. pp.8-28.

————— (1997b) "Eigo-no Imi Henka (2)" [Semantic Change in English (2)], *Kyoto Gaikokugo Daigaku Kenkyu Ronshu* 48. pp. 1-8.

Zelinsky-Wibbelt, C. (1993) "Introduction," in *The Semantics of Prepositions : From Mental Processing to Natural Language Processing.* ed. C. Zelinsky-Wibbelt. Berlin and New York : Mouton de Gruyter. pp. 1-26.