

Idiomatic Expression in a Construction*

A Case Study of *All Over* from the Perspective of its Grammatical Behavior

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1. Introduction

This study examines the grammatical behavior of the idiomatic expression *all over* using corpus data. In the field of cognitive linguistics, the semantics of English prepositions have been studied by many researchers. Claudia Brugman's (1981) "The Story of *Over*" is one of the most influential studies, which was reworked by Lakoff (1987). This may be the first study that closely examined the polysemous nature of the word *over*, suggesting its semantic network and cognitive motivation for the semantic extension. Since then, numerous studies in cognitive linguistics field have examined the polysemous structure of *over* and other prepositions (e.g., Dewell 1994; Tyler & Evans 2001, 2003; Deane 2005), elaborating on the analysis suggested by Brugman and Lakoff. Talyor (2012: 233) described this situation thus: "The Brugman-Lakoff account—which identified a putative central sense of the preposition and a large number of related senses which radiated out from the central sense like the spokes of a wheel—spawned a veritable cottage industry of over-studies."

These studies have focused on the single word *over* and have significantly contributed to the study field of polysemy and that of metaphor, metonymy, and prototype theory as well. In contrast, the present paper focuses on the expression *all over*, which is a larger unit including *over*. Lakoff (1987) examined the meaning of *all over* compositionally, that is, based on the "covering" sense of *over* and the intensifier function of *all*, illustrating that the meaning of *all over NP* is similar to that of the phrase *over + entire NP*. Conversely, some studies like Queller (2001) and Taylor (2006, 2012), have affirmed that the meaning of *all over* cannot be predicted in a straightforward manner by combining the meaning of the words *all* and *over*, and they revealed its idiomatic nature. However, these studies have mainly described its semantic characteristics and not its grammatical behavior. The current study examines the usage of *all over* using the *British National Corpus (BNC)* with a focus on its grammatical behavior, that is, the types of constructions in which *all over* tends to occur. By studying corpus data, this paper demonstrates that not only the meaning, but also the grammatical tendencies of *all over* cannot be predicted directly from the individual elements *all* and *over*. This paper also attempts to suggest that not only the combination of [a word + a word], but also the various types of combinations including "an idiom + a grammatical construction" can be units that are combined with some conventionalized meanings.

The expression *all over* has prepositional use, which is followed by a complement noun phrase (e.g., *all over the world*), and adverbial use, which is not followed by a noun

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phrase (e.g., *looking for you all over*). This study analyzes the prepositional use, that is, the unit *all over NP*, to compare it with the synonymous prepositional phrase *over + entire NP*.

The organization of the rest of this paper is as follows. Section 2 overviews previous studies of the meanings of *over* and *all over*. Section 3 explains the methodologies of research using the *BNC*, and section 4 presents the results. Section 5 discusses the constructional nature of the expressions including *all over NP*, and finally, section 6 presents concluding remarks.

2. Previous Studies on *Over* and *All Over*

2.1 Cognitive Approach to the Polysemy of *Over*

As mentioned in section 1, numerous studies in the field of cognitive linguistics have examined the meanings of English prepositions (e.g., Brugman 1981; Lakoff 1987; Taylor 1988; Dewell 1994; Boers 1996; Tyler & Evans 2001, 2003; Deane 2005). Among them, the preposition *over* is highly polysemous and has a complex semantic structure. Therefore, many researchers have analyzed the semantic characteristics of *over*, demonstrating that its semantic extension is cognitively motivated and that the polysemous structure can be explained based on the general cognitive processes (e.g., metaphor, metonymy, and image-schema transformation). These studies have contributed significantly to the development of research on cognitive semantics, which emphasizes the close relationship between language and the general cognitive system.

However, these studies have generally analyzed the meaning of a single word *over* rather than the larger unit comprising *over* and its co-occurring words. Brugman (1981) and Lakoff (1987) defined the prototypical sense of *over* as “ABOVE-ACROSS,” and even in more recent works, the polysemous structure of the single word *over* is shown as a semantic network (e.g., Tyler & Evans 2001, 2003). These kinds of descriptions reflect the assumption that the meanings of linguistic expressions are delivered by the “word” unit, that is, a “word” is the basic unit that is combined with meaning.

This assumption is also reflected in some analyses of *all over*, which is a unit comprising two words. Section 2.2.1 introduces the analysis of *all over* as suggested by Lakoff (1987), who considered its meaning as the compositional one, that is, predictable from the meanings of the words *all* and *over*. Sections 2.2.2 and 2.2.3 present the alternatives proposed by Queller (2001) and Taylor (2006, 2012), indicating that the expression *all over* has idiomatic (non-compositional) meanings that cannot be predicted by merely combining the senses of *all* and *over*.

2.2 Analysis of *All Over*

2.2.1 Compositional Analysis Based on the “Covering” Sense of *Over*

This section first introduces the Lakoff’s (1987) analysis of *all over*. It analyzes how the various senses of *over* are associated with each other and comprise a family resemblance network. The expression *all over* is introduced as an example of the “covering” sense of *over*. Lakoff highlighted that when the preposition *over* is combined with quantifiers like *all*, *most*, *a lot of*, *entire*, it can express two types of “covering” as follows:¹

A) A multiplex but stative trajector covers the landmark.

(1) a. There are specks of paint ***all over*** the rug.

b. There is sagebrush ***over*** the ***entire*** valley floor. (Lakoff 1987: 42)

B) Trajectory encoded as the verb covers the landmark.

(2) a. I walked ***all over*** the hill.

b. I’ve hitchhiked ***over*** the ***entire*** country. (*ibid.*: 429)

In cognitive linguistics, the trajector (TR) is characterized as the figure (i.e., the most salient entity) within a relational profile, and the landmark (LM) is the other salient entity that provides points of reference for locating the TR (Langacker 1987: 217). As seen in example (1), the word *over* in the “covering” sense can express a situation in which the multiplex but stative TRs (*specks* in (1a) and *sagebrush* in (1b)) exist as though they cover the LMs (*the rug* in (1a) and *the valley floor* in (1b)). As seen in example (2), the preposition *over* is also used when the trajectory encoded as the motion verbs covers the field of the LMs (*the hill* in (2a) and *the country* in (2b)). Lakoff analyzed the expression *all over* along with similar expressions, such as *over + entire NP* and proposed that the meaning of *all over* as in (1a) and (2a) can be interpreted as a combination of the “covering” sense of *over* and the quantifying meaning of *all*.

2.2.2 Focusing on the “Chaotic Dispersal” Sense of *All Over*

While Lakoff’s (1987) account is based on a combination of the meaning of *all* and *over*, Queller’s (2001) analysis emphasized its idiomatic nature.

Queller (*ibid.*) affirmed that the expression *all over* does not necessarily describe the situation in which the LM is totally covered with the TR. That is, *all* in the expression *all over* does not always designate total coverage. The word does not always express an intensifier function, either. Queller proposed that one of the prototypical senses of *all over* is “chaotic dispersal,” which describes the situation where TR entity is unwanted and dispersed over its LM in a chaotic and random manner. This semantic value cannot be

¹ Underlines, italics, and boldface of the examples in this paper have been added by the author.

predicted by simply combining the meaning of *all* and *over*. Look at the following examples presented by Queller:

- (3) a. This tablecloth has got bloodstains *all over* it.
b. ??This tablecloth has got red squares *all over* it. (Queller 2001: 58)

In example (3a), *all over* does not designate the total coverage of the LM. However, this sentence is natural because the TR entities (bloodstains) are conceptualized as unwanted blemishes. In contrast, the red squares in example (3b) are conceptualized not as unwanted blemishes, but as a design feature of the tablecloth. Hence, this sentence sounds odd. It was also shown that the semantic value of “chaotic dispersal” can be seen in the metaphorical use of *all over*.

- (4) This paper is *all over* the place. (ibid.: 62)

This sentence illustrates that a paper, such as a student’s essay, is not well organized and is written in an “untidy” manner (e.g., it lacks structure and the logic jumps randomly). Queller asserted that an English learner who remembers the meaning of *all over* as total coverage may not be able to interpret this sentence correctly, which implies that *all over* has a non-compositional meaning, that is, distinctive semantic value, which is different from that of *over*.

2.2.3 *All Over* as an Idiom and also as a Part of Larger Idioms

Taylor (2006, 2012 Ch. 11) also demonstrated the idiomatic nature of *all over*, citing Queller’s (2001) account and adding more examples to illustrate the semantic difference between *over* and *all over*. For instance, it was validated that there are some contexts in which *all* cannot be omitted. The sentences in (5) can be acceptable if *over* is changed to *all over*.

- (5) a. *It blew back in his face, dusting him *over*.
b. *Oh, God, I thought, she can see the lipstick *over* me. (Taylor 2006: 65)

There are also some cases in which *over* cannot be quantified with *all* as in (6). Further, *all* in *all over* cannot readily be replaced with other quantifiers in some cases, as seen in (7).

- (6) *I held my hand *all over* my face for a few moments before speaking. (ibid.)

- (7) *Oh, God, I thought, she can see the lipstick {half, partly, somewhat, mostly}
over me. (ibid.)

Taylor (2006) confirmed that the process of “idiomaticization” is recursive. He explained that “[j]ust as *over* combines with *all* to give an expression with its own distinctive and idiomatic value(s), so *all over* can combine with other items to produce expressions which also have their distinctive values” (ibid.: 68), and presented examples where the expressions *all over the place* and *written all over (one’s face)* gained specialized use. As shown in (4) above, *all over the place* has random distribution sense, and as in (8) below, we use the expression *write all over (one’s face)* to describe the situation in which someone’s thoughts or emotions are apparent to an observer.

- (8) He shook his head, doubt written *all over* his face. (Taylor 2006: 72)

Queller (2001) argued that the phrase *written all over (one’s face)* tends to be associated with someone’s unintended expression of emotion, which the person may have wanted to keep hidden. This semantic value cannot be predicted compositionally by the sense of the words *write*, *all*, *over*, and *one’s face*. These expressions show that *all over* has an idiomatic nature and can also be a part of a larger idiomatic expression. Based on this, Taylor (2006: 76) proposed that “[i]diomatic expressions can themselves be creatively extended to new usage situations, and are subject to creative modification.”

2.2.4 Summary of Previous Studies and the Focus of this Study

Queller (2001) and Taylor (2006, 2012) pointed out some problems with Lakoff’s (1987)’s compositional account and demonstrated the idiomatic nature of *all over*. In addition, Taylor (ibid.) demonstrated that this expression can be a source for the creation of larger idiomatic expressions (e.g., *all over the place*). His account of the recursive nature of “idiomaticization” has an important implication for our view on the meaning of a “word” because it implies that the unit associated with meaning and that combined with each other to deliver meaning are not necessarily a single “word,” but a larger unit comprising two or more words.

However, whereas previous studies have focused on the semantic aspect of *all over*, they have not examined its grammatical behavior closely. The theory of cognitive linguistics (cf. Lakoff 1987, Langacker 1987, 2008) emphasizes that the form of a linguistic unit is motivated by its meaning, denying the claims that syntax is autonomous and constitutes an independent module. Regardless, the studies focusing on prepositions including those of *all over* tend not to closely investigate the grammatical behavior, that is, the formal tendencies in the usage of *all over*. While Queller and Taylor illustrated the semantic value that is unique to *all over*, they did not compare the grammatical behavior

between *over* and *all over*. Therefore, it has not been revealed how the expression *all over* behaves grammatically in actual use. Specifically, what kinds of constructions in which *all over* appears frequently and how its meaning can be changed based on the constructions in which it occurs, remains unclear.

This paper examines the actual use of the unit *all over NP* using the corpus, focusing especially on its grammatical status. It attempts to show that *all over NP* has different grammatical characteristics from the prepositional phrases headed by *over*, that is, *all over NP* can occur frequently as a part of constructions in which *over* phrases (without *all*) tend not to occur.

3. Data and Methods

This study examined data extracted from the *BNC*, which comprises of over 100 million words of written and spoken British English. Data were collected in the following manner.

First, all sentences in which the expression *all over NP* occurs were extracted from the *BNC*. While extracting the sentences, the part-of-speech of *over* was set as the “preposition” to exclude the data of *over* being used as an adverb. Consequently, 4,133 examples of *all over NP* were extracted from the corpus. Next, 500 examples were extracted from among the total through a random sampling method. After this, the 500 sentences were examined and those examples that were actually not in line with the target data for this research were excluded. For instance, some examples of *over* being used as adverbs were annotated as prepositions. Such examples were excluded. Hence, 451 examples remained as the target data. Finally, the target data were annotated manually based on the grammatical status of *all over NP* with the following features:²

- a. Predication Adjunct: Occurring as a modifier of a verb phrase or an argument of a verb (e.g., I have to carry them *all over* the place.)
- b. Prep-Comp.: Occurring as a complement of a preposition (e.g., They’ve been collected from *all over* the world.)
- c. Copular-Comp.: Occurring as a complement of a copular verb (or a locative phrase in *there* construction) (e.g., Your capillaries are *all over* the place. / There are cracks *all over* the house.)
- d. Sentence Adjunct: Occurring as a modifier of a whole clause (e.g., *All over* the world today, children are starving.)

2 All the examples in this paper that are presented without a reference to the literature are extracted from the *BNC*.

e. NP Modifier: Occurring as a modifier of a noun phrase
(e.g., People **all over** the world have been looking for him.)

f. Others or Intermediate Examples

(e.g., For the sporty guy, Slazenger **All Over** Body Kit is ideal.)

The distinction between the predication and sentence adjuncts in this study was based on Quirk et al. (1985: 505, 511-514). Predication adjuncts are adverbial elements that occur within a verb phrase.³ Sentence adjuncts are modifiers of a clause that occur outside the scope of a verb phrase. Thus, their positions are relatively free in a clause. For instance, *on the platform* in (9a) is a sentence adjunct, which functions as a modifier of the whole related clause *she kissed her mother* and is thus free to appear not only in a clause-final, but also in a clause-initial position. In contrast, *on the cheek* in (9b) is a predication adjunct that was selected by the head verb *kiss*. It expresses the end-point location of the act expressed by the verb. Therefore, it is hardly extracted from the verb phrase, which is because (9b) sounds unnatural.

(9) a. **On** the platform, she kissed her mother.

b. ?**On** the cheek, she kissed her mother.

(Quirk et al. 1985: 512)

A total of 451 examples of *all over NP* were annotated according to these features and the frequency of the examples in each grammatical category was counted.

To illustrate the grammatical characteristics of the expression *all over NP* more clearly, this study also extracted the examples of *over + entire NP* from the *BNC*, which was introduced as a synonymous expression of *all over NP* by Lakoff (1987: 42) as in (1) and (2). When the examples of *over + entire NP* were extracted, one word, such as *the* or *a* was allowed between *over* and *entire*. Consequently, 104 examples of *over + entire NP* are found in the *BNC*. The grammatical behavior of these examples were annotated as well.

4. Results and Analysis: Grammatical Tendencies of *All Over*

This section presents the results of annotating data from the *BNC*.

³ According to Quirk et al. (1985), there are two types in predication adjuncts: one is obligatory, which is the essential element for the verb phrase (e.g., He lived **in Chicago**. (*ibid.*: 505)), and the other is optional, which occurs within a verb phrase but is not an essential element and can therefore be omitted (e.g., John forced open the door **by means of a lever**. (*ibid.*: 510)). This study did not distinguish between these two while annotating the data.

4.1 Grammatical Status of *All Over* and the Synonymous Expression

Table 1 illustrates the distribution of the grammatical status of *all over NP* and its synonymous expression *over + entire NP* observed in this study. This table summarizes the raw frequencies of the target expressions occurring in each grammatical status and their ratio among the total frequency of *all over NP* (451 examples) or *over + entire NP* (104 examples), respectively.

Table 1 : Grammatical Status of *All Over NP* and its Synonymous Expression

	a. Predication Adjunct	b. Prep- Comp.	c. Copular- Comp.	d. Sentence Adjunct	e. NP Modifier	f. Others	Total
<i>All over NP</i>	179 (39.7%)	82 (18.2%)	33 (7.3%)	48 (10.6%)	102 (22.6%)	7 (1.6%)	451 (100%)
<i>Over + entire NP</i>	49 (47.1%)	0 (0.0%)	0 (0.0%)	9 (8.7%)	40 (38.5%)	6 (5.8%)	104 (100%)

As shown here, both expressions are most frequently used as a predication adjunct. In (10), the expressions *all over the floor* in (10a, b) and *all over my books* in (10c) occur within the verb phrases headed by *spread*, *run*, and *leak*, respectively, expressing the end-state of the motion that that TRs (some entities or liquid) spread over the LMs. *All over NP* occurring in this syntactic status seems to have tendencies to co-occur with the verbs of dispersion and to describe the state of “chaotic dispersal,” which is the sense pointed out in Queller’s research.

- (10) a. George strips the wallpaper, takes the covers off books and spreads his hay *all over* the floor in one of our rooms, ...
 b. [W]hen I pulled the bath plug, it rann *all over* the floor.
 c. Get up here, don't lay them down they might leak *all over* my books and I will be in trouble.

The phrase *over + entire NP* also occurs frequently as a predication adjunct, which refers to the elements that occur within verb phrases. The phrase *over + entire NP*, as well as the expression *all over NP*, tends to co-occur with the verbs of dispersion (e.g., *scatter*, *spread*) as in (11).

- (11) a. Now once again lights and darks are juxtaposed arbitrarily to create a sense of shallow relief, and are evenly scattered **over** the **entire** picture surface to maintain a compositional balance.
- b. The Sola Grill has been unique to New World for over 25 years. We believe no one has ever come up with better. It simply uses surface combustion to spread the gas flame uniformly **over** the **entire** grilling area to eliminate hot spots and cold corners.
- c. This stock could be thinly spread **over** the **entire** population, or be given over in its entirety to a number of friendly societies (a new role for the friendly societies is proposed below).

As shown here, we can observe some common characteristics in the grammatical behavior of the expressions *all over NP* and *over + entire NP*. However, there are also some differences between these expressions. The following sections focus on the differences and analyze the kinds of semantic features that are considered reflected in the grammatical tendencies.

4.2 All Over as a Complement of Prepositions

This section first focuses on the fact that 18.2% of the examples of *all over NP* occur as a complement of prepositions. It often appears as a complement of *from* in particular.

- (12) a. Childline began nationally in 1986, more than 215,000 children and young people from **all over** the country have been counselled.
- b. From **all over** Europe, young people are attracted by the free and easy spirit in Ibiza which makes a holiday so much fun.
- c. In addition, offshore work involves many thousands of men travelling to Aberdeen from **all over** Britain, to be ferried to installations by helicopter.

As in these sentences, *from all over* tends to be followed by a noun phrase that specifies a broad area, such as *the country*, or specific names of geographic areas (e.g., *Europe* or *Britain*).

Conversely, we cannot find any examples in which *over + entire NP* occurs as a complement of a preposition in the corpus. Even if the modifying word *entire* does not occur, *over* phrase generally tends not to appear as a complement of *from*. While there are 77,559 examples of the use of the preposition *over* in the *BNC*, only 58 examples of the collocation *from over NP* can be observed. Even when the collocation occurs, *over* usually does not express the “covering” sense but focuses on the “crossing of the

boundaries of the landmark” (Brugman 1981: 24), in which “the trajectory is on the other side of the landmark from the point of view” (*ibid.*) as in (13).

- (13) a. I have been watching you from *over* the wall.
b. Clinging with toes and with knees, he leaned into the wall and drew an arrow, fast, from *over* his shoulder.

Otani (2013) compared *over* with its antonym *under*, also pointing out that *over* phrase hardly occurs as a complement of prepositions.

- (14) a. The mosquito flew from *under* the table.
b. ??The mosquito flew from *over* the table. (Otani 2013: 125)

Otani (2013) affirmed that it is natural for the *under* phrase in (14a) to occur in this syntactic status because it indicates the specific region that is conceptualized as a space bounded by the table and the floor. In other words, the region expressed by *under the table* can be recognized as a space whose boundary seems clear. In contrast, the space expressed by *over the table* in (14b) is broader and non-specific, which is hard to recognize as one bounded region. This nature would make it unnatural for the *over* phrase to occur in (14b). Otani (2015) conducted further corpus research on the prepositional phrases that appear as complements of other prepositions, also demonstrating that a prepositional phrase that indicates a bounded region tends to occur as a complement of prepositions. Based on these studies by Otani, it can be considered that the use of *over* phrases in (13) sounds natural because their boundaries are provided by the LMs and the places specified by *over the wall* and *over his shoulder* can be conceptualized as bounded regions.

Table 1 shows that *all over NP* can occur as a complement of prepositions, which implies that *all over NP* profiles the specific, bounded region to emphasize the breadth of the region. *Over + entire NP*, in contrast, describes the trajectory or the end-state of the moving entities as in (11), which may be reflected in the grammatical tendencies that it frequently occurs as a predication adjunct. That is, *over + entire NP* is closely related to the dynamic motion, and *entire* emphasizes how widely the entity moves or the influence of the motion of the dispersion spread. In contrast, *all over NP* focuses on the breadth of a bounded region and is not necessarily associated with the dynamic motion of an entity.

4.3 All Over as a Complement of Copular Verbs

This section focuses on the result that *all over NP* can occur as a complement of copular verbs. As summarized in Table 1, 33 (7.3%) examples of *all over NP* occur in this

syntactic status (including the locative phrase in *there* construction) as in (15), whereas I cannot find any examples of *over* + *entire NP* occurring in this syntactic position in the *BNC*.

- (15) a. So your capillaries are all over the place.
b. There's a great fuss going on, isn't there? It's been on the television news and it's all over the papers this morning.
c. There was drug paraphernalia **all over** the house.
d. There were dead birds **all over** the street.

All over NP as a copular-complement specifies the range in which multiplex TR exists, neither the paths nor the end-state of a dynamically moving entity, as well as the examples of *all over NP* occurring as a complement of a prepositional phrase. This grammatical tendency of *all over NP* also implies that this expression tends to be used to profile the static state of a specific region rather than the paths of dynamic motion.

From a semantic perspective, *all over NP* in this syntactic status tends to express “chaotic dispersal” sense. Among the 33 examples of the copular-complement use of *all over NP*, nine examples comprise the expression *all over the place* as in (15a). The LMs of the remaining 24 examples are the space, such as *the house* and *the street*, which are narrower than the geographic areas (cf. (12)). In addition, although further research would be needed to prove this, the TRs seem to present the tendency to have a negative value (e.g., *drug paraphernalia* in (15c) and *dead birds* in (15d)).

While we cannot find examples of *over* + *entire NP* occurring as a complement of copular verbs, it is possible for the *over* phrase (without *entire*) to occur in this syntactic position. Although it appears as a copular-complement, it expresses a situation in which a TR is at a higher place than the LM (e.g., (16a)) or the end-point of the trajectory that is “crossing of the boundaries of the landmark” (Brugman 1982: 24) (e.g., (16b)), rather than the situation in which multiplex TR spreads as though it covers the LM.

- (16) a. The tablecloth is **over** the table. (Tyler & Evans 2003: 65)
b. Sam is **over** the bridge now. (Dewell 1994: 352)

In other words, when the *over* phrase expresses “covering” sense, it tends not to occur as a complement of a copular verb. This grammatical tendency, as well as the result examined in Section 4.2, implies that the “covering” sense expressed by *over NP* (without *all*) is typically based on the movement (of dispersion as in (11) in particular), rather than the static state of a specific region.

4.4 *All Over* as a Sentence Adjunct and an NP Modifier

Sections 4.2 and 4.3 exhibit that *all over NP* profiles the specific bounded region in which multiplex TR exists, whereas *over* phrase without *all* tends to express the trajectory or the end-state of motions. This tendency is reflected in the examples in which *all over NP* occurs as a sentence adjunct and as an NP modifier as well.

Table 1 shows that the ratio of the use as a sentence adjunct (i.e., clause-level modifier) is relatively low and not all that different from that of *over + entire NP*. However, these two expressions show a very different meaning when they occur as a sentence adjunct. When *over + entire NP* occurs in this syntactic status, it usually expresses metaphorical meaning, “temporal” sense in particular; all the nine examples of *over + entire NP* categorized as sentence adjunct co-occur with the noun phrases associated with time period as follows.⁴

- (17) a. *Over the entire year* outstanding credit grew just 224m, compared with more than 4bn in 1990 and 5.7bn in 1989.
- b. Thus, *over the entire measurement period* the flooding procedure was successful in bringing the tissue and plasma free leucine enrichments to similar values.

In contrast, the noun phrase in *all over NP* as a sentence adjunct usually expresses not the abstract concept but the spatial domain such as *the world* or geographic regions.

- (18) For the history of the Soviet people during the last twenty or so years machine-readable data files are crucial and Moissenko argues contemporary historians need to come to grips with them now. It would be foolhardy to believe that the Soviet case is unique. *All over Eastern Europe* similar cases could be found, and a similar state of affairs probably holds sway elsewhere. The Netherlands, Austria, and the United Kingdom all offer parallels involving the loss of vast amounts of machine-readable data.

4 This tendency generally can be observed in the use of *over* phrases. Ohta (2009) investigated the 500 examples of *over* phrases extracted randomly from the *BNC*, demonstrating that 92.5% of the *over* phrases that occur as a sentence adjunct illustrate metaphorical meaning and that 81.7% of them express “temporal” sense.

(i) *Over the last few years*, millions of people have taken part. (Ohta 2009: 66)

In other words, *over* phrase is rarely used as a sentence adjunct to express spatial meaning.

While closer research on the contexts will be necessary in order to examine the discourse functions, it appears that *all over NP* as a sentence adjunct is used frequently in the contexts to show how widely and generally an event occurs. For instance, in (18), the writer generalized the topic from a Soviet-specific one to one that is related to a broader area, namely Eastern Europe, using the phrase *all over*. In (19), the frequently occurring expression *all over the world* is used to emphasize the importance of the topic by showing that the problem is related to and has a great influence over a broad area.

- (19) Labour's Minister for Science will develop a national strategy to promote high-quality science and technology, so that Britain can better anticipate and respond to the challenges of the future. *All over the world, industries face unprecedented environmental challenges.* We will support new research into environmentally-friendly technologies and launch a Great Environment Exhibition to publicise and to promote sales of the cleanest British technologies.

In the theory of cognitive grammar (Langacker 1987, 1991, 2008), the sentence adjunct is considered to express the setting of a situation in which an event occurs, whereas the arguments of a verb typically express the participants of the events that interact with each other in a stable setting. Radden and Dirven (2007: 303, 318) also explained that the peripheral elements such as space, time, condition, or cause, of an event usually appear as a clause-level adjunct, which specifies the setting of the event. Based on these studies, it can be considered that *all over NP* can be used to specify the spatial setting under which an event occurs. This seems consistent with the nature of *all over NP* to profile the specific range of a spatial area, which we found in the previous sections.

A similar tendency can be observed in the use of *all over NP* as an NP modifier. Although both expressions *all over NP* and *over + entire NP* can occur as modifiers of a noun phrase, their semantic characteristics differ. As in the cases of the use of a sentence adjunct, the collocation *over + entire NP* used as an NP modifier tends to express various metaphorical meanings such as “temporal” or “control,” which reflects the polysemous nature of the preposition *over*.

- (20) a. Renberg et al. reconstructed the lakes' history *over* their *entire* lifetime (more than 10,000 years), and they compare the relative importance of the factors potentially responsible for acidification of surface waters.
- b. Such a policy if we could be forced to accept it would doubtless hasten and simplify Soviet control *over* the *entire* Peninsula.

The expression *all over NP* in this syntactic status still keeps its characteristics to profile a specific spatial region. It includes a noun phrase like *the country* or *the world* as its complement, just like the cases in which it is used as a complement of prepositions and as a sentence adjunct.

- (21) a. And women *all over* the country are doing the same, ...
b. School-teachers *all over* Sarawak who supported the PBDS have since been threatened with disciplinary action.
c. Aid agencies *all over* the world have tried to ease their situation, but more immediate help has come a Hereford farmer.

The next section summarizes the idiomatic nature of *all over NP* based on the observation of the *BNC* data, and discusses its implications for the fields of idioms and constructions.

5. Summary and Discussion

The previous sections examined the grammatical behavior of *all over NP* and compared it with that of *over + entire NP*. The expression *over + entire NP* in “covering” sense mainly occurs within a verb phrase, focusing on the trajectory or the end-state of motion. The expression occurs as a modifier of a clause or that of an NP, but when it appears in these grammatical statuses, it expresses not the “covering” sense but some metaphorical meanings that the polysemous preposition *over* has. Some studies examining the grammatical behavior of *over* phrases compared with *under* phrases (e.g., Ohta 2009; Otani and Horiuchi 2013; Horiuchi 2015, 2018), have demonstrated that *over* phrases typically appear as a predicate adjunct, that is, as a modifier of a verb to express the trajectory of a moving entity. Conversely, it rarely appears as a complement of prepositions or as a sentence adjunct, except for its “temporal” use. It can be considered that the grammatical behavior of *over + entire NP* reflects the tendencies of prepositional expressions headed by *over* in a relatively direct manner.

In contrast, the expression *all over NP* can occur in some grammatical positions in which *over* phrases (without *all*) in “covering” sense hardly appear. For instance, it can be used as a complement of another preposition and of a copular verb, and also as a sentence adjunct to indicate the spatial settings in which an event occurs. The spatial elements occurring in these grammatical positions tend to profile a particular region, rather than closely relate to the motion of the entities. This implies that (i) the phrase *all over NP* presents distinctive grammatical tendencies that cannot be directly predicted by the use of

over phrases, and (ii) it reflects the semantic profiles of this expression, which is also different from that of *over* phrases occurring without *all*.

As shown in Section 2, Taylor (2006, 2012) examined the use of the expressions *all over the place* and *write all over (the face)*, proposing the recursive nature of “idiomaticization.” This suggests that a new, non-compositional meaning can be delivered by a unit that comprises the combination of an idiom and other words. This implies that the linguistic unit that conveys the meaning and that is combined with each other to deliver the meanings is not necessarily the “word” unit but can be larger than a word. The results of this paper may also imply that some meanings are associated with a combination of an idiom and a grammatical status, that is, the more schematic constructions in which it occurs. For instance, by occurring as a sentence adjunct, the expressions *all over the world* and *all over the country* (or specific name of a country, city, or a region) can be interpreted as a setting of an event and achieve a discourse function to emphasize how important and widely influential the event is (cf. (18)(19)). When *all over NP* occurs within a verb phrase or a complement of a copular verb, in contrast, it tends to be associated with the meaning “chaotic dispersal” of the multiplex TR.

The construction approach to grammar (Goldberg 1995, 2006; Hilpert 2014), and the theory of cognitive linguistics more generally, assumes that there is no clear distinction between lexicon and grammar. It implies that there are various types of constructions, such as highly schematic ones (e.g., transitive construction, double object construction) and far more specific ones in which some lexical items are determined. It also suggests that various types of units, a word or a more complex construction comprising multiple words, are associated with the meaning. Based on this, it can be assumed that a combination of various types of linguistic units can gain some conventionalized or non-compositional semantic features. The combinations can be, for example, [a word + a word] (e.g., *all + over*), [a word + a phrase] (e.g., *all + over the place*, *all + over the face*), [a word + an idiom] (e.g., *written + all over the face*), and even “an idiom + a grammatical construction” (e.g., *all over the place + Copular construction*) as shown in this paper.

6. Conclusion

This study examined the grammatical behavior of the expression *all over NP* using the *BNC*, demonstrating that (i) *all over NP* presents some grammatical tendencies that cannot be directly predicted by the use of *over* phrases occurring without *all*, and (ii) the grammatical tendencies would reflect its semantic characteristics profiling the bounded spatial region, which is also different from that of *over* phrases that tend to focus on the paths. *All* in the expression *all over NP* seems to be a simple modifier, but the grammatical tendency of *over NP* can differ by adding this element. The idiomatic nature

of *all over NP* can be observed not only in its semantic features but also in its grammatical behavior.

This paper suggested that not only the combination of [a word + a word] but also the various types of combinations including “an idiom + a grammatical construction” can be a unit that is associated with some conventionalized semantic characteristics. Similar phenomena would be observed in linguistic expressions other than *all over NP*, which may facilitate deeper research based on the constructional view of grammar.

This study conducted quantitative research using the *BNC*, but neither examined the adverbial use of *all over* nor examined the distributions of the co-occurring noun phrases that work as the TRs and the LMs when *all over* is used. If additional research is conducted on these points, then it may become clearer under which kinds of conditions some semantic distinctive features (e.g., “chaotic dispersal”) become evident and what kinds of differences are observed between “covering” the sense of *over* and *all over* from the perspective of collocation.

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