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On Semantic Extensions of Verbs of Appearance

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1. Introduction

As one of its organizing principles, cognitive linguistics asserts that language is indissociable from other facets of our cognition. It claims, in particular, that fundamental cognitive abilities and experientially derived cognitive models are directly and pervasively manifested in language, and, conversely, that linguistic structure furnishes important clues to understand basic mental phenomena. It is argued that meaning is extended to the abstract sense from the concrete sense (which is based on our bodily experience and our cognition of space). Semantic extensions¹ are motivated by our cognitive abilities, such as metaphor, metonymy, abstraction, schematization, categorization, figure/ground organization, and reference-point abilities². For example, through metaphor and abstraction or schematization of meaning, a certain linguistic expression comes to be used in another context or domain. It is often called domain shift or metaphorical extension. A semantic extension concerning profile shift occurs through the shift of our point of view (or the shift of our focus of attention). It is sometimes called metonymic extension. Moreover, subjectification (in which an entity originally construed objectively comes to be subjectively construed) is also a highly important factor of semantic extension. It reflects the difference in perspective or the difference in how the conceptualizer chooses to construe an entity or a situation.

My objective is to explore the semantic extensions of four verbs of appearance (*appear*, *occur*, *emerge*, and *come*³) and to clarify what kinds of motivations figure in their extensions. Quirk et al. (1985) and Langacker (1991) present various characteristics of *appear*, but both of them still do not clarify what kinds of motivations trigger the semantic extension of *appear*. Quirk et al. (1985) classify *appear* into two types (i.e. *appear* as a verb of 'seeming' and catenative *appear*). But, their analysis chiefly focuses on the syntactic characteristics, and so they do not clarify the semantic difference between these two types of *appears* and in what process they have developed. Langacker (1991) analyzes *appear* and other so-called raising verbs by using the notion of the active-zone and our reference-point ability. He does not, however, focus on the semantic extension of *appear*.

Therefore, in this article, I will try to propose the semantic extensions of these four verbs of appearance from the standpoint of cognitive grammar. It is the analysis which includes the effect on extension of our fundamental cognitive abilities, our tendencies, analogy to other verbs which evoke a similar sense, interpersonal relationship, and contextual effects within its scope. The historical observation functions as one of supporting evidence of my claim.

In the next chapter, I will review some of the basic notions of cognitive grammar which relates to meaning, semantic structure, and semantic extensions. In chapter 3, I will describe a pattern of semantic extension of these four verbs of appearance and clarify what kind of cognitive abilities are related to their extensive process. Chiefly, I will focus on *appear*, as *appear* is used in the

¹By the term 'semantic extension,' I mean extensions of usage event (i.e. extensions of the range of usage including the range of construction) to which a linguistic expression is accommodated. It includes both synchronic and diachronic extensions. The term 'semantic change (or semantic shift)' is used chiefly as historical changes of meaning. The term 'development' means historical developments of construction in which a linguistic expression can occur.

²It may be possible to refine these various cognitive abilities and integrate them into one or two fundamental abilities.

³*Come* is often classified into motion verbs. However, there are cases in which *come* profiles primarily the sense of appearance of some entity into our view. It is why I classify *come* into verbs of appearance and discuss the semantic extension of *come* in this paper.

broadest range of context of these verbs. I will present its extensive process and the network of its sense and constructions, and show *appear*'s historical development to support my claim. While indicating that subjectification recurrently occurs in the extension of *appear*, I will also claim the importance of the following other factors of its extension than subjectification: analogy to other verbs conveying a similar sense, contextual effects (i.e. the routinization of context), and communicative or interpersonal factors.⁴ Lastly, in chapter 4, I will propose the relationship between the semantic shift and the explicit locative expressions occurring with these verbs.

In this article, I try to show what kinds of cognitive abilities are related to semantic extensions and how important to extensions the conceptualizer's role of construing an entity or a situation is. My objective in further studies is not only to explore the crucial roles of our cognitive abilities in natural language, but also to clarify the effects on semantic extensions of our cognitive abilities, contextual effects, cultural or social factors, and interpersonal or communicative functions.

2. Semantic Extension in Cognitive Grammar

A central tenet of cognitive grammar is that language emerges from the interaction of varied inherent and experiential factors – physical, biological, behavioral, psychological, social, cultural, and communicative – each functions as the sources and formative pressures (cf. Langacker 1991).

A few basic notions of cognitive grammar need to be presented at the outset. Langacker (1991) assumes that a speaker's linguistic knowledge is characterized as "an array of units (or thoroughly mastered structures – cognitive routines) available to the speaker for the categorization of usage events (actual utterances in the full richness of their phonetic detail and contextual understanding) (Langacker 1991)." The units abstracted constitute a speaker's knowledge of linguistic convention. In this context, a meaning or a semantic structure includes both conceptual content and a particular way of construing that content. That is, meaning of an expression is identified with conceptualization. An expression provides access to even whole knowledge systems (involving both linguistic and extra-linguistic knowledge). "Extensions" refer to extensions of usage events or a process to give rise to a new conventional unit from more basic one.

Metaphorical extensions and metonymic extensions are subclasses of semantic extension. The former arises through schematization and domain shift, and the latter arises through profile shift.

"Subjectification" is also an important term in discussing the semantic extension. It means "a semantic shift or extension in which an entity originally construed objectively comes to receive a more subjective construal (Langacker 1991)." The "perspective" taken on the scene by the conceptualizer is crucial for this extension.

Grammaticalization (cf. Hopper and Traugott 1993) is a type of semantic extension, in which a meaning tends to change from a lexical item to a grammatical marker. A grammatical marker is usually schematic and is applied to a broader range of usage events by a loss of specificity. It is based on transfer from a 'concrete' to an abstract domain which is motivated by our cognitive abilities abstraction and schematization. Recent analyses, however, show that grammaticalization involves various types of semantic extension and that it is important to clarify them. Langacker (1990) evinces that some instances of grammaticalization are the consequence of recurrent subjectification.

My analysis of semantic extensions of verbs of appearance depends on these tenets and notions of cognitive grammar. Accordingly, my claims in this article are: the original meanings of these verbs are concrete ones which are based on our physical experience and our cognition of space; these verbs extend first from this concrete sense to more abstract one through schematization and domain shift, and then show a further extension to verbs of 'cognition' through profile shift.

I will also claim, however, that we must have more attention to contextual effects, interpersonal factors, and analogy to other linguistic expressions, because these factors are closely related to "conceptualization" and "subjectification" in complex ways but they have received little attention in cognitive grammar. In short, it is necessary to clarify them in order to characterize exhaustively every kind of extension and the crucial roles of conceptualization in extension. I believe that it is

⁴I think that these factors have received so little attention (or have been described in detail) in cognitive grammar.

possible to elucidate the important roles of these factors in conceptualization and extension in cognitive grammar, since cognitive grammar, as its central tenet, does consider language to emerge from the interactions of varied inherent and experiential factors including social, cultural, and communicative factors, and assumes that usage events (which includes contextual understanding) affects an interpretation of expression.

3. Semantic Extension of Verbs of Appearance

In this chapter, I will show that the senses of the verbs of appearance are extended first from concrete (physical-experience-based) sense to more abstract one and then come to convey a sense pertaining to 'cognition.' The motivations are our abilities of metaphor and metonymy. Moreover, these verbs show not only the extension of meaning itself but also the extension of usage events. Its motivations are our ability of analogy to other verbs which evoke a similar sense and our ability of profiling shift, i.e., our ability of profiling the secondarily interpersonal sense rather than the originally profiled part of the meaning.

3.1. From Appearance in Physical Space to Appearance in Mental Space

Verbs of appearance originally evoke a concept of the appearance of a visible entity in the external physical world. I call it the sense of 'appearance in physical space'. As (1a) and (1d) show, the most crucial domain in the external space is our field of view .

- | | |
|--|------------------------|
| (1) a. The ship appeared in sight. | (<i>Progressive</i>) |
| b. Bats occur almost everywhere ⁵ . | (<i>ibid.</i>) |
| c. The sun has emerged. | (<i>ibid.</i>) |
| d. The shore came in sight. | (<i>ibid.</i>) |

Consider the sentences in (2). *Appear*, *occur*, *emerge*, and *come* extend their original senses to the sense of appearance of abstract entity (e.g. thought) in the internal mental world.

- | | |
|--|------------------------|
| (2) a. The more clearly their excellences appear. | (<i>OED</i>) |
| b. An idea occurred to me. | (<i>Progressive</i>) |
| c. A conclusion began to emerge. | (<i>ibid.</i>) |
| d. The solution to the problem just came to me [into my head]. | (<i>ibid.</i>) |

These examples express the appearance of abstract (i.e. [-visible]) entity. For their appearance to be recognized, these entities must be brought into our consciousness. Accordingly, the space where they appear is no longer the external physical space. It is the internal mental space or our mind⁶ and a most relevant domain is our consciousness.

⁵There is an example of *occur* in which the subject is not a physical entity but an event.

- | | |
|---|------------------------|
| (i) Several traffic accidents occurred yesterday. | (<i>Progressive</i>) |
|---|------------------------|

Though the subject *several traffic accidents* is not considered as a concrete entity, I want to posit this kind of sentences in the type of appearance in physical space. The difference between entity and event may reside only in a difference between sequential scanning and summary scanning. The further study will be awaited.

⁶We can find other contexts in which the abstract entity appears. One of them is linguistic context, as the following sentences show

- | | |
|--|------------------|
| (i) a. ...they [=the presentational <i>there</i> , the meteorological <i>it</i> , and "chunks" of idioms] do appear as the object of <i>expect</i> in the context of the raising construction. | <Langacker 1991> |
| b. ...it [=a lexical item] occurs in a certain construction. | (<i>ibid.</i>) |

The position of these examples in the extensive process is still in question.

⁷"Consciousness" or "awareness" seems to be an important concept. Bolinger (1977) uses this term in the study of *there*-constructions. He claims that the existential *there* has a function of bring something into awareness; and therefore that the referent of the existential *there* is "awareness." Though I do not completely argue for his claim, it is interesting to me that as a result of abstraction some linguistic expressions tend to have a meaning related to

The extension from the sentences in (1) to the sentences in (2) can be called a metaphorical extension from appearance in external physical space to appearance in mental space. More precisely, it is a metaphorical extension from appearance in our field of view to appearance in our consciousness. It is a consequence of abstraction through schematization and domain shift. *Appear, occur, emerge, and come* have extended their meanings, preserving the original topological and relativistic nature of the original 'appearance' schema.

The schema of 'appearance' can be well illustrated in the container-content schema: the entity which appears can be taken as a content and that the domain in which the entity appears as a container. A content, a visible entity, appears or comes into a container which is called the field of view in the external world, and a content, an abstract [-visible] entity appears or comes into a container which is called our mental (or internal) world. Figure 1^a roughly illustrates, by analogy to the container-content schema, the extension of verbs of appearance from appearance in physical space to appearance in mental space.

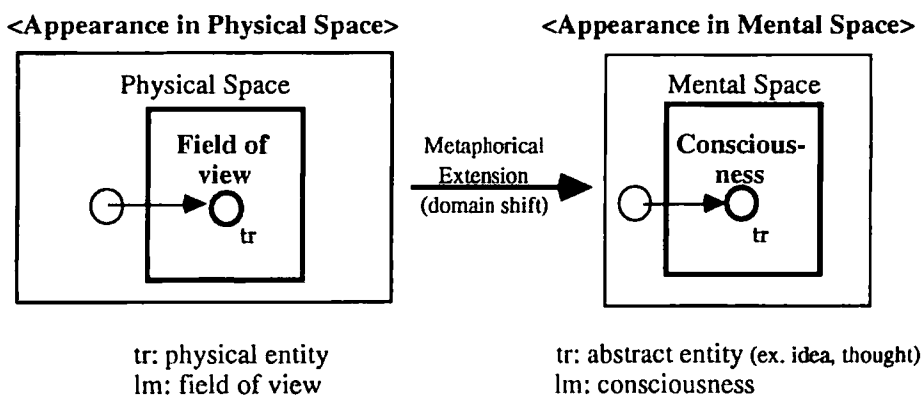


Figure 1

What I try to suggest in Figure 1 is that the semantic shift preserves the image-schematic structure (i.e. topological or relativistic nature) of the original 'appearance' schema.

The verbs of appearance show further extensions. See the following examples in (3). The sense of 'appearance' is attenuated and the detail of what comes into consciousness is clearly expressed in *that*-clause. As occurring with a *that*-clause complement, verbs tend to convey the sense pertaining to cognition or judgement, as seen in the cases of *see, hear, and feel*. Therefore, in (3), the verbs of appearance come to evoke primarily a sense of cognition and only secondarily a sense of 'appearance.' We can assume that these verbs change from verbs of appearance to verbs of cognition.

- (3) a. It appears that he is wise. (Quirk et al. 1985)
 b. It occurs to me that I may have misunderstood you. (Progressive)
 c. It emerged that she had been drinking. (COBUILD)
 d. It came to me suddenly that what was wrong that I was tired. (ibid.)

The significant characteristics in the sentences of (3) is that the container (i.e. the domain in which thought appears) is no longer profiled. It is made implicit and background. One reason resides in the attenuation of the sense of 'appearance.' Another is that it is obvious that the domain "awareness", "consciousness" or mind.

^aThe following notations are used in Figure 1.

- tr: trajector
- lm: landmark
- heavy line: profiled entity

is the speaker's mind in the default-case interpretation.

This extension can be taken as an instance of profile shift (i.e. shift of our focus of attention) from the event of appearance of thought to the content of thought. It is not surprising that we tend to focus our attention to the content of thought rather than its appearance.

This profile shift also pertains to the close relationship between our perception and cognition. A conception of 'appearance' originally evoked by the verbs of appearance presupposes the conception of 'cognition' that what the speaker (i.e. the conceptualizer) perceives and recognizes is appearance of an entity or an event. Verbs of appearance thus incorporate this conception as a necessary part of the original meaning, i.e. as a cognitive domain. I can say that the extension of (3) seems to emerge from the profile shift from the sense of 'appearance' to this conception of 'cognition' which has been originally incorporated.

To summarize, some verbs of appearance like *appear*, *occur*, *emerge*, and *come* extend their senses: first, they metaphorically extend from the sense of appearance in physical space to the sense of appearance in mental space through schematization and abstraction; and then, they extend from the sense of appearance to the sense of cognition through profile shift.

3.1.1. The semantic extension of *appear*

In this section, I focus on the semantic extension of *appear*. *Appear* is used in the wider context than the other verb of appearance. See the following examples.

- (4) a. He appears wise.
 a'. He *occurs/*emerges/comes wise.
 b. He appeared to have had contact with Fujioka beforehand. (*The Dairy Yomiuri*)
 b'. He *occurred/*emerged/*came to have had contact with Fujioka beforehand.

As we can see, *occur* and *emerge* cannot take an adjective complement and *to*-infinitive. *Come* can be used as copulative as seen in (4a'), but *come* does not express the speaker's subjective belief. Also, although *come* can take *to*-infinitive as a complement, the *come*-sentence in (4b') is not acceptable. *Come to do* is restricted to the meaning of the state of consequence rather than the speaker's subjective belief. That is, *come to do* expresses the subject's state after a certain reference time. *Appear*, however, can serve both as a copulative verb and as a semi-auxiliary verb⁹, and in both cases it expresses the speaker's belief. In short, *appear* has been most developed of these four verbs of appearance.

Let us first consider the extensive process of *appear*'s senses from the sense of 'appearance in physical space' to the sense of 'appearance in mental space.'

- (5) a. He appeared to me in a dream.
 b. The virgin appeared to a peasant girl. (*Kenkyusha's New Dictionary of English Collocation*)
- (6) a. A glow of light appeared over the sea. (*COBUILD*)
 b. Two men suddenly appeared from nowhere. (*ibid.*)
 c. When we reached the top of the hill, a church tower appeared. (*ibid.*)
 d. The ship appeared in sight. (*Progressive*)
 e. He appeared on the stage. (*ibid.*)
 f. My friend appeared in court. (*ibid.*)
 g. His picture appeared in the paper. (*ibid.*)
- (7) The idea appears in many papers. (*Progressive*)
- (8) The more clearly their excellences appear. (*OED*)

⁹As we will see later, Quirk et al. (1985) classify *appear* like (4a) into verbs of 'seeming' and *appear to* like (4b) into catenative verbs.

- (9) Likewise, since writing is an instance of human activity, human activity does not appear as a domain, but the various domains that it presupposes - time, change, force, volition - do appear.... <Croft 1993>¹⁰
- (10) It appears that across senses transitive *break* allows a wider range of objects than intransitive *break* allows subject. <Levin and Rappaport 1995>

In examples in (5), both entities are human, but they no longer have a concrete substance because they are phantoms. For the person who can see them, they are real and visible entities, but for the other persons, they are not visible. We can say that the space where these entities appear is the mental space of a person who can see them. As I suggest in 3.1.3, *appear* seems to historically first express the sense of appearance of phantom. Through the schematization or abstraction of the sense of 'appearance,' *appear* came to be extended to express the sense of appearance of physical entity in the physical space like (6), and then to be extended to be used in the context of expressing the appearance of abstract entity in mental space like (7).

All the subjects in (6) are visible and concrete entities which appear in the physical world. *Appear* in (6) represents appearance of physical (i.e. visible) entity in physical space.

In (7), the *idea*, represented by the subject, have no concrete substance and it is an abstract entity, and so the sentence shows a step of abstraction. However, the *papers* in which that *idea* is expressed are visible and concrete entities. Therefore, this sentence lies between visible concrete entity's appearance in physical space and invisible abstract entity's appearance in mental space. In other words, the meaning of *appear* receives a process of abstraction slightly, and slightly extends to the sense of appearance in mental space. This extension can occur because a certain idea is visibly and explicitly expressed by linguistic expressions and, even if it is not, we have an ability to grasp what is the speaker's idea from sentences in papers. Moreover, we have an ability of abstraction by which we extend physical-world vocabulary to abstract uses (cf. Sweetser 1990). This ability and the conceived context seem to bring the extension of *appear* to appearance of abstract entity.

As seen in 3.1.1, the sentence in (8) shows a complete semantic shift from appearance in physical space to appearance in mental space.

Appear in (9) represents the appearance in mental space, because we can also easily assume that the domain in which the thought that *human activity does not appear as a domain* appears is in our (in this case, author's) mental space. Moreover, we must note that this sentence profiles the state of an abstract entity (i.e. *human activity*) by using *as*-phrase. In other words, the sentence profiles 'as what kind of entity the speaker considers *human activity*' rather than the appearance of *human activity*. This leads to the next development of *appear* to a verb of cognition which profiles the content or detail of what comes into the speaker's consciousness.

In (10), *that*-clause represents the content of a certain thought or judgement which comes into the speaker's consciousness. *Appear* attenuates the sense of 'appearance' and instead profile the sense which pertains to cognition. As we will see later, this is a type of subjectification, because the speaker (or conceptualizer) incorporates in the meaning of the verb's sense.

To summarize our discussion. The sense of *appear* in the sentences like (5) is the original sense. Through the schematization, *appear* can be extended to the broader range of context; first, to appearance in physical space and then appearance in mental space. *Appear* in the sentences in (6) represents appearance of visible and concrete entity in physical space. *Appear* in the sentence like (8) expresses the appearance of abstract entity in mental space. The extension to *appear* in the sentence like (8) is a semantic extension from *appear* in the sentences like (6) through domain shift. The sentences like (7) is in the middle of this metaphorical extension, since, though they convey the sense of appearance of abstract, not visible, entity, the space where this kind of entity appears is somewhere in physical space. The sentence like (9) shows what the speaker (conceptualizer) thinks about an entity. This means that *appear* is gradually shifted to convey primarily the sense

¹⁰The angle brackets (<>) are conventionally used in this paper to indicate that the example is a sentence which a linguist uses in the text as his/her ordinary language, not a sentence which a linguist deals with as an objective of his/her analysis.

pertaining to the conceptualizer's cognition, through the attenuation of the original sense of 'appearance'. It is considered to be profile shift from 'appearance' to 'cognition'. The sentence like (10) attenuates the sense of 'appearance' and *appear* completely profiles the content of what the conceptualizer considers, i.e. the conceptualizer's cognition. In these sentences, it is not necessary to express explicitly the location where an entity appears.

I illustrate the semantic shift of *appear*. The dashed lines represent a gradual shift from appearance in physical space to appearance in mental space, and the dotted lines represent a gradual shift from the sense of 'appearance' to the sense of 'cognition.'

(11) <The semantic Extension of *Appear*>

DOMAIN SHIFT	Appearance in Physical Space	→	Appearance in Mental Space
PRIMARY SENSE	(appearance)		→ (cognition)
EXAMPLES	(6)	(7)	(8), (9), (10)

Figure 2

Now, let us observe *appear*-sentences which are not seen in other verbs of appearance.

- (12) a. He appears wise.
 b. He appears a wise man.
 c. For example, it appears inconsistent to describe the acquisition of knowledge both as seeing and as grasping.... <Sweetser 1990>
 d. ...it appears necessary to have a rule of Raising.... <Roger 1971>¹¹
 e. It appears that he is wise.
 f. It appears as if (or as though) he is wise.
- (13) a. (=4b) He appeared to have had contact with Fujioka beforehand.
 b. He appears to be wise.
 c. Sam appears to realize the importance of the problem. (Quirk et al. 1985)
 d. The importance of the problem appears to be realized by Sam. (*ibid.*)
 e. ...the entire discussion appears to rest on certain dubious assumptions about the necessary character of syntax. <Langacker 1987>
 f. Within the theory developed in chapter 5, (61a) appears to express a judgement on the relationship of the two [TYPE] concepts. <Jackendoff 1983>
 g. In other examples, the possessor does not appear to manifest any kind of potency vis-a-vis the entity possessed. <Langacker 1990>

Quirk et al. (1985) classify *appear* in the sentences like (12) into verbs of 'seeming' in copular verbs of main verbs and *appear* in the sentences like (13) into catenative verbs.

(14) <Copular Verbs>

a. CURRENT COPULAS

(i) *be*

(ii) *appear, feel, look, seem, smell, sound, taste*

(iii) *remain, keep, stray*

(iv) *become, come, end up, get, go, grow, prove, turn, turn out, wind up*

(Quirk et al. 1985)

¹¹This phenomenon has been called Raising in the traditional linguistic theories. But in this research, we do not discuss it with reference to Raising.

(15) <Gradient between Modal Auxiliaries and Full Verbs>

(one verb phrase)



(two verb phrases)

(a) central modals (*can, may, will, etc.*)

(b) marginal modals (*dare, need, ought to, used to*)

(c) modal idioms (*had better, etc.*)

(d) semi-auxiliaries (*have to, be able to, etc.*)

(e) catenatives (*appear to, happen to, seem to, etc.*)

(f) main verb + nonfinite clause (*hope + to-infinitive*)

(*op.cit.*)

The gradient in (15) is based on syntactic and semantic analyses. Syntactically, central modals have one verb phrase and satisfy “independence of subject” criteria¹², while main verbs have two verb phrases and have a restriction to the subject. Semantically, central modals express certain speech acts like giving advice, making premises or threats, giving orders, etc., whereas the main verbs do not. Since catenative *appear* satisfies “independence of subject” criteria (see the sentence in (13c)), it is classified in (15e) (i.e. the position more close to central modals than main verbs) of the gradient.

One of the problems in the classification above mostly depends on the syntactic behavior of *appear*: whether *appear* occurs with *to*-infinitive or not. Quirk et al. do not clarify what factors trigger these semantic extensions of *appear*. Another problem is whether a functional or semantic difference is in these two *appears*. Both copular and catenative verbs have a function similar to copular *be* and ‘to be copulative’ can be considered to mean already more grammaticalized. I try to show them from the standpoint of cognitive grammar.

Semantically, catenative *appear* conveys a sense of ‘in the speaker’s subjective belief world’, or a sense like ‘seem’ which is often used for the less certain proposition. *Appear* as a verb of ‘seeming’, however, is used in the cases not only of conveying a sense similar to ‘seem’ but also of implicating that ‘the statement of the sentence is now apparent or evident.’ In the latter sense, a proposition described is a certain evidential or even disclosed one. Observe the following sentences.

- (16) a. He had always seemed the perfect husband but it now appeared that he had frequently beaten his wife. (COBUILD)
- b. It now appears that George Makharadze, the Georgian diplomat accused of causing the accident that killed a 16-year-old Kensington girl in Washington, had a history of driving violation. (The Dairy Yomiuri)
- c. It appears at present that such analogies use this metaphorical mechanism. <Lakoff 1993>
- d. It appears, in fact, that reference points are fundamental to both linguistic and cognitive organization. <Langacker 1993>
- e. Now that he appears tainted, can American love him still? (The Dairy Yomiuri)

Why do the sentences above convey the high evidentiality like ‘apparent’, ‘evident’ or ‘true’ rather than ‘seem’? The reason lies in the original sense or schema of *appear*. Consider again Figure 1. *Appear* originally profiles the final situation of that an entity came into our field of view. As our dairy life mostly depends on our sight, *appear* gives rise to a sense that it is apparent what kind of entity is perceived for the speaker. In other words, *appear* originally conveys the high evidentiality of what kind of entity of is perceived.

We can not ignore the role of the words like *now*, *now that* and *at present*. In all these examples in (16), *appear* occurs with *now* or *now that*, *in fact* and *at present*. This shows that these adverbial phrases play a significant role of conveying a sense like ‘apparent’ or ‘true.’ Imagine the conventional usage events of these words. These adverbial phrases are usually and conventionally used in conclusive or decisive statement in which something has just been revealed at that time. This conventional usage events function to highlight a profile which the original *appear* evokes.

¹²“Independent of subject” criteria means that the verb can occur with any kind of subject. That is, the verb lacks a semantic restriction to the subject.

I propose, here, that the sense like 'seem', whose evidentiality is lower than that of *appear* in (16), is extended from the sense of 'apparent' or 'true' in (16). The loss of time specification by the words like *now* makes profile not a process of 'appearing' through time and a contextual meaning of 'decisive,' but instead an atemporal cognition of the speaker in the sense of not focusing on evolution through time and the uncertainty of a proposition.

To-infinitive in catenative *appear* also highlights atemporality of the sentence. Langacker (1991) suggests that infinitives designate atemporal relation in the sense of being holistically viewed (i.e. in the sense that evolution through time is not in focus). The sequence *appear to* is a more apparent sign to designate the speaker's belief than *appear* in (12).

From these discussions so far, I conclude that the sense like 'apparent' precedes the sense like 'seem' in the extension of *appear*, and also that *appear* as a verb of 'seeming' precedes catenative *appear* because of the loss of the sense like 'apparent.'

We can see here that there is a gradient in *appears* classified into verbs of 'seeming,' from the one which preserves the sense of 'appearance' to the one which completely loses its sense. While *appear* in the sentences like (12a-d) completely loses its sense and functions like a copular verb, *appear* in the sentences like (12e, f) slightly preserves the sense of 'appearance.' In the sentences like (12a-d), an adjective phrase highlights atemporality of the sentence, as Langacker (1991) has proposed. In the sentences like (12e, f), however, *appear* does not take an adjective complement. Also, we can consider that the situation has just appeared in speaker's mental space, since *it* evokes a certain vague situation which is explicitly described in the following *that*-clause. Hence, *appear* extends its usage events and the range applied from the sentences like (12e, f) to the sentences like (12a-d).

I would say here that there is no strict demarcation between *appear* as a verb of 'seeming' and catenative *appear* in the classification of Quirk et al. (1985). Semantically and functionally, a gradient can be seen in between the two. After metaphorically extended to appearance of abstract entity in mental space, *appear* gradually attenuates a conception of appearance of an entity through time and gets a sense of cognition like 'evident' or 'true.' By taking adjective or *to*-infinitive as a complement, *appear* profiles an atemporal relationship which is a holistically view made by the speaker, and then comes to convey a sense like 'seem.' *Appear* evokes a conception that the judgement is a speaker's subjective belief and that it is not based on any reliable evidence. However, there are still differences between *appear* with adjective and *appear* with *to*-infinitive complement. First, *appear* with *to*-infinitive satisfies the "independent of subject" criteria (see (13c)), as Quirk et al. suggest, whereas the subject of the sentence of *appear* with adjective must be visible. Second, *appear* with *to*-infinitive is used in a broader range of context, because the sentence describes a state or an action of the subject not only in speech time but also in the past (see (13a)). *Appear* with adjective only describes a state of the subject in speech time. From these characteristics, I can say that catenative *appear* is more grammaticalized. This might be a reason why Quirk et al. classify catenative *appear* more close to modal auxiliary verbs than *appear* as a verb of 'seeming.'

I propose here another possibility –though it is still under speculation– of the extension to the sentences like (12a, b): a possibility that these sentences were derived from the sentences like (5). The sentences like (5) describe phantoms or disembodied spirits. Since the appearance of these entities is recognized only by a perceiver or conceptualizer (expressed as a complement of *to*-dative), (5a) contextually conveys the sense like 'I think that he appeared in my dream,' and (5b) contextually conveys the sense like 'The peasant girl thinks that the virgin appeared in front of her.' It seems possible that the meaning like 'It seems to a perceiver that...' originally conveyed as a secondary contextual sense has been promoted to a primary sense under the sentences like (12a, b). A morphological coincidence between adjectives and adverbs in Middle English (see Visser (1963; quoted by Taniguchi 1996)) might help this extension. For example, the sentence of (5b), which evokes a sense like *The virgin appeared vividly to a peasant girl* can be changed to *The virgin appeared vivid to a peasant girl* through the coincidence between adjectives and adverbs. As this structure came well-entrenched, the sense like 'seem' might be promoted to a primary sense.

(17) illustrates an extensive process of *appear*'s sense. As I discuss in the following sections, this extension involves some types of subjectification in Langacker (1990, 1991).

3.1.2.1. Examples of subjectification

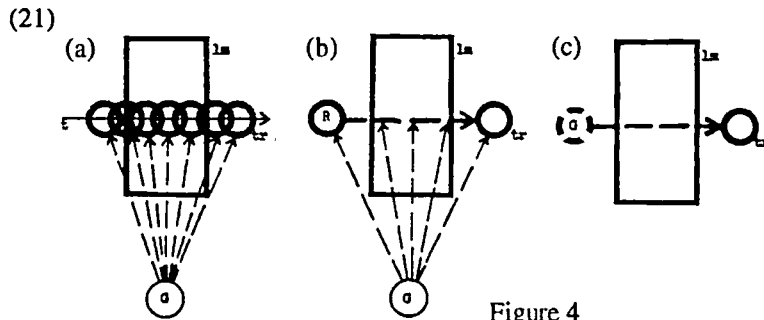
Subjectification is not taken as equivalent to a semantic shift to become an expression of a speaker's subjective belief, though related. Subjectification pertains to a distinction between the subjective vs. the objective construal of an entity, which is closely related to perspective taken on the scene.

- (19) Subjectification is a semantic shift or extension in which an entity originally construed objectively comes to receive a more subjective construal. (Langacker 1991)

To clarify the notion, let us first review some examples of subjectification.

The first example is the preposition *across*. (20a) is sketched in Figure 4(a), (20b) and (20c) in Figure 4(b), and (20d) in Figure 4(c)¹⁴.

- (20) a. Vanessa jumped across the table.
 b. Vanessa is sitting across the table from Veronica.
 c. Vanessa is sitting across the table from me.
 d. Vanessa is sitting across the table.



In (20a), *across* designates a sequence of locative configuration, *across* does not involve the ground (i.e. the speech event, its participants, and its immediate circumstances). In (20b), the sense of *across* represents a subjectification in relation to (20a), because the path from Veronica to Vanessa is subjective, residing in the conceptualizer tracing along it mentally in order to locate the trajector vis-a-vis the reference point. The foregoing instance represents a central property of subjectification.

- (22) “[S]patial motion on the part of an objectively-construed participant is replaced by subjective motion (mental scanning) on the part of the conceptualizer (Langacker 1990).”

(20c) is analogous to (20b), but the reference point is identified as the speaker instead of Veronica. In (20d), the reference point is not overtly expressed, but in the default-case we take the speaker as reference point. Here, we see that subjectification occurs recurrently.

- (23) Subjectification also occurs “when an originally objective reference point comes to be identified with a facet of the ground, which retains its subjective construed (Langacker 1990).”

From the example of *across*, we can see that there are many types of subjectification, at least two types of subjectification in preposition *across*: (i) the objectively construed spatial motion is replaced by subjective motion, i.e. mental scanning along a path from a reference point to the trajector's static location, as diagrammed in Figures 4(a) and 4(c); (ii) the reference point is

¹⁴See the details in Langacker (1990).

identified with the ground, subjectively construed, as illustrated in Figure 4(b) and 4(c).

The second type of subjectification can be seen in English past tense marker *-(e)d*. It is a fairly grammaticized element, i.e., in Langacker's term, it is a grounding predication. *-(e)d* form invokes the ground as a reference point, but the ground no longer profiled. Langacker explains this example as follows:

- (24) "[W]hen G receives a highly subjective construal, a relationship invoking it a reference point loses its profile to become as unprofiled facet of the base.... Thus, as G goes farther offstage, its construal becoming increasingly subjective, at some point the relation it anchors must also be considered offstage and hence excluded from the profile. It is for precisely this reason that a grounding predication fails to designate the grounding relationship, leaving only the grounded entity in profile (Langacker 1990)."

Note that this farther subjectification designates that the ground becomes unprofiled and offstage again after once profiled as a reference point.

The third example of subjectification is observed in the extension from deontic to epistemic modal. This reflects a domain shift from 'the evolution of *reality itself*' to 'the evolution of *our knowledge of (present) reality*.' Since knowledge of reality lies wholly within the province of the conceptualizer, epistemic modals show more subjective construal.

The fourth example is *go* of *be going to*. The original sense of *go* evokes the physical (or spatial) movement of trajector. This sense is extended temporally and comes to convey the sense that 'the trajector moves to do something in future.' Next, the following sentence like (25) has been developed. In the sentence of (25), the trajector (i.e. subject) no longer moves to destroy that town. The subject just functions as a reference point. What traces mentally along the path in order to situate the process in relation to a reference point is the speaker/conceptualizer. This change is also brought by subjectification, though *go* does not become a purely grounding predication.

- (25) An earthquake is going to destroy that town.

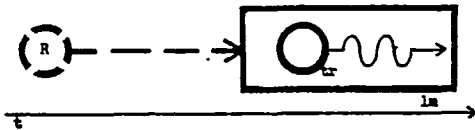


Figure 5

The fifth example is seen in *have*. See the following example.

- (26) We have a lot of coyotes around here.

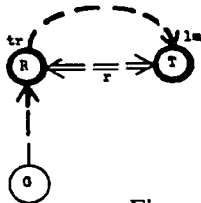


Figure 6

Have originally describes a relationship of direct physical control of the subject. In the example above, however, the subject (*we*) serves as primarily as a reference point "for establishing mental a particular geographical area (*around here*) as the region within which the target (*a lot of coyotes*) is located (Langacker 1990)." *Have* is more subjectively construed.

From these examples, we can see that subjectification is a process in which the conceptualizer incorporates in originally objective construal and that there are various way of incorporation. We also notice that subjectification recursively occurs in the semantic extension of a linguistic expression, i.e., that various types of subjectification can be layered in the extension of a linguistic expression.

3.1.2.2. Subjectification in the extension of *appear*

Now, let us turn to the case of the semantic extension of *appear*.

- (27) a. A glow of light appeared over the sea.
 b. The more clearly their excellences appears.
 c. It appears that he is happy.
 d. Sam appears to realize the importance of the problem.



In the previous sections, *appear* firstly metaphorically extends its original sense to appearance of abstract entity in mental space. In the extension from (27a) to (27b), objectively construed physical movement (i.e. physical appearance) of a concrete physical entity is replaced by subjective motion (mental scanning) of appearance of an abstract entity on the part of the conceptualizer.¹⁵ It is the same type of subjectification as seen in the development of *across* in (20b).

In (27c), *appear* comes to describe the speaker's cognition, though it still preserves the sense of 'appearance.' The conceptualizer's perspective is incorporated into the sense of *appear* and so the situation expressed in the sentence is subjectively construed. Therefore, the extension to (27c) can be explicated as an example of subjectification. In this type of subjectification, the grammatical subject *it* plays an important role. The subject *it* does not refer to any concrete entity and exerts no potency of physically appearing. Through subjectification (i.e. through the cognitive process of the conceptualizer which views *it* as an agentive entity), the occurrence of *it* comes to be acceptable. *It* serves as a reference point for establishing mentally the proposition described by *that*-clause.

In the sentence like (27d), *appear to* primarily conveys the similar sense to 'seem' and less convey the sense of 'appearance' than *appear* in (27c). The sentence is lower in the degree of evidentiality of the proposition than (27c). It means that the sentence more reflects the conceptualizer's perspective or subjective belief. In this sense, I can suggest that (27d) is extended from (27c) through subjectification. Additionally, though it is similar to (27c) that the trajector (*he*) does not actually have a potency of trying to realize the importance of the problem through time and just serves as a reference point to a target process represented by *to*-infinitive, (27d) differs from (27c) in the following respect: the speaker/conceptualizer traces mentally along the path in order to situate that process in relation to a reference point. This characteristics is seen in the extension of *go* in (25). Therefore, I claim that the sentences in (27d) is extended from (27c) by means of subjectification.

I have shown here that recurrent and layered subjectification figures in some subextensions in the extension of *appear*. For a complete account of the extension of *appear* depicted in Figure 3, however, we must need to characterize other factors than subjectification, such as analogy, contextual routinization, and interpersonal factors. I will discuss it in 3.1.4.

3.1.3. Historical development of *appear*

Let us first observe the historical development of *appear*. I especially focus on the development

¹⁵In the sentences like (6), the conceptualizer (i.e. the speaker) is subjectively construed. That is, the speaker is in the offstage region (See Langacker 1990). It is because the conceptualizer cannot come into his/her field of view in ordinary situation. Therefore, the following sentences are unacceptable, because the conceptualizer is construed objectively as an entity in the onstage region.

- (i) a. I appeared in N.Y. in 1930.
 b. I will appear in Nagano in 2050.

However, if we assume the situation in which the speaker takes his/herself objectively as an entity in a distinctive world, the sentences above are acceptable. Langacker (1987) calls this kind of examples cross-world identification. It is also an instance of subjectification.

from *appear* of 'appearance in mental space' to catenative *appear*. Looking over OED, we have found out some of the important characteristics of the extension of *appear*.

As I suggested in 3.1.1, *appear* is used originally to describe the appearance of phantom.

(28) *esp.* of angels, disembodied spirits, and visions.

"Aperede an ongel of heuene in here slepe."

[1250 Kent. Serm. in O.E. Misc. 27]

'An angel of heaven appeared in her slepe.'

As the first extension from this sense, *appear* came to be used in the context of appearance of physical entity through schematization and abstraction.

The following sentence in (29) describes the cognition that her foolery is now apparent rather than the appearance of 'her foolery.' The sentences like (29) support my claim that *appear* comes to convey the sense of the conceptualizer's cognition rather than the sense of 'appearance.' In other words, *appear* comes to profile the sense like 'clear or evident,' which has been originally a secondary sense in the context of 'appearance.' This extension seems to be closely related to the loss of an explicit locative expression.

(29) To be clear or evident to the understanding; to be plain, manifest.

"Now apperith her folye."

[1400 CHAUSER Rom. Rose 5511]

'Now her foolery appears.'

In terms of *appear* as a verb of 'seeming,' firstly entrenched is *appear* with *that*-complement whose sense is 'clear, or evident.' The second one is *appear* with adjective phrase with the sense of 'To be in mind, or in one's opinion; to be taken as, to seem' or 'To seem, as distinguished from *to be*; to be in outward show, or to the superficial observer.' And the third one is *appear* with *that*-clause whose sense is 'To seem.' See the following examples quoted from OED.

(30) impers. It is clear or evident.

"þat it may *apere* þat þe prescience is signe of þis necessite."

[1374 CHAUSER Boeth v. iv. 162]

'It may appear that the prescience is a sign of this necessity.'

(31) a. To be in mind, or in one's opinion; to be taken as, to seem.

"And the Lord siȝ, and it *apperide* youl in hise iȝen."

[1388 WYCLIF Isa. lix. 15]

'And the Lord saw, and it appeared evil in his eyes.'

b. To seem, as distinguished from *to be*; to be in outward show, or to the superficial observer.

"And the matters of most wrong, to have *appered* most right."

[1559 Myrr. Mag., R., Tresilian iv]

'And the matters of most wrong, to have appeared most right.'

(32) It seems.

"Hee's the man should fight with him...*Shal*. It appeares so by his weapons.

[1603 SHAKS. Meas. for M. III. i. 72 Page]

'He is the man should fight with him... It appears so by his weapons.'

As we can see in (31), *appear* with adjective phrase primarily has the sense like 'seem' rather than 'clear or evident.' In section 3.1.1., we have seen that, when occurring with the adverbial phrase like *now*, *appear* with adjective complement comes to convey the sense like 'clear or evident' (see the sentence of (16e)). This kind of the sentence might be derived first from *appear* like (29) and so preserve the sense of 'clear and evident.'

The developmental process of *appear* as a verb of 'seeming' seems to be as follows: first, *appear* with *that*-clause with the sense of 'evident or clear' has occurred; second, *appear* with

adjective phrase with the sense like 'seem'; and the third, *appear* with *that*-complement whose sense is similar to 'seem' has established.

OED does not mention any example with the structure like *It appears as if* (or *as though, like*) *he is wise*. This types of examples seems to have emerged by analogy to *look*-sentences like *It looks as if* (or *as though, like*) *he is wise* in the later period.

Catenative *appear* have occurred after *appear* with adjectival complement has been established. Compare the following example with the examples in (31).

- (33) "That they may appear vnto men to fast." [1611 BIBLE *Matt. vi. 16*]
 'They may appear to fast to people.'

Once the sequence of *it appears* is well-entrenched, it comes to be an insertion like *you know* and *I think*. This shows that the sequence of *it appears* has been considered as a unit (i.e. an independent or idiomatic category for the expression of the speaker's subjective judgement) through routinization. Its function is to make the statement equivocal. In communication or interpersonal relation, this function seems to play an important role in making the hearer to listen to the speaker.

- (34) "The ophrastus did not, *it appears*, adopt the sublime doctrines of his master." [1812 SIR H. DAVY *Chem. Philos. 5*]

From these historical observations, I concede that the extension of *appear* suggested in Figure 3 is fairly convincing.

In considering the following definition of grammaticalization, we can see that the extensive process to *appear to* is an instance of grammaticalization. Though *appear to* does not eventuate a complete grammatical element (i.e. it is not yet a "grounding predication"), it is most grammaticalized of *appears*. It expresses a speaker's subjective belief, its function is a kind of semi-auxiliary verb, and it is used in the broadest range of context. These characteristics are similar to those of a grammatical word.¹⁶ The emergence of sequence *it appears* used as an insertion is also considered to be a grammaticalized element.

(35) <Definition of Grammaticalization>

- a. Grammaticalization is "the processes whereby items become more grammatical through time (Hopper and Traugott 1993)."
- b. "[T]he process of grammaticization, whereby 'grammatical' elements evolve from 'lexical' sources (Langacker 1990)."
- c. 'A frequent component of grammaticization (and semantic change in general) is transfer from a "concrete" to an abstract domain (*ibid.*).'
- d. "...a grammatical marker is usually quite schematic, its evolution marked by a loss of specificity that results in its applicability to a broader range of context. Beyond this, grammaticization apparently preserves image-schematic structure and is presumably constrained by the 'topological' or 'relativistic' nature of grammatical meanings (*ibid.*)."
- e. "...grammaticized elements often shift from 'propositional' to 'textual' meanings, or from describing an external situation to reflecting evaluative, perceptual, or cognitive aspects of the "internal situation" (*ibid.*)."
- f. "One of the 'semantic-pragmatic tendencies' pointed out by Traugott as being characteristic of grammaticization is that 'meanings tend to become increasingly situated in the speaker's subjective belief/attitude toward the situation' (*ibid.*)."

Though the studies from the point of grammaticalization represent a common extensive pattern of linguistic expression (i.e. a tendency of semantic change) from a concrete (i.e. "lexical") to an abstract (i.e. "grammatical") element, they can not clarify what motivations trigger semantic extensions or which cognitive abilities are related to the extensions.

¹⁶The emergence of the sequence *it appears* in (34) is also considered to be another instance of grammaticalization, because it is used as an insertion.

3.1.4. Motivations in the extensions of usage events

Subjectification is a type of semantic extension concerning a perspective, or how to construe. As seen in 3.1.2, both metaphorical extension (i.e. domain shift) and profile shift can be integrated into subjectification. Accordingly, both the semantic extension (i.e. the extension to appearance in mental space and the extension to a verb which describes the conceptualizer's cognition or judgement are the consequences of subjectification. Nevertheless, it is impossible to characterize the extensions of usage events (i.e. the extension of construction rather than meaning) only by means of "subjectification" and the difference in "conceptualization." I know that we can posit no specific boundary between the extension of meaning and the extension of usage events. Moreover, the term of "conceptualization" subsumes in a maximal inclusive way both linguistic and extra-linguistic knowledge, and the understanding of context and social relationship, and the term of "subjectification" shows the conceptualizer's cognitive operation through conceptualization. My claim is that a complete account of extension would require an full description of a number of factors which contribute to the extension, even though they are all incorporated into a cognitive processes of "conceptualization" and "subjectification."

As I suggested in the previous sections, the factors yielding the extension of construction are analogy to other expressions, contextual effects, and interpersonal factors. Let us first consider examples of analogy to other verbs triggered by a similar sense.

- (36) a. It appears as if he is wise.
 b. ...it appears inconsistent to describe the acquisition of knowledge....
 c. Sam appears to realize the importance of the problem.

It seems that (36a) has emerged by analogy to a construction like *It looks as if (or as though, like) he is wise*, because both *appear* and *look* have come to convey the similar sense to 'seem.' The sentences like (36a) are sometimes used for making the statement equivocal. Equivocation is a means of expressing the speaker's cooperative attitude. We can say that this kind of sentences has been developed in order to satisfy our desire for smooth interpersonal relationship.

Appear in the sentence of (36b) already have a similar copulative function to *be*-verb. The sentences like (36b) seem to have been developed by analogy to the sentences like *It is inconsistent to describe the acquisition of knowledge*. In short, a functional similarity triggers a structural similarity.

Catenative *appear* like (36c) seems to have been established by analogy to *seem*-constructions like *He seems to be wise*, since *appear* came to convey a similar sense to *seem*.

Moreover, in 3.1.1, I have suggested a possibility that a sentence like (12a) (i.e. *He appears wise*) has been developed from a sentence like (5) (i.e. *The virgin appeared to a peasant girl*). One of the reason is the morphological coincidence between adverb and adjective, and another is that the meaning similar to 'seem' is originally included in the sense of *appear*. In the context of describing the appearance of phantom, only the conceptualizer can perceives the phantom and so the sentence contextually conveys the sense like 'seem to the conceptualizer.' It seems that, as establishing the structure [NP *appears* Adje.], this sense came to be a primary sense. It is possible that a meaning secondarily conveyed in the context is promoted to a primary sense.

Here, we can see that the motivations of extension are not only difference in perspective or difference in our cognition of how to construe, but also analogy to other expressions evoking a similar conception, interpersonal functions, and contextual effects. These motivations have not been highlighted in cognitive grammar – it has mainly focused "conceptualization" or how to construe an entity or a situation. I believe, however, that cognitive linguistics can treat these motivations, and further, social, cultural effects on language. See the following central tenets.

- (37) a. [Language] emerges organically from the interaction of varied inherent and experiential factors – physical, biological, psychological, social, cultural, and communicative – each the source of constraints and formative pressures.
 b. ...it [=cognitive semantics] forthrightly identifies meaning with conceptualization (in the

broadest sense)...

- c. An expression is better conceived as providing access to a potentially very large array of concepts, conceptual complexes, and even whole knowledge systems, which it invokes in a flexible, open-ended manner.
- d. [A speaker's linguistic knowledge is] characterized as an array of units (i.e. thoroughly mastered structures – cognitive routines) available to the speaker for the categorization of usage events (actual utterances in the full richness of their phonetic detail and contextual understanding). Such units arise by a process of schematization based on the reinforcement of recurrent features; thus each embodies a commonality observable across a series of usage events.

(Langacker 1991)

Cognitive grammar conceives a meaning of an expression to reflect our linguistic knowledge including contextual understanding and our extra-linguistic knowledge including social, cultural, and communicative factors. In fact, the term “scope of predication” (see Langacker 1990, 1991) refers to a scope or domain which includes a usage event of the meaning. That is, the contextual factor is included in the scope of predication. In further studies of cognitive grammar, I will focus on effects of contexts, extra-linguistic knowledge, communicative factors and analogy to other expressions in extensions in order to describe exhaustively the semantic extension of *appear*. It will clarify not only a network (Langacker 1991)¹⁷ of the senses and constructions (i.e. structural patterns) of *appear*, but also a network of *appear* and other verbs. This attempt will reveal both an overall body of linguistic system and the interrelation between language and these factors.

3.2. Observation of Other Verbs of Appearance

In this section, I observe other verbs like *occur*, *emerge*, and *come*. The common characteristics of these three verbs are: that these verbs do not convey the speaker's subjective belief; and that they cannot take an adjective (or noun) phrase and *to*-infinitive as a complement. It is a crucial difference from *appear*.¹⁸ See the following examples.

- (38) a. He appears wise.
- a'. *He emerges/occurs wise.
- b. He appears to be wise.
- b'. *He emerges/occurs to be wise.

3.2.1. *Occur* and *emerge*

Both *occur* and *emerge* show a metaphorical extension from appearance in physical space to appearance in mental space.

- (39) a. Bats occur almost everywhere. (Progressive)
- b. An idea occurred to me. (ibid.)
- c. ...thoughts that are instantaneous do not occur as part of a logical expression. <Lakoff and Turner 1989>
- d. It occurs to me that I may have misunderstood you. (ibid.)
- e. And it would no more have occurred to Adam to confide in his brother....¹⁹ (John Steinbeck, *East of Eden*)

- (40) a. The sun has emerged. (Progressive)
- b. A conclusion began to emerge. (ibid.)

¹⁷In a network, all nodes are constructional schemata linked by categorizing relationships of elaboration and extension (See Langacker 1991).

¹⁸I will not discuss the reason why only *appear* extends differently.

¹⁹Though it takes *to*-infinitive, *occur* in this sentence is not a catenative verb. *To*-infinitive simply expresses the detail which the grammatical subject *it* shows, as *that*-clause in (40d).

c. ...the reference point function emerges as the profiled relationship.

<Langacker 1990>

d. It emerged that she had been drinking.

(COBUILD)

Occur in (39a) represents the occurrence of *bats* in the physical space. In (39b), *an idea* is an

In (40a), the emergence of *the sun* is considered to be the appearance of concrete entity in physical space. In (40b), *a conclusion* is an abstract entity and the domain where *a conclusion* began to emerge is our mind (or our mental space). The sense of *emerge* shifts to appearance in mental space. *Emerge* in (40c) is the same as the case of *appear* in (9) and the case of *occur* in (39c). It slightly shifts to express (or comes to express secondarily) 'what the speaker considers *the referent point function* is,' as *as*-phrase shows. In (40d), in *that*-clause, the detail of what the speaker considered is described. This type of *emerge* is put in the extreme of the semantic extension, as seen in *appear* in (10) and *occur* in (39d).

Of course, there are some examples which we cannot determine whether it represents the appearance in physical space or the appearance in mental space. See the following examples.

(41) a. But in the end, something sound emerges from all the noise: An issue that needs attention gets it. (The Dairy Yomiuri)

b. Thus the gap between black and white views on the criminal justice system emerged with painful clarity from the O. J. Simpson criminal trial. (ibid.)

c. A new problem emerged at the meeting. (Progressive)

However, we can say the examples in the extremes of the semantic extension of these verbs: (39a) and (40a) are the examples which represent the appearance in physical space, while (39d), (39e) and (40d) are the examples which primarily express (or profile) the conceptualizer's cognition.

Here, I illustrate the semantic shift of *occur* and *emerge*, as follows, including the extension of *appear*.

(42)

	Appearance in Physical Space	→	Appearance in Mental Space		
	(Appearance)		→	(Cognition)	
<i>appear</i>	(6)	(7)	(8)	(9)	(10)
<i>occur</i>	(39a)		(39b)	(39c)	(39d), (39e)
<i>emerge</i>	(40a)	(41)	(40b)	(40c)	(40d)

As I have noted, unlike *appear*, both *occur* and *emerge* have not developed to verbs of 'seeming' and catenative verbs.

(43) a. *He occurs/emerges happy.

b. *Sam occurred/emerged to realize the importance of the problem.

Another difference from *appear* is that *occur* and *emerge* cannot occur with *as if* (or *as though*)-clause and *like*-clause, though they can occur with *that*-clause.

(44) It appears {that / as if} he is happy.

(45) a. It occurs to me {that/*as if/*like} I may have misunderstood you.

b. It emerges {that/*as if/*like} she had been drinking.

As if, *as though* and *like* are metaphor expressions. Metaphor reflects the conceptualizer's thought or reason (cf. Lakoff 1993), and so it is a highly subjective expression. We can say that the conceptualizer incorporates into these metaphorical expressions. The fact that *occur* and *emerge*

cannot occur with these metaphorical expressions shows that the conceptualizer cannot incorporate into both *occur* and *emerge* to the same degree as the case of *appear*. This fact is closely related to the fact that both *occur* and *emerge* cannot extend to catenative verbs.

Though we must await a further study with the examination of their historical developments, it is apparent that both *occur* and *emerge* have first extended their meanings from appearance in physical space to appearance in mental space, and then come to convey primarily the conceptualizer's cognition – which is originally a secondary sense emerged from the context – rather than the sense of 'appearance.'

3.2.2. *Come*

Now, let us consider the semantic extension of *come*. *Come* also shows an extension from appearance in physical space to appearance in mental space.

- (46) a. The shore came in sight. (Progressive)
 b. Happiness comes to people who work hard. (ibid.)
 c. The solution to the problem just came to me [=into my head]. (ibid.)
 d. The answer came to him just before noon. (COBUILD)
 e. A memory comes to me of snowfield in June. (ibid.)
 f. The result came as a surprise to many people. (Progressive)
 g. It came to me suddenly that what was wrong was that I was tired. (COBUILD)²⁰
 h. It came into my head to jump aloft. (OED)

(46a) represents the physical and visual appearance of *the shore*. The sentences in (46b) - (46e) represent the appearance of some abstract entity 'in people's mind', 'in the speaker's mind', and 'in his mind'. Here is the semantic shift from the appearance in physical space to appearance in mental space. (46f) shows the same characteristics as *occur* in (39c) and *emerge* in (40c). The sentence comes to describe secondarily 'as what type of entity the conceptualizer considered *the result*.' In terms of (46g) and (46h), the original sense of 'appearance' as a physical world vocabulary is attenuated and the sentences have come to focus on what the conceptualizer considers. Structurally, *that*-clause in (46g) and *to*-infinitive in (46h) represent the detail of what the conceptualizer considers. These sentences are the extreme of the semantic extension of *come*.

Unlike *occur* and *emerge*, *come* shows syntactically the same development as *appear*. (47b) shows *come* as a copular verb and (48b) *come* as a catenative verb. However, the sense of *come* is different from that of *appear*. *Appear* in (47a) and (48a) expresses the speaker's subjective belief, while *come* simply describes the resulting state and does not show the speaker's subjective belief. This semantic difference means that the syntactic development of *come* is closely related to the other original sense of *come* (i.e. the sense of 'motion into the speaker's domain') rather than the sense of 'appearance.'

- (47) a. He appears wise.
 b. The knot came untied. (Progressive)
- (48) a. She appeared to hesitate. (op.cit.)
 b. Then we come to regret it. (Kenkyusha's New Dictionary of English Collocation)

To summarize the semantic shift of *come* from appearance in physical space to appearance in mental space, comparing with other verbs of appearance discussed so far.

²⁰ The idiomatic expression *come about* conveys a sense of 'appearance' and it describes the occurrence of an entity and an event, but it seems not to be extended to describe the content of thought.

(i) Thus it came about that a kind of affection grew up between the two boys.

(John Steinbeck, *East of Eden*)

(49)

	Appearance in Physical Space		→	Appearance in Mental Space	
	(appearance)		→	(cognition)	
<i>appear</i>	(6)	(7)		(8)	(9)
<i>occur</i>	(39a)			(39b)	(39c)
<i>emerge</i>	(40a)	(41)		(40b)	(40c)
<i>come</i>	(46a)			(46b)-(46e)	(46f)
					(46g), (46h)

We have seen so far the development of *occur*, *emerge*, and *come*, and proposed that the development is the extension from appearance in physical space to appearance in mental space. Moreover, I have shown that when the sense of appearance in mental space has established the original sense slightly attenuates and these verbs shifts to verbs of cognition. The extended sentences primarily and chiefly express what the conceptualizer considers.

Though there are many verbs which are classified into verbs of appearance, all of them cannot extend their meanings from appearance in physical space to appearance in mental space. Which verb can extend its original sense to appearance in mental space is a question in further studies.

4. Locations where Something Appears

In section 1, I proposed that the semantic shift from appearance in physical space to appearance in mental space is a metaphorical mapping or domain shift to internal mental space which preserves the topological or relativistic nature of original sense of appearance. I also suggested that the relationship between an entity which appears and the location where the entity appears is a relationship between container-content, and illustrated this in the following rough figures.

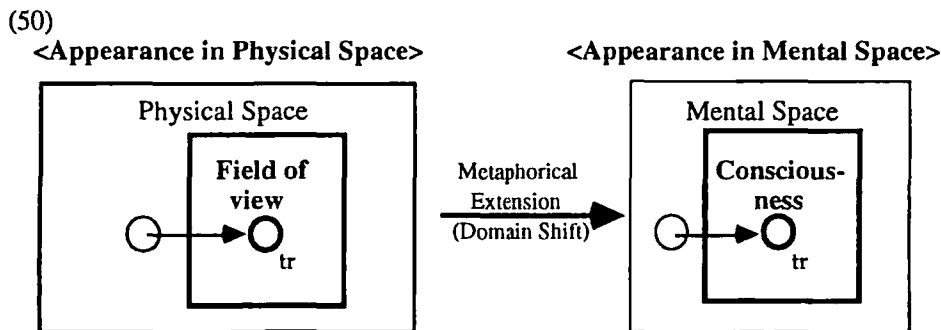


Figure 1

Every locative expression in the sentences of appearance in physical space describes or evokes a certain location in our field of view.

- (51) a. The ship appeared *in sight*.
 b. A glow of light appeared *over the sea*.
 c. He appeared *on the stage*.
 d. My friend appeared *in court*.
 e. His picture appeared *in the paper*.
 f. Bats occur *almost everywhere*.

We know experientially that an entity must come into the conceptualizer's (or perceiver's) view when we recognize that 'something appears.' Accordingly, the location 'field of

view' is most basic domain in the sense of appearance in physical space. This experiential factor characterizes the original sense of *appear*.

- (52) To come forth into view, as from a place or state of concealment, or from a distance; to be come visible. (OED: *appear* 1)

I illustrate the relationship among locative expressions in (52), as follows:

(53)

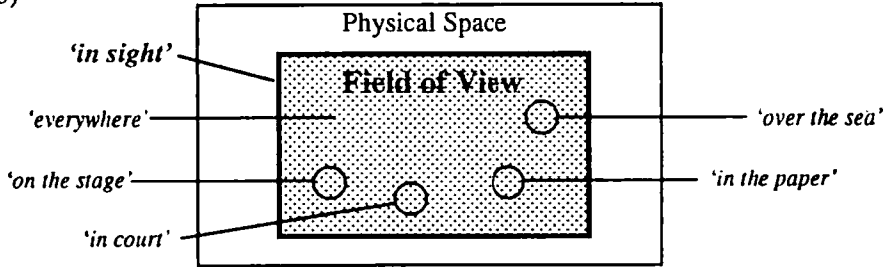


Figure 7

In contrast, all the locative expressions in the case of appearance in mental space evoke our mental space²¹.

- (54) a. The solution to the problem just came *into my head*.
 b. It came *into my head* to jump aloft.
- (55) a. This is the instance that occurs first *to one's mind*.
 b. This will readily occur *in the mind of...*
 c. His name did not occur *to my memory*.
 d. It has come *to my direct knowledge*.
 e. I try to profit by criticisms that have come *to my notice*.
 f. come *to one's recollection*

(Kenkyusha's *New Dictionary of English Collocation*)

Head in (54) is a body part where our brain (in which various mental experiences occur) is contained. In (55), *memory* and *knowledge* are domains in our mind. *Notice* and *recollection* are mental activities. All conceptions of *memory*, *knowledge*, *notice*, and *recollection* are related to our mental experience.

Though *to*-dative is literally ambiguous in terms of which it represents the internal self (i.e. mind) or the physical body, when it occurs with the sentences like (56), *to*-dative represents the self or mind rather than the physical body. As I represented in Figure 1, *to*-dative evokes especially the conception of 'consciousness.' The situation in which we can realize something is only the situation that it comes into our awareness or consciousness.

- (56) a. An idea occurred *to me*.
 b. It occurred *to me* that I may have misunderstood you.
 c. It came *to me* suddenly that what was wrong was that I was tired.
 d. Happiness comes *to people who work hard*.

²¹Though *appear* of the sense of appearance in mental space can also take *to*-dative (see the following example), I have not found out *appear*-sentences with other locative expressions.

(i) ...its grammaticality appears *to me* to be less clear than that of (39). <S. Y. Kuroda 1973>
 Moreover, I have not found out *emerge*-sentences both with *to*-dative and with other locative expressions.

- e. The answer came *to him* just before noon.
- f. And it would no more have occurred *to Adam* to confide in his brother....

The shift of the conception of *to*-dative occurs under the condition that the entity is abstract. The conception of an element in the sentence, as seen in *appear*'s extension, is determined in our linguistic knowledge including in what usage event it is used.

I depict a metonymic relationship among the locative expressions in the case of appearance in mental space.

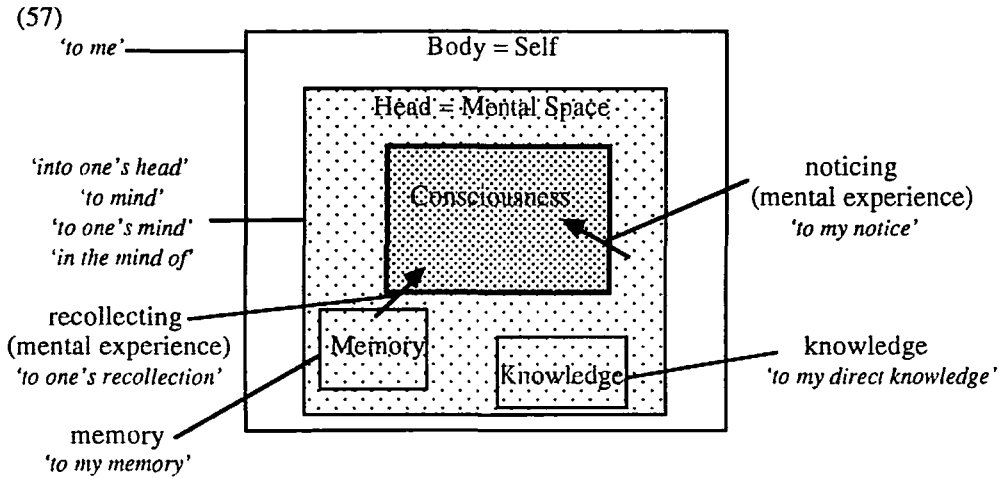


Figure 8

As I claimed in 3.1, in the sentences like *It appears that...* where the sense of 'appearance' is attenuated and the verbs primarily convey the sense of cognition, the location of appearance is background. It is because, in default-case, we can interpret a location where our cognition occurs as our mind or consciousness. Only *to*-dative can occur in these sentences to clarify whose cognition is expressed.

Appear of 'appearance in physical space' and catenative *appear* can occur with *there* in *there*-construction. The difference in *appear* is closely related to the difference in conception of *there*.

- (58) a. (physical) There appeared ship after ship. (Bolinger 1977)
- b. (catenative) There appear to be thousands of idioms <Lakoff 1987>

In Fukada (1995), I tried to show that the existential *there* has developed from the deictic *there* through abstraction and bleaching of concrete locative sense. The existential *there* no longer evokes a physically remote location, and instead, it functions as a marker to make us establish something in our mental space. Accordingly, the deictic *there* in (58a) expresses a concrete physical location, while the existential *there* in (58b) evokes our mental space. The deictic *there* can occur with *appear* of 'appearance in physical space', while the existential *there* can occur with catenative *appear*.

I have shown in this section that: first, the locative expressions occurring with verbs of appearance are linked metonymically; and second, in the sentences like *It appears that...*, the locative expression is often implicit because of the attenuation of the sense of 'appearance' and experiential knowledge that the location pertaining to our cognition is our mind or consciousness.

5. Concluding Remarks

In this paper, I have attempted to clarify an extensive pattern of four verbs of appearance (i.e.

appear, occur, emerge and *come*) from a standpoint of cognitive grammar. In particular, I have focused on the extensive process of *appear* and presented the network of its various senses and constructions. The historical examination supports my claim. The common extensive pattern of these verbs are as follows: first, their meanings are metaphorically extended from 'appearance in physical space' (or, more precisely, 'appearance in our field of view') to 'appearance in mental space' (or, 'appearance in our consciousness'); and then, they come to convey the sense of the conceptualizer's cognition. This extensive pattern is motivated by our cognitive abilities of schematization, abstraction, metaphor (or domain shift), and metonymy (or profile shift), subjectification, and our tendency to have much attention to the content of thought rather than its appearance. The types of locative expressions occurring with these verbs are closely related to the shift of meaning.

My study of verbs of appearance supports some general assumptions in cognitive grammar that: (i) the meaning changes from a concrete to an abstract element; (ii) our cognitive abilities and our conceptualization (which reflects the conceptualizer's perspective) play an important role in semantic extensions; (iii) subjectification occurs recurrently and a central factor in many semantic extensions; and (iv) our linguistic knowledge including our knowledge of usage events (or contexts) determines an interpretation of linguistic expressions.

However, I have also contended that cognitive grammar have little attention to the motivations like analogy to other verbs evoking a similar conception, contextual effects, and an interpersonal factor to communicate smoothly or amicably, and that we must have much attention to them in order to clarify exhaustively extension of linguistic expression and the interrelationship among various senses of various expressions. I think that they interact with conceptualization in complex ways and yield extension of meaning and construction.

Though many problems are beyond the scope of my observation, I wish to explore in future researches: (1) relationship between semantic extension and syntactic (or structural) development in these verbs; (2) analogical relationships among *appear, look, and seem* in comparing semantic extension of these verbs; and (3) the relation between perception and cognition in considering the extensions of verbs of appearance and perception verbs. I hope to clarify not only the crucial roles that our cognition and conceptualization play in the usage of natural language, but also the effects on linguistic meaning of individual experience, culture, and routinization of context.

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