

Focus Effect on Genericity*

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It has been accepted since Diesing (1992) that focus placements in a sentence can have influence on whether its bare noun phrase subject is interpreted as existential or generic. But there has been little attention on a semantic difference between focused and unfocused generics, and only unfocused generics have usually been treated in the literature. I argue that focused generics should be distinguished from unfocused generics semantically. The purpose of this paper is to reveal linguistic phenomena in which both focus and genericity appear, and to account for them from a semantic point of view.

1. Introduction

Focus and genericity have been among topics which have attracted great attention of linguists for the last couple of decades. Moreover, in some sense, they have been closely related to each other in that many of their studies have been based on the common ground which is called tripartite structures consisting of operator, restriction, and nuclear scope (Partee 1991, Diesing 1992, Kratzer 1992, Krifka et al. 1995). But there have been few studies on phenomena in which focus and genericity appear simultaneously. From a semantic point of view, however, the two semantic concepts are not mutually exclusive. Roughly speaking, focus means a new information introduced into discourse, and genericity represents some kind of generality. Conceptually they can co-occur for some expressions. It is not difficult to describe a situation in which expressions representing some kind of generality can be introduced into discourse as a new information. In this paper, first, I will identify focused generics in English or Korean which

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receive both focus and generic reading. Second, I will provide focused generics with proper semantic representations which distinguish them from unfocused generics.

2. Focused Generics

2.1. Existential/Generic Readings of Bare Plural Subjects

Carlson (1977) distinguished between s(tage)-level and i(ndividual)-level predicates, and showed that the distinction is important for understanding genericity.¹ He maintained that bare plural subjects with s-level predicates receive an existential interpretation, whereas those with i-level predicates receive a generic interpretation. But Diesing (1992) argued that bare plural subjects with s-level predicates can get a generic reading as well as an existential reading, and that focal difference plays an important role in determining a quantificational force of bare plural subjects with s-level predicates. Here are relevant examples²:

- (1) a. Firemen are [available]_F.
- b. GEN_x [fireman(x)] [available(x)]
- c. [Firemen]_F are available.
- d. $\exists x$ [fireman(x) & available(x)]

When a focus is on the predicate as in (1a), the bare plural subject of s-level predicates obtains a generic reading as in (1b). Here *fireman* appears in the restriction and obtains a generic force from generic operator *GEN*. In contrast, the bare plural subject of s-level predicates obtains an

¹ S-level predicates express properties of individuals that are transient or episodic; i-level predicates express properties of individuals that are permanent or tendentially stable. Here are some examples:

- (i) s-level predicates: smoke, play, available, drunk,...
- (ii) i-level predicates: know, love, intelligent, tall,...

But it has also been indicated that the distinction between the two kinds of predicates is often blurred depending on contexts (von Stechow 1994, Chierchia 1995, Kratzer 1995).

² Subscript F means focus.

existential reading as in (1d) when a focus is on the subject as in (1c). In (1d), *fireman* appears in the nuclear scope and receives an existential force from existential quantifier \exists . On the other hand, Diesing noted that those different focus placements have nothing to do with i-level predicates. Here are examples with an i-level predicate:

- (2) a. Firemen are [altruistic]_F.
- b. [Firemen]_F are altruistic.
- c. GEN_x [fireman(x)] [altruistic(x)]

According to her analysis, the tripartite structure in (2c) is given to both (2a) and (2b). Irrespective of focus placement, both (2a) and (2b) have the same semantic representation as in (2c)³. Unlike s-level predicates, subjects of i-level predicates have only a generic reading.

Diesing clearly showed that existential/generic meanings of bare plural subjects crucially depend on the difference of focal placements as well as the kind of predicates. But she did not capture any semantic difference between (2a) and (2b) with the same semantic representation assigned to both of them. In terms of tripartite structures, focused expressions are partitioned to nuclear scope, and generic expressions are partitioned to restriction to get generic force from generic operator. According to the tripartite structure in (2c), *fireman* appears in the restriction, so it gets a generic force from *GEN*. But it has nothing to do with any focus-hood because it is not connected to the nuclear scope at all. In other words, the tripartite structure represents that the subject *firemen* is a generic but not focused expression. It only captures the unfocused generic subject in (2a). For semantic representation of focused generic subject as in (2b), we need another semantic tool which represents focus as well as genericity. Prior to trying to search for such a semantic tool, I will first discuss existence of focused generics in natural languages in more detail.

2.2. Two Examples of Focused Generics

As pointed out in Jun (1997), it is not the case intuitively that (2a) and

³ She argues that, in the case of s-level predicates, focal difference induces syntactic difference as well as semantic difference whereas, in the case of i-level predicates, neither syntactic nor semantic difference is caused by focal difference.

(2b) have the same semantic interpretation. Different focus placements also play some role in sentences with i-level predicates, although *firemen* in both (2a) and (2b) has a generic reading. Intuitively speaking, focus placement in sentences with i-level predicates play a semantic role other than in sentences with s-level predicates. It is clearly shown in Korean that focus placement is also important in sentences with an i-level predicate. Here are Korean sentences corresponding to (2a/b) respectively⁴:

- (3) a. *sopangswu-nun* *hensincek-ita*.
 firemen-TH altruistic-be
 b. *sopangswu-KA* *hensincek-ita*.
 firemen-EXH altruistic-be

Comparing the sentences in (2a/b) and (3a/b), we find that different focus placements in the English sentences result in different particles in the Korean sentences. Of course, like (2a/b), both subjects in (3a/b) have a generic reading, but (3a) and (3b) are distinguished by different kinds of particles. It is well known that the exhaustive-listing subject particle *KA* is a kind of focus marker. The comparison tells us that the prosodic difference in those English sentences is grammaticalized in Korean by means of post-subject particles. The bare plural subject in (2a) or (3a) is generic but not focused, whereas that in (2b) or (3b) is both generic and focused. As remarked in 2.1., the semantic representation in (2c) is appropriate for unfocused generic subjects as in (2a) or (3a) because it only captures generic force of those subjects. Another semantic representation is required to represent focus as well as generic force of (2b) or (3b).

Concerning sentences with an s-level predicate as in (1), we noted that it depends on focus placement whether their bare plural subjects are interpreted as existential or generic. By the way, as for those sentences with an s-level predicate, we should note one more thing. This has to do with the focus projection of subjects. Selkirk (1984) argues that pitch accent on an object can be interpreted either as narrow focus on that constituent or as wide focus on the entire VP⁵.

⁴The Korean topic and subject markers are usually divided to two classes each: the former is divided to thematic topic marker (TH: *nun*) and contrastive topic marker (CON: *NUN*), and the latter is divided to neutral description subject marker (ND: *ka*) and exhaustive-listing subject marker (EXH: *KA*).

- (4) a. A: What did Mary do last night?
 B: She [watched KOJAK]_F.
 b. A: Did Mary watch M*A*S*H last night?
 B: No, she watched [KOJAK]_F.

Focus on the object *KOJAK* is projected in (4a), but not in (4b). In contrast, pitch accent on a subject is generally interpreted as narrow focus on that constituent. In other words, pitch on a subject is not generally projected unlike an object. But many exceptions have been noted to the generalization that a pitch accent on the subject results in a narrow focus, and one of them is the behavior of s-level predicates (Diesing 1988, Heycock 1993). Heycock (1993) gives the following examples:

- (5) a. [The EMPEROR]_F is playing pool.
 b. [BLOWFISH]_F are poisonous.
 (6) a. [[The EMPEROR]_F arrived]_F.
 b. [[BLOWFISH]_F are available]_F.

As indicated by the bracketing, (5a/b), whose predicates are i-level, can only be interpreted with narrow focus on the subject, but (6a/b) containing s-level predicates can be interpreted either with narrow focus or with wide focus⁶. When (6a/b) are interpreted with wide focus, the entire sentence can constitute a new information.

Considering such a focus projection of subjects of s-level predicates, examples like (1c) should be analysed further. For convenience's sake, I repeat it with (1d), its semantic representation:

- (1) c. [Firemen]_F are available.
 d. $\exists x$ [fireman(x) & available(x)]

Focus projection of subjects of s-level predicates makes (1c) interpreted

⁵ Uppercase letters indicate pitch accent.

⁶ Heycock does not indicate a narrow focus reading of (6a/b), but footnotes that since narrow focus is always possible, it is not always indicated in the examples if a wider focus is available. For expository convenience, I indicate narrow as well as wide focus.

either with narrow focus as in (7a) or with wide focus as in (7b) since its predicate is s-level.

- (7) a. [FIREMEN]_F are available.
 b. [FIREMEN are available]_F.

Then, which one between (7a) and (7b) is given the interpretation in (1d)? On the one hand, the wide focus on the sentence in (7b) means that the whole sentence is a new information. On the other hand, the tripartite structure in (1d), consisting only of a nuclear scope, represents only new information since what appears in nuclear scope is considered a new information. So, the semantic representation in (1d) is assigned to the sentence with wide focus in (7b). Now, how about interpretation of (7a)? It can be interpreted as 'it is firemen who are usually available'. The interpretation means that *firemen* in (7a) is used as generic, and furthermore that it is focused. In other words, (7a) can be interpreted as a habitual sentence with a focused generic subject.

This observation is also supported by paraphrasing (7a/b) into Korean. (8a) and (8b) correspond to (7a) and (7b) respectively.

- | | |
|-------------------------------------|-------------|
| (8) a. <i>sopangswu</i> - <u>KA</u> | kayonghata. |
| firemen-EXH | available |
| b. <i>sopangswu</i> - <u>ka</u> | kayonghata. |
| firemen-ND | available |

According to whether the focus on the subject is projected or not, different subject particles are used in the Korean paraphrases. When used with narrow focus, the subject is followed by the exhaustive-listing *KA*; when used with wide focus, it is followed by the neutral description *ka*. Of course, *sopangswu* 'firemen' in (8a) have a generic reading and be focused since it is followed by the exhaustive-listing *KA* which is a focus marker. The discussion on (7a) and (8a) tells us that focused generic subjects are also possible with s-level predicates, and that they should be distinguished from unfocused generic subjects as in (1a). The Korean sentence corresponding to (1a) has its subject followed by the thematic topic marker *nun*: *sopangswu-nun kayonghata*. In summary, focused generic subjects are distinguished from unfocused generic subjects in sentences with s-level as well as i-level predicates, and separate semantic representations are needed

for the two kinds of generic subjects.

Another candidate for focused generic expressions is concerned with contrastive topics. Take a look at the following Korean example:

- (9) *sopangswu-NUN hensincek-ita.*
 firemen-CON altruistic-be

In the sentence (9), the bare plural subject is followed by the contrastive topic marker *NUN*, but still has a generic reading. On the other hand, some presupposition is triggered by the contrastive topic marker, so the subject is also associated with a focus in view of the fact that focus usually triggers presupposition or focus frame. But the contrastive topic marker triggers a different presupposition from the one triggered by the exhaustive-listing subject marker because those markers are different focus markers. Unlike (3b), (9) presupposes that there exists a C(contrast)-set, and any member belonging to the C-set has some property, and fireman is a member of the C-set. Therefore, I argue that the sequence of bare plural subject and contrastive topic marker as in (9) is another case of focused generics.

The same observation can be made with the English sentence in (10) with B pitch accent on the bare plural subject.

- (10) [Firemen]_B are altruistic.

Subscript B means a focus which is expressed by a fall-rise B accent. Its pitch contour is described as L+H**LH*% in terms of Pierrehumbert's system. On the one hand, the bare plural subject has a generic reading. On the other hand, its focus triggers the same presupposition just observed in the Korean example (9). Therefore, I argue that the bare plural subject with B accent also belongs to focused generics. The focus feature of Korean contrastive topic marker as in (9) is revealed only prosodically in English as in (10) just like the focus feature of Korean exhaustive-listing marker in (3b) is realized prosodically in English in (2b). It has also been pointed out that the Korean contrastive topic marker is a counterpart of B accent in English (Wee 1998, Lee 1999a/b).

Subscript F has been used in the examples such as (1-2) and (4-7). Now, it should be replaced by subscript A to distinguish it from subscript B. Subscript A means a focus with A accent whose pitch contour is usually described as H**L*(*L*%). For instance, the example (2b) is now rewritten like

this: [*Firemen*]_A are altruistic.

So far we have identified the following two cases in which focus and genericity are realized simultaneously.

- (11) a. sopangswu-KA hensincek-ita. (= (3b))
 firemen-EXH altruistic-be
 b. [*Firemen*]_A are altruistic. (= (2b))
- (12) a. sopangswu-NUN hensincek-ita. (= (9))
 firemen-CON altruistic-be
 b. [*Firemen*]_B are altruistic. (= (10))

3. Semantic Representation for Focused Generics

In this section, I will try to provide appropriate semantic representations for those focused generics discussed above. First, I will examine whether tripartite structures can be used for a proper semantic treatment of focused generics. Then, based on Erteschik-Shir's (1997) f(ocus)-structure theory, I will provide semantic representations for focused generics.

3.1. Focused Generics in Terms of Tripartite Structures

Tripartite structures have been one of major tools for focus as well as genericity (Partee 1991, Diesing 1992, Krifka et al. 1995 among others). In terms of tripartite structures, focused expressions are partitioned into the nuclear scope; generic expressions are partitioned into the restriction to get a generic force from generic operator. So, in some sense, focus and genericity seem to be complementary to each other since they are partitioned into separate sections of tripartite structures. If only one-time partitioning is allowed in terms of tripartite structures, i.e. a tripartite structure is not embedded into another tripartite structure, it is very difficult to account for focused generics in terms of tripartite structures. Focus property of focused generics requires partitioning into nuclear scope, whereas genericity of focused generics needs partitioning into restriction. As seen in 2.1., the limitation of Diesing's (1992) analysis concerning focused generics also comes from the fact that she does not include any embedded tripartite structure in analysing relevant data⁷. Recursiveness is needed to represent

focused generics in terms of tripartite structures. Some independent motivations for recursiveness of tripartite structures have also been mentioned in the literature (Partee 1991, Kanerva & Gabriele 1995, Erteschik-Shir 1997, Lee 1999a).

In Jun (1997), I made use of embedded tripartite structures in analysing the focused generic expressions in (11). They are manifested with the exhaustive-listing subject marker in Korean or the A-accent in English. In order to use the idea of tripartite structures, at that time, I adopted van der Sandt's (1992) presuppositions-as-anaphora theory which extends DRT to grasp presuppositions. The theory is one of appropriate tools which can account for focused generics with respect to these two aspects. On the one hand, focused generics always carry some presupposition which is induced by their focus feature. On the other hand, generic sentences have usually been represented by means of tripartite structures which are more elaborated in DRT. Considering the theory extends DRT to account for presupposition, it is predicted that the theory can be used for a semantic representation for focused generics. I provided the following semantic representation for the sentence in (11) with a focused generic subject:

- (13) $\text{GEN}_s[\exists X.\text{altruistic}(X,s)][\text{GEN}_x[\text{fireman}(X) \ \& \ x \in X][\text{altruistic}(x,s)]]$

Here underlined *fireman* appears in the restriction embedded within the nuclear scope of the main tripartite structure. The partition into this section guarantees the focus property as well as the generic property of *fireman* because it has the same effect as being partitioned into both the restriction and the nuclear scope.

A similar strategy could be applied to the analysis of the sentence in (12) which is realized with the contrastive topic marker in Korean and the B-accent in English. The only difference between (11) and (12) is that they carry different presuppositions because of their different focus characteristics. So, in order to analyse (12) in terms of embedded tripartite structures, we need a different presupposition accommodation than the one used with (11). Because the bare plural subject in (12) also carries both focus and genericity, an embedded tripartite structure would be required for (12),

⁷ Diesing (1992: 140 footnote 17) admits that an embedded tripartite structure is needed to account for small clause complements, but does not take into consideration focused generics.

too. By the way, with respect to once-embedded tripartite structures, the two positions would be available for focused generics: the restriction embedded in the main nuclear scope and the nuclear scope embedded in the main restriction. No other positions can provide a focus property and a generic property simultaneously. The first is already adopted for the focused generic subject in (11) as in (13), so the only available locus for the focused generic subject of (12) would be the nuclear scope embedded in the main restriction⁸.

3.2. Focused Generics and Erteschik-Shir's Focus-Structure Theory

For semantic representation of focused generics, in this paper, I adopt Erteschik-Shir's (1997) *f*(ocus)-structure theory rather than embedded tripartite structures or van der Sandt's presuppositions-as-anaphora theory. I believe that her *f*-structure theory enables us to achieve the same goal more easily than embedded tripartite structures. The *f*-structure theory allows recursiveness of information structure as one of its basic strategies. Its information structure consists of topic and focus, and either of them can contain another topic/focus structure. As remarked above, a semantic analysis for focused generics would need recursiveness of information structure since they have both focus and genericity. Take into consideration the argument that generic NPs are topics, i.e. the generic-hood of generic NPs is concerned with their topic-hood (Lee 1996 among others). The simultaneous realization of focus and genericity in focused generics may be regarded as a kind of co-occurrence of focus and topic. Therefore, it is expected that recursiveness allowed in the *f*-structure theory can be quite useful in accounting semantically for focused generics.

As shown in 3.1., the extended DRT, which admits the recursiveness of tripartite structures (or duplex conditions), can also capture the semantic characteristic of focused generics. Furthermore, Erteschik-Shir (1997: 57-9) indicates that it would be a promising line of investigation to develop a

⁸ Unfortunately I cannot proceed anymore to provide a proper tripartite structure for (12) because of technical problem. In Jun (1997), I showed detailed steps to obtain the embedded tripartite structure given in (13). Those steps include some process accommodating the presuppositions evoked in (11), and some resolution process. But, for the present, I do not have an unproblematic method to make those steps with (12). I hope that, in the near future, more adequate semantic representation will be given to (12) in terms of embedded tripartite structures.

theory which integrates f-structure and DRT, and that restriction and nuclear scope of tripartite structures correspond quite well to topic and focus of the f-structure respectively. But, in this paper, I choose the f-structure theory rather than the extended DRT or van der Sandt's presuppositions-as-anaphora theory.

3.2.1. The F-Structure Theory

Prior to analysing the two cases of focused generics in terms of Erteschik-Shir's f-structure theory, I introduce its general frame including some of its basic assumptions which would be needed for a semantic treatment of focused generics. First of all, the theory assumes a file consisting of a set of cards and a set of rules which determine the changes in the file induced by an utterance. The rules are based on the definitions of topic and focus which are the basic elements of f-structures. Topics represent existing cards which must both be old and prominent in the discourse and these cards provide the locus for truth value assignment. The focus is the constituent to which the hearer's attention is drawn, and focused cards are placed prominently in the file. The file itself can be viewed as a stack of such cards which is partitioned into two parts: the top of the file where prominent cards are to be found and the rest of the stack where nonprominent cards are to be found. The cards on top of the file are licensed as potential topics of an utterance. The state of the file before the utterance of the sentence determines the potential f-structures licensed for it.

The following f-structure rules show how new cards are made out and how cards get to be on top of the file. The instruction for a topic requires the topic card to be on top of the file, and the instruction for a focus puts a card on top of the file providing a potential future topic.

F-structure rules

- I TOPIC instructs the hearer to locate on the top of his file an existing cards (or an existing set of cards) with the relevant heading and index.
- II FOCUS instructs the hearer to either
 - (i) open a new card and put it on the top of the file. Assign it a heading and a new index (in the case of an indefinite) or
 - (ii) locate an existing card and put it on the top of the file (in the case of a definite)
- III PREDICATION instructs the hearer to evaluate the predicate with

respect to the topic where the predicate is taken to be the complement of the topic.

If the result of the evaluation is TRUE the UPDATE rule applies:

IV UPDATE instructs the hearer to enter the focus on the topic card and then to copy all entries to all cards activated by the focus rule.

The following two assumptions are also among the basic assumptions of the f-structure theory: First, topic and focus are necessary elements of a sentence, i.e. each sentence has both topic and focus. Second, stage topics, which correspond to Kratzer's spatio-temporal argument, are available only with s-level predicates but not with i-level predicates.

3.2.2. Focused Generics in Terms of the F-Structure Theory

We are ready to analyse focused generics by means of the f-structure theory. Let's start with the case in (11) where focused generics are realized with A-accent in English or the exhaustive-listing subject marker in Korean. Here are dialogues in which the relevant sentences are used as answers to some questions:

(14) A: Who is altruistic?

B: [Firemen]_A are altruistic.

(15) A: *nwu-KA hensincek-ini?*

who-EXH altruistic-Q

B: *sopangswu-KA hensincek-ita.*

firemen-EXH altruistic-be

We would get the same result either with the English example in (14) or with the Korean one in (15). For convenience's sake, I will first discuss the English example. B's utterance is an answer to A's question, which is an open proposition with an argument missing. B's utterance is not to be construed as a statement about firemen, but it is to provide a referent required by *who* in A's question. So we know that *firemen* is not a topic in (14B) even though subjects are unmarked topics in most cases (Lambrecht 1994, Erteschik-Shir 1997, Lyons 1999). What is then a topic of (14B)? A candidate would be the predicate, *are altruistic*. The predicate is introduced into the discourse in the previous question (14A), and "X is altruistic" is presupposed in B's utterance. Considering presupposition is very close to

topic conceptually, the predicate can be a topic of (14B). But Lambrecht (1994) argued that such a predicate cannot be a topic because it does not have a referent⁹. However, if we accept Erteschik-Shir's assumption that every sentence has a topic, there is no choice but to consider the predicate as the topic. Because the predicate is i-level, even stage-topic cannot function as a topic here. So, the only candidate for topic is the predicate *are intelligent* along with the assumption that every sentence has a topic. Then, the f-structure of (14B) would be like this:

(16) [firemen]_{FOC} [are altruistic]_{TOP}

That predicates can be a topic is also supported by the opinion that predicates can be contrastive topics in the same way as nominals (Lee 1999b).

Erteschik-Shir (1997: 106-7) discusses the question in (14A). According to her, i-level predicates with only one argument allow only the restrictive interpretation of *wh*-questions. That is, (14A) receives an interpretation only if the context makes available a restrictive set of *whats* and the question asks for a partitioning of this set into altruistic and nonaltruistic individuals. This observation is supported by the fact that the following question may have the same function as (14A):

(17) What kind of government employees are altruistic?

(17) can be an appropriate question for the answer like (14B), and introduces into the context the set of government employees. In other words, the set of cards for government employees are placed on the top of the file by the question of (14A) or (17) with respect to the f-structure theory. Now the set of cards for government employees are available as a potential topic on

⁹ Lambrecht (1994: 121-2) deals with the following sentence:

(i) (Who went to school?) The CHILDREN went to school.

According to her, "X went to school" can be presupposition but not topic. Because the open proposition "X went to school" is semantically incomplete, it cannot be said to have a referent, therefore the asserted proposition cannot be construed as being about its referent. But she also cites the "language-psychology" tradition in which the verb phrase as in the above example is called "the psychological subject" and the subject "the psychological predicate". This tradition supports my argument that *are intelligent* is the topic of (14B).

top of the file before the answer (14B) is uttered. In a sense, B selects a card for firemen among the cards available on top of the file in answering (14A) or (17). This process selecting a certain card among the set of cards available on top of the file is captured by a subordinate f-structure like this¹⁰:

- (18) TOP_i [[[firemen]_{FOC-sub}]_{FOC} [are altruistic]_i]
[other gov. employees]_{TOP-sub}

The restrictive set of cards for government employees on the top of the file forms a topic of the subordinate f-structure; the card for firemen selected from the restrictive set of cards is used as a focus of the subordinate f-structure. The complex f-structure shows that *firemen* is focus of the subordinate as well as the main f-structures. The same complex f-structure is also assigned to the Korean example in (15B).

How about the second type of focused generics shown in (12)? This type of focused generics is expressed with B-accent in English or the contrastive topic marker in Korean. In the following dialogues, the sentences in (12) are used as answers:

- (19) A: How are the government employees?
B: [Firemen]_B are altruistic.

- (20) A: kongmwuwen-tul-un ettay?
gov. employee-PL-TH how
B: sopangswu-NUN hensincek-ita.
firemen-CON altruistic-be

In the dialogue of (19), A's question places the set of cards for the government employees on the top of the hearer's file, and the set of cards becomes a potential topic of the following answer. In this state of the file, B's response is given as an answer to A's question, and especially *altruistic* in B's response is a direct answer to the wh-word *how* in the question. So the predicate *are altruistic* works as the focus of B's utterance. How about topic of the answer? First of all, stage-topic cannot be a topic of it since

¹⁰ *TOP*_{*i*} is introduced in the initial position of the f-structure according to the assumption that all the f-structures have an initial TOP followed by a focus constituent.

its predicate is i-level. As remarked, it is assumed in the f-structure theory that i-level predicates do not allow any stage-topic. The best candidate would be the subject *firemen* since subjects are unmarked topics. The card for firemen is already located in the top of the file because it is a member of the set of cards for the government employees introduced in A's question. Therefore the f-structure of (19B) will be like this:

(21) [firemen]_{TOP} [are altruistic]_{FOC}

On the other hand, (19B) carries more information than that in (21), i.e. the f-structure in (21) does not represent that the card of the kind firemen is a member of the set of cards for the government employees located already in B's file. A proper f-structure for (19B) should include B's selecting a card for firemen out of the set of cards already existing in the top of B's file. As shown above, selecting a card out of potential topic cards is represented by a subordinate f-structure like this:

(22) [[[firemen]_{FOC-sub}]]_{TOP} [are altruistic]_{FOC}
 [other gov. employees]_{TOP-sub}

In this complex f-structure, *firemen* appears as the focus of the subordinate f-structure as well as the topic of the main f-structure. Of course, the same complex f-structure is given to the Korean example in (20B).

As a matter of fact, (22) has the same subordinate f-structure as (18). But there exists a difference between (18) and (22). The subordinate f-structure of (18) is embedded within the main focus, whereas the subordinate one of (22) is embedded within the main topic. Of course, the difference results from different partitions of the main f-structures found in (18) and (22). In (18) *firemen* is partitioned to focus; it is partitioned to topic in (22). The subordinate f-structure is formed around *firemen*, so those f-structures in (18) and (22) become different from each other.

Finally, note that the f-structure theory assumes generic cards for generic expressions, which would be responsible for generic characteristics of focused generics. Generics are assumed to be name-like. Whereas NPs which are not names must be indexed in order to identify the individual to which they refer, names, which are rigid designators, provide an inherent index. There is no need to assign noninherent identifying indexes to generics. Generics and names, like definites, are present in the file inde-

pendent of immediate mention in the discourse.

To summarize, semantic characteristics of the two types of focused generics in (11) and (12) are represented in (18) and (22) respectively: the first type appears as the focus of the subordinate f-structure embedded within the main focus as in (18) whereas the second one appears as the focus of the subordinate f-structure embedded within the main topic as in (22). Generic property of focused generics is captured by assigning generic cards to focused generics.

4. Conclusion

Focus and genericity are not semantically incompatible with each other, so expressions with both focus and generic force are predicted to exist in natural languages. Focused generics are distinguished from unfocused generics from a semantic point of view because the former induce some presupposition by means of its focus feature, but the latter do not. Both focus and genericity have been among major topics of linguistics, but there has been little attention on focused generics. It comes partly from the fact that focused generics are not explicitly differentiated from unfocused generics in languages like English. But it sheds light on the existence of focused generics that, in languages like Korean or Japanese, focused generics and unfocused generics are accompanied by quite different particles.

In this paper, first, we have identified two types of focused generics in English and Korean. One of them is manifested with A-accent in English and the exhaustive-listing subject marker in Korean. The other appears with B-accent in English and the contrastive topic marker in Korean. Then, we have provided those focused generics with semantic representations with respect to the f-structure theory. Focused generics discussed here are only related to subjects, but the same idea could be extended to others like objects.

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