

*If a Quantifier is not floated, but moored or even incorporated:
Complexity of Presuppositions in Local Domain*

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1. Introduction

In this paper we would like to deal with interaction of presupposition triggers and show that the binding theory of presupposition comes up with it better than the satisfaction theory. In section 2, the newly developed presupposition conception is introduced. Section 3 explains the Binding Theory in contrast with the Satisfaction Theory. In sections 4 and 5, Kamp's new idea about the treatment of complex interaction of presuppositions is introduced, and it is suggested that his theory can be extended to two other phenomena; linguistic contexts in which presupposition triggers only have narrow scope reading and specificity interpretation of some Japanese NPs. Based on the recent development of DRT approaches on presuppositions, we will deal with floating quantifiers as a special case of specificity phenomena in sections 6 to 8. In section 6, three different configurations of a quantifier and its restriction NP are introduced: the genitive construction, the compound construction and the floating construction. As a preliminary research, we concentrate in section 7 and 8 on the compound construction of floating quantifiers to the effect that comparison with Semantic Incorporation is made to understand non-specificity of the construction more in detail. This will be done first in GQT terms (section 7) and finally as an application of de Swart & Farkas' theory on weak NPs (section 8).

2. What is a presupposition?

The presupposition is concerned with what is taken for granted (Chierchia & McConnell-Ginet 2000). It must be satisfied as given at the point of uttering a sentence which contains its trigger. Moreover, it must be retrieved from the given context.

A presupposition is normally triggered by some lexical item or by some grammatical construction. In fact, there is a fairly stable list of presupposition triggers. (1a) to (6a) trigger the presuppositions (1b) to (6b), respectively. (taken from Geurts 1999:2)

- (1) Factives
 - a. Fred regrets that he cheated at the exam.
 - b. Fred cheated at the exam.
- (2) Aspectual verbs
 - a. Barney stopped writing sonnets.
 - b. Barney had been writing sonnets.
- (3) It-clefts
 - a. It was in July that we left for France.
 - b. We left for France.
- (4) Wh-clefts
 - a. What Barney ate was potato chips.
 - b. Barney ate something.
- (5) Quantifiers
 - a. The Queen has talked with all delegates.
 - b. There were delegates.
- (6) Definites
 - a. The pizzeria in the Vatican is closed.
 - b. There was a pizzeria in the Vatican.

There are some popular tests for presupposition. They are all concerning “projection” properties of presupposition. Presuppositions are known to survive in constructions which (at least semantically) subordinate their triggers. As inferences, they are projected. This is the point that

makes them different from propositions. The following constructions are the case in point. Here and in the following, $\varphi\{\chi\}$ expresses a sentence which contains a trigger for the presupposition χ .

- (7) a. not $\varphi\{\chi\}$
b. it is possible that $\varphi\{\chi\}$
c. X believes that $\varphi\{\chi\}$
d. if $\varphi\{\chi\}$ then ψ
e. either $\varphi\{\chi\}$ or ψ

This does not prohibit a presupposition from being defeasible in some special contexts. It happens especially in the negative and the contrasted probabilistic context regarding some presupposition trigger. Again, cited from Geurts (1999:7) in a slightly changed form:

- (8) a. It isn't Betty who kissed John – In Fact, John wasn't kissed at all.
b. Maybe it is Betty who kissed John, but maybe John wasn't kissed at all.

This certainly suggests some akinness to conversational implicature (cf. Levinson 2000). A presupposition can be contrasted to the conversational implicature in that it will be inferred in the local context of its trigger, though (Kadmon 2001:162, Geurts 1999:21). In general, a strategy is considerable for separating the problem whether a presupposition is triggered lexically or conversationally from the problem of presupposition projection (Kadmon 2001:215), even if there is something like presuppositions with conversational origin.

This problem cannot be mixed up with another one concerning the presupposition filtering (Karttunen 1973, 1974, Karttunen & Peters 1979), however. In contrast to the earlier cancellation theory (Gazdar 1979) it is now widely assumed in the tradition of dynamic semantics that a presupposition does not disappear but is just turned into a proposition asserted when encountering the concerning proposition on the way of its projection.

3. Binding theory (vs. Satisfaction theory)

Presupposition phenomena can be analysed in the framework of the Discourse Representation Theory (Heim 1983a, 1983b, Kamp & Reyle 1993). I will presuppose some knowledge of the standard DRT below. In this paper, we take stance for the line of the so-called Binding Theory within DRT approaches (van der Sandt 1992, Geurts 1999). It can be characterized as a pragmatic branch of the DRT. For its proponents, practice of the DRT includes a kind of top-down processing and therefore goes beyond the limit of compositional semantics. Accordingly, they try to sharply distinguish themselves from the semantic branch of DRT (Groenendijk & Stokhof 1991, Heim 1990, Dekker 1993). Of course, this line of thinking is a little bit deviant from the official phrase of the standard DRT (cf. van Eijck & Kamp 1997), but it is fair to say that it suggests potential of the DRT as a theory of language understanding.

Specifically, the Binding Theory has been able to develop an attractive theory about common behaviors of presuppositions and anaphors. In fact, the parallelism is ubiquitous (cf. Geurts 1999:48). In (9), an example for the “donkey-type” conditional is shown such that (9a) contains an anaphor relating to an (apparently) quantified NP, whereas (9b) contains a presupposition in the consequence clause which is “satisfied” in terms of another presupposition in the premise clause.

- (9) a. If Smith owns a donkey, he beats it. (Geach 1962)
b. If Fred has managed to kiss Cecilia, Fred will kiss Cecilia again. (Karttunen 1973)

In this paper, we are not going into details of the DRT formalism for the Binding Theory, since it is clearly defined in Geurts (1999). Rather, we would like to suggest at this point that the Binding Theory as a pragmatic branch of DRT almost inevitably leads to the two-stage model, in which the resolution part is separated from the construction part at each step so that the function of pragmatics is visible at the semantics-pragmatics or grammar-general knowledge interface. The pragmatic resolution of presuppositions (and anaphors) obeys grammatical interpretation constraints such as accessibility conditions. Further DRS constructions are dependent on resolutions at each step. From this point of view, it is no wonder that the Binding Theory tends to make resolutions as near to the

interface to the general knowledge as possible, that means as close to the top DRS as possible.

General strategies (“principles”) of resolutions in the Binding Theory look like this (Geurts 1999:57):

- (10) a. Presupposition must be projected.
- b. Binding is preferred to accommodation.
- c. A presupposition must be projected to the highest possible DRS. (but; Kadmon 2000)

4. Presupposition computation and justification

Kamp (2000, 2001) points out a general drawback of current semantico-pragmatic researches on presuppositions that they deal with a single presupposition at a time. The other side of the same coin is that also in the Binding Theory, the binding of variables in the presupposition DRS to be bound, χ , is itself defined in the unselective form of all-or-nothing (Geurts 1999:56). This definition will do only if the variables in question are really all bound at the same time. This is always true when just a single variable is available for binding in the concerning presupposition DRS χ , but of course, it is not always the case.

In reality, a presupposition DRS χ may contain more than one variable for binding to the antecedent presupposition χ' . This can be easily seen if the example (9b) is slightly manipulated. Here, the presupposition DRS to be bound, χ , which is triggered by the adverb “again”, can only be resolved after the anaphor in the third person singular feminine is correctly resolved as Cecilia. The same reasoning can be applied to Kamp’s own example, (11b), borrowed from van der Sandt (1992): An anaphor is nested in the definite NP which results in the presupposition DRS to be bound, χ .

- (11) a. If Fred has managed to kiss Cecilia, Fred will kiss her again.
- b. Walter has a rabbit. His rabbit is white.

To solve this kind of complication, Kamp makes use of DRSs as pairs of the propositional part (“content representation”) and a complex presuppositional part (cf. Asher 1993). While he sticks to

the bottom-up construction process of DRSs, Kamp makes resolution of nested presuppositions possible in using Binding-theoretic resolution technique and a kind of storage mechanism. The propositional part of each presupposition trigger consists of a (possibly empty) DRS. Its presuppositional part is a set of three-place structures each with a referential argument, its selection (or restriction) set and a binding condition related to it.

Consequently, two steps are distinguished from each other as reminiscence of the two-stage model of the Binding Theory: the computation step and the justification step. First, a computation step leads to a “preliminary representation”. A justification step including resolutions of variables in the presupposition DRSs follows.

Based on the complex presupposition mechanism developed here, Kamp (2001) shows in detail that minimal compulsory addition of a bridging inference to the given presuppositions allows for computing the whole set of them “away”. This seemingly creates a new, real meaning which does not hinge on lexical items. In (12), for example, the fact that there are only two workers in total will be reasoned in this way.

- (12) I gave the workers a generous tip. One thanked me. The other one left without saying a word.

5. Precursors

Kamp also extends his analysis to presuppositions triggered by the adverb “again”. Therefore, his analysis covers not only (11b), but also (11a) (see also (13b)). He distinguishes the narrow VP-scope reading and the wide IP-reading of “again”. When the narrow scope reading of “again” co-occurs with an indefinite subject as in (13a), their interaction causes a problem of binding into presuppositions.

- (13) a. Some rabbit is on the loose again.
b. Walter’s rabbit is on the loose again.

The reasoning is this: The VP-scope of “again” does not influence the subject. In DRT terms, this means that the positioning of the discourse referent standing for the referential argument of the subject in the topmost DRS prohibits the mirror variable in the presupposition DRS triggered by “again” becoming presuppositional and getting a separate (“sloppy”) identity. Therefore, the variable for the subject in the propositional part and its mirror in the presuppositional part have the same identity. This is a correct result, but Kamp thinks of it as necessary to justify the fact that the mirror variable in the presupposition DRS remains non-presuppositional itself and accordingly new, since it is identical to the variable for the subject which must be introduced in the topmost DRS. Kamp explains this constellation by taking the non-presuppositional variable in the presupposition DRS as non-presuppositional and new to the hearer but presupposed and given to the speaker (because of the location in the presupposition DRS). According to Kamp, a variable for the referential argument of the subject NP must be accommodated in such a constellation.

This variable is not only accommodated, but also interpreted to be somehow specific. Two application areas can be proposed. First, as Kamp himself notices, there are some sentences which provide the same constellation and nevertheless only shows the narrow scope reading for presupposition triggers. Binding into the presupposition is accompanying.

- (14) a. Someone managed to succeed George III on the throne of England. (Karttunen & Peters 1979)
 b. A fat man was pushing his bicycle. (Heim 1983)

In (14a), the external argument of the complement of “manage” must be bound to the subject variable. Likewise in (14b), the possessor variable must be bound to the subject variable. Correspondingly, the subject must be constantly interpreted as specific. In these cases, we are open to any cause-effect relations between semantic phenomenon of narrow scope (and maybe control), structural phenomenon of binding into presupposition and functional phenomenon of specificity on subject. This is different from the position of Kadmon (2001), who considers scope considerations as

basic.

Secondly, we take this theoretical implication on specificity as clue to the interpretation of Japanese NPs. It is shown that there are some contexts in which specificity of a NP is warranted. We set out by assuming that specificity originating from the sentence itself has much to do with interaction of presuppositions in there. In the rest of paper, we will pursue the phenomena of so-called floating quantifiers. As a preliminary research, we will concentrate on the phenomena that turn out to be constantly non-specific.

6. Presuppositional effect of “floating quantifiers”

In this section, we will examine how a NP in the object position obtains a specificity effect in the context of “quantifier float”. Many investigations have been done on the topic of “floating quantifiers”, but they are often restricted on the syntactic conditions of permissive floating positions (Miyagawa 1989, Kawashima 1995 and Fukushima 1993 for the compositional semantics). Of course, meaning differences dependent on the floating positions have not been overseen in the literature. Following the approaches of Diesing (1992) and de Hoop (1992), some version of syntactically motivated definiteness effect was assumed for the QF as well (Tateishi 1989, Ishii 1997). Ishii (2001), though theoretically taking a distance from his earlier position, still concentrates on the scrambling facts of different distances and related focus phenomena.¹

We are concerned with the relation of object to the finite verb and their relative positions to an adverb. Even in terms of this minimal context, it seems to be obvious that not only definiteness, but also specificity, partitivity and some kind of focus play a part. In (15), for example, the quantifier “san-nin” (*three persons*) is situated in a **genitive construction**. We assume that the construction including the case marker “o” makes up a DP. In (15a), it is situated between an adverbial and the

¹ We could only make reference to Ishii (2001), but not to Ishii (1997).

finite verb. In (15b), it is to the left of an adverbial and the finite verb.

- (15) a. denwa-de san-nin-no gakusei-o yon-da. [-focus, +spec, +partitive]
telephone-with3-CL-GEN student-ACC call-PRET
b. san-nin-no gakusei-o denwa-de yon-da. [+focus, +spec, +partitive]
3-CL-GEN student-ACC telephone-withcall-PRET

Truth-conditionally there is no difference in meaning, but you can find several different effects on presupposition. First, the DP is in focus in (15b), but not in (15a). In our discussion, the concept of focus is confined to a kind of informative prominence according to the word order. What is meant here is some subtle difference in the degree of “focal prominence” between (15a) and (15b) based on the different word order. Therefore, the real focus of a sentence can be overwritten, for example, by phonological prominence put on some other place.

Secondly, the DP, which can be safely assumed to be indefinite, is interpreted as specific in both sentences. Note that the definiteness, if it is posited on the determiner, would lead to a completely different reading of the DP meaning ‘(the) students of the three’.² Certainly, there is a reading near to the non-specificity in which the quantifier seems to work almost like a normal determiner (such as “three” in English). However, we want to claim descriptively that even in such a reading some kind of specificity can be read off on the speaker side. Consequently, the DP as a whole is additionally considered partitive. It means that the restriction set based on the head noun (more correctly, NP rather than N) is independently given at the point of interpretation. Therefore, existence and uniqueness of the selection set must be presupposed.

In contrast, less attention has been paid to a sort of **compound construction** shown in (16). Here also, you can find some presuppositional contrasts corresponding to the word order. In (16b)

² In this case, we claim that the modifier of the genitive construction is not a NP, but a DP. Compare the interpretations of “so-no” in the following phrases:

- (i) Yuuko-no haha-to-wa shotaimen datta. *Sono* hito wa irojiro data.
(ii) Yume-no haha-wa Ume, *sono* haha-wa Kame da.

the construction has focus on it, but not in (16a).

- (16) a. denwa-de gakusei san-nin-o yon-da. [-focus, -spec]
 telephone-withstudent 3-CL-ACC call-PRET
 b. gakusei san-nin-o denwa-de yon-da.[+focus, +spec(, +part)]
 student 3-CL-ACC telephone-withcall-PRET

In this pair, the contrast is clearer than that in (15). The compound construction is typically specific (i.e., on the speaker side) in (16b), but non-specific in (16a). As for the compound construction, our intuition is that the specificity value of the object follows the focus value, though the construction itself is non-specific or remains at least unspecified with respect to the specificity value.³ However, we are not sure if the partitivity for the DP should be necessarily induced from the specificity as is the case with (15).

There is a third possibility of building DPs, namely in terms of quantifier floating. The classified numeral as quantifier is localized outside of a phrase including the case marker (NP or some other phrase below DP), as shown in (17). The characteristic of this **floating construction** resides in the non-specificity of the complex object predicate. Moreover, making definite is only possible for the head NP (selection set), but not necessarily for the floated phrase. In this latter case, the resulting partitive interpretation is allowed to be non-specific. We assume that a true quantifier is at work in this case, independently of the relative position to an adverbial. The focus is put on the kind or property that is expressed by the isolated NP.

- (17) a. denwa-de gakusei-O_[-focus]san-ninyon-da. [-spec, +partitive]
 telephone-withstudent-ACC 3-CL call-PRET
 b. gakusei-O_[+focus] san-nindenwa-de yon-da. [-spec, +partitive]
 student-ACC 3-CL telephone-withcall-PRET
 c. gakusei-O_[+focus] denwa-de san-ninyon-da. [-spec, -partitive]
 student-ACC telephone-with3-CL call-PRET

³ We are certain that acceptable definite expressions with this compound construction like (i) can be explained in the approach introduced later in this paper.

(i) denwa-de rei-no gakusei san-nin-wo yon-da.

As a matter of fact, this case can be divided into two subcases. On the one hand, the classified numeral can be adjacent to the object as in (17a,b). On the other hand, it can be integrated into a VP, specifically at the verb adjacent position. The latter case is easily seen as a reading of (17c). An important difference between them concerns the fact that the partitive interpretation is difficult to get in (17c). This is presumably because the quantifier plays a part of delimiting function. It takes a V(P) before combining with the DP. Because of building the restriction set on the verbal side, not the partitive, but the exhaustive interpretation results.

In sum, restricting the effects of DP-scrambling to the minimal, we have shown that for the investigation of the floating effect of quantifiers, at least three different configurations of a quantifier and its restriction NP should be taken into account: the genitive construction, the compound construction and the floating construction. It is now obvious that meaning differences emerge not only from the relative positions with respect to an adverbial, but also from the difference of constructions. Specifically, putting aside the genitive construction for the moment, there is a clear contrast on the specificity interpretation between the compound construction and the floating construction. Specificity of the compound construction sways depending on the relative position to an adverbial, that of the floating construction is stable. In the next section, this contrast will be dealt with in the framework of DRT (Kamp & Reyle 1993).

7. Floating quantifiers in GQT terms

In this section, we will enforce the basic idea that the compound construction consists of a NP whereas the floating construction is made up of a NP for a restriction set and a quantifier applied to it. Typically, the noun adjacent version of the latter amounts to a DP and to an adverbial

quantification construal as well.⁴ This means that the orthodox semantic composition in the form of generalized quantifier can be retained for the floating construction, especially for its noun adjacent version.⁵

From this viewpoint, the treatment of the compound construction is more awkward. Let us first make a sketch in the fashion of a GQT approach. Following our main idea, the resultant construction must be a property of type $\langle e, t \rangle$. In the construction itself, a complicated composition procedure must be assumed. Originally, the NP amounts to a nominal predicate of type $\langle e, t \rangle$, and the quantifier is of type $\langle \langle e, t \rangle, \langle \langle e, t \rangle, t \rangle \rangle$. According to our basic assumption though, the resultant “compound” is again of type $\langle e, t \rangle$. For this purpose, the quantifier must undergo a type-change to $\langle \langle e, t \rangle, \langle e, t \rangle \rangle$. This amounts to the type of modifiers.

Assuming now for convenience that V is monovalent (since only object is being considered) and therefore of type $\langle e, t \rangle$, the composition of the compound construction with a V needs some composition device because functional application is not straightforwardly applicable. Either the type of the whole construction must be changed to the generalized quantifier of type $\langle \langle e, t \rangle, t \rangle$, or some closure operation must be posited after the argument sharing of both properties. Conceptually and empirically, the third possibility of raising the type of verbs can be safely thrown away.

If the first possibility would be adopted, a question might be raised why the proposed complicated procedure (“once down and then up again”) is needed in place of a normal generalized quantifier construction. Our answer is that the property reading is necessary and even basic for the compound construction. Notice that in the non-focus position (right to an adverbial) the construction receives a non-specific reading. To explain these phenomena, the property interpretation of the

⁴ The adverbial quantification construal is exploited in the scrambled immediate version (without an alternative DP construal any more) and the verb adjacent version (as an aspectuality construal), too.

⁵ If this construal is reasonable, it makes sense to assume two different versions of the genitive construction corresponding to the two different construals above: The quantifier in the genitive position can be a full-fledged DP, but also a “degenerated” NP.

compound construction is fundamental. It is natural to assume that in the non-focus position, the default interpretation of a unit is used, with other things being equal. Therefore, it is the property interpretation that underlies the compound construction in the non-focus position. First, this results in the non-specific reading, if we assume in addition a closure operation between the compound construction and a verb. Since existential quantification takes place in the narrowest scope, the specific reading is excluded. This view can be reinforced by the fact that the quantifier indeed takes a narrow scope with respect to other quantifiers (18b). This is common with so-called reduplicated indefinites in Hungarian (18c).

- (18) a. #subete-nokyouju-ga denwa-de rakudaisha san-nin-o yon-da.
 all-GEN professor-NOMtel-with repeater 3-CL-ACC call-PRET
 b. subete-no kyouju-ga rakudaisha san-nin-o denwa-de yon-da.
 all-GEN professor-NOMrepeater 3-CL-ACC tel-with call-PRET
 c. Minden diák irt egy-egy levelet.(de Swart & Farkas 2001:6)
 every studentwrote a-a letter ($\forall > \exists$, but not $\exists > \forall$)

We maintain, however, that (18a) has no co-varying interpretation, actually it seldom gets an interpretation. It is therefore not enough to assume a requirement of co-varying with some overscoping operator for the ordinary quantifier, which is proposed as an analysis for the reduplicated indefinites in Hungarian.

Our proposal at the moment is that the compound construction is a property expression in the non-focus position, but changed to a generalized quantifier in the focus position. In the latter case, the change to a generalized quantifier corresponds to the A-operation of Partee (1987). The composition of the compound construction with V is a normal functional application thereafter.⁶

- (19) $\lambda x.3\text{STUDENTS}(x) \sim \rightarrow_A \lambda Q \exists x. (|\text{STUDENTS}(x) \& Q(x)| \geq 3)$

In the former case, however, we need another closure operation for the composition of a compound

⁶ We will later see that in a version of the DRT framework (de Swart & Farkas 2001), the treatment of bare plural as a DP is based on the assumption of a zero determiner. The case here looks similar to this treatment.

construction with V. The operation is parallel to the Semantic Incorporation, which is proposed for noun incorporation phenomena of West Greenlandic (van Geenhoven 1998).

(20) $\lambda Q \exists x. (3\text{STUDENTS}(x) \& Q(x))$

However, note that the classified numeral itself does not receive the quantifier interpretation in this case. If this was possible, then there must be a specific reading available also for the non-focus position.

There are several problems for this solution. For example, we need systematic type ambiguity for every compound construction. Another problem which de Swart & Farkas point out about the Semantic Incorporation is the discourse referentiality of bare plurals in the incorporated position in contrast to bare singular in Hungarian. Unlike incorporated bare singulars, incorporated bare plurals can be the antecedent for an (overt) personal pronoun (dS&F 2001:36). Finer gradation of indefinites and incorporation is in order.

8. A DRT approach to the floating quantifier

Working on the DRT, they take the plurality marker as responsible for the accommodation of a discourse referent called "Weak Instantiation". For the Japanese FQ in the compound construction, we take the accusative marker "-o" as responsible for the accommodation. Just as the agreement marker, case markers for grammatical relations license a discourse referent as well. Much the same as the plural agreement marker looks for a discourse referent that it can predicate plurality of, the grammatical case marker looks for a discourse referent that goes into a relation with the event denoted by the verb. In both cases, the existence of its participants is deduced from the existence of the event denoted by the verb.

To implement these mechanisms in a compact and perspicuous way, we follow de Swart &

Farkas' idea of enriching the standard DRT (à la Kamp & Reyle 1993) such that DP-structures are constructed in a finer-grained way ("with intermediate steps") to the effect that thematic arguments are distinguished from discourse referents. In this framework, verbs and NPs provide a predicate with its thematic arguments, whereas a determiner in the DP introduces corresponding discourse referents. The combination mode of DP and NP with a verb is also different. A DP combines with a verb by "instantiation, an operation which substitutes the discourse referent contributed by a DP for the appropriate thematic argument of the predicate" (dS&F, p.18). Since a NP as a predicate just restricts a particular argument slot, it combines with a verb by way of "unification" (dS&F, p.19), an operation which only adds a predicate of a thematic argument in a given DRS and leads to a complex predicate formation without qualifying discourse referents into its "universe".

Let us recall our basic assumption that the compound construction corresponds to a NP, whereas the floating construction, at least in its noun-adjacent version, makes up a DP. An application of their theory to the analysis of the compound construction means first that in the compound construction the quantifier is transformed to a modifier, and secondly that the construction as a whole is taken as incorporated. All in all, no discourse referent need to be prepared for this construction.

However, the construction shows discourse transparency: Anaphoric relations can be maintained with it. For this purpose, qualification of a discourse referent is indispensable. Our explanation is that like the plurality marker, the grammatical case marker relates the existential presupposition of a thematic argument to the denoted event. The introduction of a corresponding discourse referent in an earlier stage, namely before the combination of the construction with a verb should be rejected for two reasons. First, this move would annihilate the assumption of the predicate status of the construction. Secondly, this would lead to the interpretation of co-varying variable parallel to the reduplicated indefinites in Hungarian. We have seen above that this interpretation is missed for the compound construction.

This analysis has several empirical consequences. To begin with, the compound construction must take narrow scope in the non-focus position, even without a licenser for co-varying. Although the construction allows for a “weak instantiation” through accommodation, its tight relationship to the event argument dictates narrow scope. Furthermore, our analysis is compatible with the intuition that the compound construction has a group denotation like a definite expression, though as an indefinite, it introduces a discourse referent in contrast to definites. Therefore, denotation of atomic reference is awkward with the compound construction (21a), (22a).

- (21) a. matomete/#betubetu-ni jisho san-satsu-okatta.
together/separately dictionary 3-CL-ACC buy-PRET
- b. matomete/betubetu-ni jisho-o san-satsu katta.
together/separately dictionary-ACC 3-CL buy-PRET
- (22) a. kyou jisho san-satsu-okatta. #sorera-warakuchou-dat-ta.
today dictionary 3-CL-ACC buy-PRET they-TOP wanting-COP-PRET
- b. kyou jisho-o san-satsu katta. sorera-wa rakuchou-dat-ta.
today dictionary-ACC 3-CL buy-PRET they-TOP wanting-COP-PRET

In our view, this intuition comes from the fact that the compound construction in question forms a complex predicate with the verb. Conditions in the construction and those in the verb always result in the same DRS. This makes the corresponding discourse referent invariable with respect to other quantifiers and operators. Only a group denotation is asked. Note that this is the same context as the existential reading of bare plurals comes out. If, on the other hand, a DP is formed by the floating construction, it is constructed separately from V so that it takes scope freely. Moreover, a discourse referent is available without complication. Wide scope makes a distributive reading easier.

9. Conclusion

Based on the recent development of DRT approaches on presuppositions, we have dealt with floating quantifiers as a special case of specificity phenomena. As a preliminary research, we have

concentrated on the compound construction of floating quantifiers to the effect that comparison with Semantic Incorporation was made to understand non-specificity of the construction more in detail. Specifically, de Swart & Farkas' theory on weak NPs is applied to the phenomena. In terms of stepwise analysis of nominals and clear distinction between thematic arguments and discourse referents on the one hand and between NPs and DPs on the other, not only meaning difference of compound constructions in different syntactic and information-theoretic positions has been explained. The contrast of the compound construction to the floating construction was also made palpable. The incorporation nature of the compound construction such as narrow scope and existential reading has been explained based on its complex predicate formation with a verb. Its discourse transparency is guaranteed by accommodation called "weak instantiation", whereas its preference to the group denotation is suggested to be related to its invariable narrow scope.

Reference

- de Hoop, Helen (1992/96) *Case Configuration and Noun Phrase Interpretation*. NY, Garland Publishing.
- Dekker, Paul (1993) *Transsentential Meditations*. Univ. of Amsterdam.
- de Swart, Henriette (2000) *Weak Readings of Indefinites*. (to appear in *Linguistic Review*)
- & Donka Farkas (2001) *Bare Nominals in the Typology of Indefinites*.
- Diesing, Molly (1992) *Indefinites*. MIT Press.
- Fukushima, Kazuhiko (1991) "Phrase structure grammar, Montague semantics and floating quantifiers", *Linguistics and Philosophy* 14, 581-628.
- Geurts, Bart (1999) *Presuppositions and Pronouns*. Elsevier.
- Groenendijk, Jeroen & Martin Stokhof (1991) "Dynamic predicate logic", *Linguistics and Philosophy* 14, 39-100.
- Gunji, Takao & Koichi Hashida (1999) *Measurement and quantification*. In: Gunji, Takao & Koichi Hashida (eds.) *Topics in Constraint-Based Grammar of Japanese*. Dordrecht, Kluwer. pp.39-79.
- Heim, Irene (1983a) *File change semantics and the familiarity theory of definites*. In: R. Bäuerle, Ch. Schwarze & A. von Stechow (eds.) *Meaning, Use and Interpretation of Language*. Berlin, de Gruyter.
- (1983b) "On the projection problem for presuppositions", *WCCFL* 2, 114-125.
- Ishii, Yasuo (1997) "Scrambling and weak-strong distinction in Japanese", University of Connecticut

- Working Papers in Linguistics 8, 89-112.
- (2001) Presuppositional effects of scrambling reconsidered. In: Inoue, Kazuko & Nobuko Hasegawa (eds.) *Linguistics and Interdisciplinary Research*. pp.79-101.
- Kadmon, Nirit (2001) *Formal Pragmatics*. London, Blackwell.
- Kamp, Hans (2000) *The Importance of Presupposition*. ms.
- (2001) *Presupposition computation and presupposition justification*. IMS, ms.
- Kamp, Hans & Uwe Reyle (1993) *From Discourse to Logic*. Dordrecht, Kluwer.
- Kobayashi, Masahiro & Kei Yoshimoto (2001) "A Parallel Interpretation of Floated Quantifiers and Adverbials", *Proceedings of the PACLIC 15*, 45-52.
- Miyagawa, Shigeru (1989) *Structure and Case Marking in Japanese*. *Syntax and Semantics* 22. NY, Academic Press.
- van der Sandt, Rob (1992) "Presupposition projection as anaphora resolution". *Journal of Semantics* 9, 333-377.
- van Geenhoven, Veerle (1998) *Semantic Incorporation and Indefinite Descriptions*. Stanford, CSLI.