SPECIFIERS

Minimalist Approaches

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Filling and Licensing Multiple Specifiers

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1. INTRODUCTION

The uniqueness and obligatoriness of the clausal subject (Spec-TP) that characterizes languages such as English does not hold across all languages.[1] It has recently been argued (Ura 1994, 1996; Chomsky 1995) that specifiers may be generated recursively. Together with the assumption that in certain languages nominative case may be licensed on more than one element, this provides the necessary positions for 'multiple-subject' constructions (MSCs, henceforth) as they exist in languages such as Japanese and, we will argue, also the Semitic languages of Modern Hebrew and Modern Standard Arabic. However, this proposal raises in turn a number of issues concerning the elements filling these positions. In this chapter we address the related questions of how these positions are filled and how the resulting structures are interpreted.

2. THE EXISTENCE OF MULTIPLE SPECIFIERS

2.1. *Examples of the construction*

2.1.1. *Japanese*

The existence of what have variously been called multiple subjects and multiple nominatives is uncontroversial in Japanese. Two examples are given in (1).[2]

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[1] We take T[ense] to be the functional head of the clause, as in Chomsky (1995), as we do not assume independent Agr heads. There may be languages in which T is split into separate Tense and Aspect heads. In fact, Arabic may be one such language, as suggested in Fassi Fehri (1993).

[2] Note that throughout this chapter the translations are intended only to give a rough idea of

(1) (*a*) mary-ga kami-ga nagai (koto)
Mary-NOM hair-NOM long (fact)
'Mary has long hair.'

(*b*) yoi otya-ga nihonzin-ga kononde nomu (koto)
good green-tea-NOM Japanese-NOM enjoying drink (fact)
'Good green tea, Japanese people drink [it] with pleasure.'

2.1.2. *Semitic*

The existence of multiple subjects in Modern Standard Arabic and Modern Hebrew (which for convenience we will refer to collectively in this chapter as 'Semitic') is more controversial. The basic structure of Arabic sentences is VSO, as shown in (2).[3] We assume that VSO is due to a weak D-feature of T, as suggested in Chomsky (1995).[4]

(2) yuqa:bilu T-Tulla:b-u hind-an
meet(3M) the-students(M)-NOM Hind(F)-ACC
'The students are meeting Hind.'

Yet there are sentences where one or more nominative noun phrase appears sentence-initially:

(3) (*a*) hind-un yuqa:bilu-ha T-Tulla:b-u
Hind-NOM meet(3M)-her the-students(M)-NOM
'The students are meeting Hind.'
Literally: 'Hind, the students are meeting her.'

(*b*) ?al-bayt-u ?alwa:n-u-hu za:hiyat-un
the-house-NOM colours-NOM-its bright-NOM
'The house has bright colours.'
Literally: 'The house, its colours are bright.'

Although contemporary linguists of Arabic usually treat examples like (3) as left-dislocations, corresponding to the literal gloss, we will argue that all sentence-initial nominative noun phrases like those above are subjects, as was

the meaning; since English does not allow MSCs the structure of the translations cannot correspond to the originals. In particular, translation as a left-dislocation should not be taken to imply that this is the structure of the original sentence.

In the Japanese examples *koto* (fact) is added so that the sentence is read as an embedded clause; this is done to avoid the awkwardness that can occur when a matrix sentence does not have a *wa*-marked topic.

[3] For a different view on the base position of subjects in Arabic, see Benmamoun (Ch. 6, this volume).

[4] In Standard Arabic, when the verb precedes the thematic subject it agrees with it only in person and gender. We take the apparent singular number morphology to be in this case a default, and to indicate lack of number agreement. In the glosses we indicate this lack of number agreement by giving no specification for number. Thus (3M) indicates a non-agreeing 3rd person masculine form; when there is actual singular agreement the gloss is given as (3MS).

argued in Doron (1996) (the rest of the sentence being a 'sentential predicate').[5]

A similar construction occurs in Hebrew:

(4) (*a*) ruti yeS la savlanut
Ruti there-is to-her patience
'Ruti has patience.'

(*b*) ruti sof-a le-naceax
Ruti end-hers to-win
'Ruti will end up winning.'

This construction is treated essentially as left-dislocation by Nahir (1955), Peretz (1961), and Blau (1966), but we will argue that the initial noun phrase is not dislocated, but a syntactic subject, as claimed already by Rosén (1977) and Ornan (1979) (whose analyses, however, differ considerably from ours).

2.2. *The initial phrase is a subject*

In this section we will demonstrate that the initial nominative noun phrase in these constructions has in all cases the properties normally associated with subjects in the relevant languages. In particular, we will demonstrate that it is neither a dislocated phrase nor in a designated focus position (these being the two standard counteranalyses in Semitic and Japanese respectively). Rather, it is a subject which combines with a 'sentential predicate', that is, a phrase that semantically denotes a property, though syntactically it is a full clause which already contains a subject.

2.2.1. *Case marking, Exceptional Case Marking, and raising*

Many authors have argued that in Japanese these initial phrases (henceforth 'Broad Subjects') behave like thematic subjects ('Narrow Subjects') (see e.g. Kuno 1973; Kuroda 1986; Heycock 1993, and references contained therein). Most obviously, in Japanese the Broad Subject is marked with *ga*, which is generally considered to be the realization of nominative case. Topics in Japanese, on the other hand, are marked with the particle *wa*.

Further, as pointed out by Kuno (1978), Broad Subjects in the complement

[5] It is also possible for the thematic subject to appear in sentence-initial position:

(i) ?aT-Tulla:b-u yuqa:bilu-una hind-an
the-students(M)-NOM meet(3M)-P Hind-ACC
'The students are meeting Hind.'

In this case, the verb agrees in number, as well as person and gender. The status of this thematic subject is somewhat different from the non-agreeing subjects; the reasons for this will be discussed extensively in Section 3.

clause of what have been analysed as ECM verbs can alternate between nominative and accusative marking, just as Narrow Subjects can:[6]

(5) boku-ga john-o/-ga imooto-ga kirei-da to omowu
I-NOM John-ACC/NOM sister-NOM beautiful-be that think
'I think that John's sister is beautiful.'

In Semitic also, the Broad Subject occurs in nominative case, and MSC constructions (in contrast to dislocated sentences) can be embedded under ECM verbs, as illustrated by the Arabic example (6*a*). This is of course impossible for left-dislocation in English, as illustrated in (6*b*).

(6) (*a*) dhanan-tu l-bayt-a ?alwa:n-u-hu za:hiyat-un
thought-1S the-house-ACC colours-NOM-its bright-NOM
'I believed the house to be of bright colours.'

(*b*) *I believed John, him/he to be a hero

It should perhaps be noted that while the Arabic MSC construction differs from English left-dislocation in its ability to be embedded under an ECM verb, topicalization structures are as bad in this context in Arabic as they are in English. This can be seen clearly by the contrast in acceptability of the minimal pair in (7*a*, *b*), where (7*a*) is a grammatical embedded MSC construction and (7*b*) is an ungrammatical embedded topicalization (distinguishable by the lack of a clitic on the verb); (7*c*) is the corresponding grammatical matrix topicalization.

(7) (*a*) dhanan-tu hind-an yuqa:bilu-ha T-Tulla:bu
thought-1S Hind-ACC meet(3M)-her the-students
'I believed Hind to have been met by the students.'

(*b*) *dhanan-tu hind-an yuqa:bilu T-Tulla:bu
thought-1S Hind-ACC meet(3M) the-students
Intended: 'I believed Hind to have been met by the students.'

(*c*) hind-an yuqa:bilu T-Tulla:b-u
Hind-ACC meet(3M) the-students
'Hind, the students are meeting.'

There is, therefore, no reason to hypothesize that Arabic is somehow just generally more liberal in what can appear in an ECM context.

2.2.2. *Coordination*

An additional respect in which Broad Subjects behave like other subjects is that in a coordination a single noun phrase may be 'shared' between two conjuncts, in one of which it functions as the Broad Subject, and in the other as the Narrow Subject. An example from Arabic is given in (8).

[6] A possible alternative is that these verbs involve control: the point here is unaffected, as only subjects can be controlled.

(8) sayya:rat-i [[lawn-u-ha za:hiyy-un] wa- [maftu:Hat-un min
car(F)-my colour(M)-NOM-its bright(M)-NOM and open(F)-NOM from
al-a'la]]
above
'My car has a bright colour and is a convertible.'

Here, according to our analysis the sequence *lawn-u-ha za:hiyy-un* (colour-its bright) is a predicate; as such it is expected that it be conjoined with another predicate: *maftu:Hat-un min al-a'la* (open from above). Note that the latter, being a predicate AP, is undoubtedly a predicate and not a sentence with a null subject, since predicate APs do not license *pro*-drop in this language. Similar examples of coordination can be given for Hebrew and Japanese.

2.2.3. *Non-peripheral position*

Although Broad Subjects obligatorily occur outside Narrow Subjects in all the languages under consideration (see Section 3.1 for discussion) they do not occur in the kind of peripheral position that left-dislocated phrases do. For example, in both Semitic and Japanese, Broad Subjects occur freely in embedded contexts, in contrast to left-dislocations (and to *wa*-phrases in Japanese). This is already illustrated for Japanese in the examples that have been given, which have all been complements of the nominal head *koto* rather than matrix clauses (see footnote 2).

In Arabic, example (6) above showed a Broad Subject embedded beneath an ECM verb. Further, in clauses that include the auxiliary *ka:n* (be), the Broad Subject may follow the auxiliary:

(9) ka:na l-bayt-u ?alwa:n-u-hu za:hiyat-un
was(3M) the-house(M)-NOM colours-NOM-its bright-NOM
'The house was of bright colours.'

In Hebrew, the example in (10) shows that a Broad Subject may occur to the right of an adjunct, which a left-dislocated phrase may not.

(10) be-anglit kol miSpat yeS l-o nose
in-English each sentence there-is to-it a-subject
'In English each sentence has a subject.'

Compare the ungrammatical English example in (11*a*), in which a left-dislocated phrase follows an adjunct (contrasting also with the grammatical example in (11*b*), where the left-dislocated phrase is in the peripheral position).

(11) (*a*) ?*In English a sentence like that, it would have a subject
(*b*) A sentence like that, in English it would have a subject

2.2.4. *Quantified subject*

A further property that distinguishes Broad Subjects from topics and dislocated phrases is that Broad Subjects can be *wh*-phrases and bare quantifiers. Example (12) is an example of a *wh*-phrase from Japanese.

(12) dare-ga me-ga aoi no-desu-ka?
who-NOM eyes-NOM blue qu
'Who has blue eyes?'

The corresponding topicalized sentence is only marginally acceptable:

(13) ??dare-wa me-ga aoi no-desu-ka?
who-TOP eyes-NOM blue qu
'Who has blue eyes?'

Example (14) shows a universally quantified Broad Subject in Arabic, and (15) a downward-entailing quantifier Broad Subject in Hebrew.

(14) kull-u ?insa:n-in tuHibbu-hu ?umm-u-hu
every-NOM man-GEN love(3F)-him mother-NOM-his
'Everyone's mother loves him.'
Literally: *'Everyone, his mother loves him.'

(15) af exad eyn be-yad-o la'azor le-rina
no one it-isn't in-power-his to-help Rina
'No one has it in his power to help Rina.'

2.2.5. *Broad Subjects are not in a focus position*

In Semitic it is clear that Broad Subjects are not licensed by Focus: like Narrow Subjects, they may have the discourse function of either topic or focus, and in fact typically do not carry focal intonation. For Japanese, however, it has occasionally been claimed that Broad Subjects are in some designated focus position (Kiss 1981). The reason for this is presumably the fact that when the Broad Subject appears in a matrix clause, it is often interpreted as being in focus. However, as argued by Kuroda (1986) and subsequently by Heycock (1993), Broad Subjects behave no differently in this respect than the subjects of individual-level predicates, and, like them, can be interpreted without focus in a number of contexts—in particular, in non-root clauses. Further, if we leave out of consideration the type of sentence that we are considering in this chapter, in order not to beg the question of how it is to be analysed, there is a clear generalization that only a focused subject appears with *ga*: thus, when the object of an ordinary transitive verb is questioned the *wh*-phrase (and the corresponding constituent in the answer) take the accusative case marker *o*; *ga* would be unacceptable. Thus the proposal that *ga* is a focus marker (or appears on phrases in a focus position) is not well motivated.

2.3. *Other subject properties of the Broad Subject*

In addition to the data given above, which clearly indicate that the Broad Subject is neither left-dislocated nor in some designated focus position, there are various other diagnostics in the languages we are considering which demonstrate that the Broad Subject has the properties of a subject (properties presumably associated with the Spec-TP position).

2.3.1. *Subject-oriented reflexives in Japanese*

Broad Subjects can bind the reflexive *zibun*, as illustrated in (16).

(16) sono hito$_i$-ga kodomo-ga zibun$_i$-yori atama-ga ii (koto)
that person$_i$-NOM child-NOM self$_i$-than head-NOM good (fact)
'That person$_i$ [is such that his/her] child is more intelligent than him$_i$/her$_i$.'

The possibility of this binding is relevant in two respects, as argued by Heycock (1993). First, it suggests that the Broad Subject is in an A-position, given the general assumption that binding of anaphors is only possible from A-, rather than A′-positions. Secondly, it constitutes another instance of the Broad Subject behaving like a Narrow Subject, as *zibun* is known to be a subject-oriented reflexive.

It has been argued that when *zibun* has a long-distance antecedent it can function as a logophoric pronoun (Kuno 1972; Kuno and Kaburaki 1977; Kameyama 1984, 1985; Sells 1987), in which case its antecedent may be a non-subject. However, a Broad Subject can also be the antecedent for the anaphor *zibun-zisin*, which is strictly a local subject-oriented anaphor (Kurata 1986; Katada 1991):[7]

(17) john$_i$-ga zibun-zisin$_i$-no hisyo-ga kubi-ni natta (koto)
John$_i$-NOM self$_i$-GEN secretary-NOM was-fired (fact)
'John$_i$ [is such that] his$_i$ secretary was fired.'

2.3.2. *Arabic*

In addition to the arguments already given, there are other indications in Arabic that the MSC is not a case of left-dislocation. For one, a sentential predicate behaves with respect to control exactly like a simple predicate. Consider for example a verb of obligatory control such as *tajarra?a* (dared) in sentence (18).

(18) qa:la muHammad-un ?inna zayd-an qad tajarra?a ?an
said(3M) Mohammad-NOM that Zayd-ACC had dared(3MS) to
yuqa:bila l-mu'allim-a
meet(3MS) the-teacher-ACC
'Mohammad said that Zayd had dared to meet the teacher.'

[7] It has sometimes been claimed (see e.g. Ura 1996: 141) that *zibun-zisin* cannot be bound by a Broad Subject. Ura gives the following example:

(i) *john$_i$-ga imooto$_j$-ga zibun-zisin$_{*i/j}$-no heya-de korosareta (koto)
John$_i$-NOM sister$_j$-NOM self$_{*i/j}$-GEN room-in was-killed (fact)
'John$_i$'s sister$_j$ was killed in self$_{*i/j}$'s room.'

However, it appears to be the intervening subject that makes the binding by the Broad Subject unavailable; as the grammaticality of the binding in (17) shows, the Broad Subject is otherwise available as an antecedent.

According to (18) it is Zayd who is to meet the teacher, not Mohammad. This locality requirement on the anaphoric link in (18) is explained if it is indeed control. Obligatory control is local, unlike the antecedent–pronominal relation. But if obligatory control is involved here, it means that the clause *yuqa:bila l-mu'allim-a* is a predicate. The same holds of predicates abstracted on the object, as shown in (19).

(19) qa:la muHammad-un ?inna zayd-an qad tajarra?a ?an
said(3M) Mohammad-NOM that Zayd-ACC had dared(3MS) to
yuqa:bila-hu l-mu'allim-u
meet(3M)-him the-teacher-NOM
'Mohammad said that Zayd dared to be met by the teacher.'
Literally: 'Mohammad said that Zayd had dared [for] the teacher to meet him.'

In (19), it is understood that the teacher will meet Zayd, not Mohammad. The locality of the anaphoric link between the antecedent *Zayd* and the suffix *-hu* again demonstrates that it is not an antecedent–pronominal relation but control. In other words, *yuqa:bila-hu l-mu'allim-u* is a predicate.

Another indication of the status of this construction is that the sentential predicate can be used not only predicatively, but also attributively (in the construction called *na't sababiyy* (indirect attribute)). Consider the sentential predicate in (20*a*), *bint-u-hu jami:lat-un* (daughter-his beautiful). This same phrase is used attributively in (20*b*), *jami:la bint-u-hu* (beautiful daughter-his), to modify the noun *?ar-rajul* (the man).

(20) (*a*) ?ar-rajul-u bint-u-hu jami:lat-un
the-man-NOM daughter-NOM-his beautiful-NOM
'The man has a beautiful daughter.'
Literally: 'The man, his daughter is beautiful.'

(*b*) qa:bal-tu r-rajul-a l-jami:lat-a bint-u-hu
met-1S the-man-ACC the-beautiful-ACC daughter-NOM-his
'I met the man whose daughter is beautiful.'

The sentential predicate is treated here just like a simple adjectival phrase, which can typically be used both predicatively and attributively.

Note that the *na't sababiyy* is not a relative clause but a regular adjectival modifier. Its head agrees in Case and definiteness with the noun it (indirectly) modifies: in (20*b*), the adjective *jami:la* is definite and accusative, just like the noun *rajul*. There is of course no such agreement between a head noun and parts of a relative clause.

2.3.3. *Hebrew*

In Hebrew there are additional subject-oriented constructions which treat Narrow Subjects and Broad Subjects alike. For example, there is a particular cleft construction which applies to subjects only:

(21) (*a*) dani hu Se- 'azar le dina
Dani he that helped to Dina
'It is Dani who helped Dina.'

(*b*) *dina hi Se- dani 'azar l-a
Dina she that Dani helped to-her
'It is Dina that Dani helped.'

As we would now expect, Broad Subjects can also be clefted in this construction. The following example is from Amatzia Porat's Hebrew translation of Faulkner's *Absalom, Absalom!*, published by Am Oved Publishers, Tel Aviv, 1983:

(22) Se-harey elen hi be-ecem Se-haya l-a sade panuy
since Ellen she in-reality that-there-was to-her field free
'Since it was really Ellen who had the free field.'

3. THE DERIVATION: MOVEMENT OR MERGING?

On the basis of the evidence that we have introduced from all the languages under consideration, we take it to be established that Broad Subjects are indeed subjects. Nevertheless, there are a number of respects in which Broad Subjects differ from Narrow Subjects. We shall now argue that the principal difference between Narrow Subjects and Broad Subjects is that while Narrow Subjects are base-generated within the VP, so that their occurrence in Spec-TP is due to movement, Broad Subjects are *merged* at Spec-TP; that is, they are base-generated in that position, and do not form a chain with a trace within VP.

3.1. *Broad Subjects and feature checking*

The first piece of evidence that Broad Subjects are merged at Spec-TP, while Narrow Subjects are moved, is that in Arabic only Narrow Subjects induce verbal agreement:

(23) (*a*) ?aT-Tulla:b-u yuqa:bilu-una hind-an
the-students(M)-NOM meet(3M)-P Hind(F)-ACC
'The students are meeting Hind.'

(*b*) hind-un yuqa:bilu-ha T-Tulla:b-u
Hind(F)-NOM meet(3M)-her the-students(M)-NOM
'The students are meeting Hind.'
Literally: 'Hind, the students are meeting her.'

We follow the proposal of Chomsky (1995), according to which an element cannot check off features (such as agreement) of the head if it is merged as the specifier of that head. Thus the facts in (23) follow straightforwardly. Broad Subjects are merged at Spec-TP, and hence cannot check agreement features

there. Narrow Subjects, on the other hand, are merged at Spec-VP.[8] In example (23*a*) above, and (24) below, the external argument of *meet* is generated in Spec-VP.

(24) yuqa:bilu T-Tulla:b-u hind-an
meet(3M) the-students(M)-NOM Hind(F)-ACC
'The students are meeting Hind.'

In order to account for the variable appearance of agreement morphology, and its correlation with movement of the subject, we adopt the proposal of Doron (1996), according to which there are two types of number agreement feature in Arabic: strong—which is marked overtly on the verb—and weak. In (24) the weak form occurs: thus the subject remains within the VP by *Procrastinate*. In (23*a*), the strong form occurs, and hence raising of the subject to Spec-TP is obligatory.

The assumption that number agreement may be a strong feature in Arabic is not completely uncontroversial. It has been noticed by Demirdache (1989) that *pro*-drop sentences obligatorily exhibit number agreement features not only on the main verb, but also on the auxiliary *ka:n* (be), as in (25). This point is raised by Benmamoun (1996) as a criticism of the view that overt number agreement is a strong feature. For why should overt number agreement be obligatory with *pro* more than the once required for the identification of *pro*?

(25) ka:nu-u /*ka:na yuqa:bilu-una hind-an fi s-sa:Hat-i
were(3M)-P /*was(3M) meet(3M)-P Hind(F)-ACC in the-yard-GEN
'They used to meet Hind in the yard.'

We do not think that this objection is compelling, however. The double agreement in (25) can be accounted for if the auxiliary *ka:n* (be) is in the head whose specifier is the Case-checking position for Nominative. Assuming with Rizzi (1986) that *pro* can only be identified by occupying a Case position by Spellout (to translate his proposal into the terminology of Chomsky 1995), it must raise overtly to the specifier of *ka:n-* in (25). In order for this to be possible, some feature in the specifier must be strong. We know that Nominative Case in Arabic is weak, so some other feature in this position—Agreement—must be strong.

A further advantage of our proposal that Broad Subjects are merged at Spec-TP, coupled with the assumption that number agreement is a strong feature in Arabic, is that it can account for the rigid ordering constraints: the (non-agreeing) Broad Subject must precede the Narrow Subject, as illustrated in (26).

[8] Note that in these languages nominative case differs from agreement in allowing checking even in the position of merger. We take this to reflect the difference between strong and weak features. Case, being weak in these languages, is checked by a head–head relation at LF rather than by a specifier–head relation.

(26) (*a*) hind-un ?aT-Tulla:b-u yuqa:bilu-una-ha
Hind(F)-NOM the-students(M)-NOM meet(3M)-P-her
'The students are meeting Hind.'
Literally: 'Hind, the students are meeting her.'

(*b*) *?aT-Tulla:b-u hind-un yuqa:bilu-una-ha
the-students(M)-NOM Hind(F)-NOM meet(3M)-P-her
'The students are meeting Hind.'
Literally: 'The students, Hind, (they) are meeting her.'

The explanation for the obligatory position of the Broad Subject to the left of the Narrow Subject again lies in the fact that it is merged rather than moved. Being merged, it cannot check strong agreement features itself. However, using the definition of *closeness* in Chomsky (1995: 358), because the Broad Subject is closer to T than the Narrow Subject in (26*b*), it prevents the latter from being attracted to a second Spec-TP.

Thus, when strong agreement features are present, the only possible order is the one in which the Narrow Subject moves first to check them off, and then the Broad Subject is merged. If, on the other hand, the weak form of number agreement occurs, here, just as in a sentence like (23*b*), the Narrow Subject will have to remain in situ (again, by Procrastinate) and the order Narrow Subject–Broad Subject will still not occur.

In Hebrew there is no evidence for strong agreement features. However, Hebrew does have a strong feature that forces some XP (not necessarily a DP) into clause-initial position. Thus for example the Hebrew equivalent to the well-formed verb-initial Arabic sentence in (24) is ill formed. See (27).

(27) *nifgaSim ha-talmidim 'im ruti ba gina
meet the-students with Ruti in-the yard
'The students meet with Ruti in the yard.'

We will refer to this feature (which may be the same as the feature which forces movement of some XP to initial position in verb-second languages) as the XP-feature. Again, on the assumption that the Broad Subject is merged rather than moved, we predict that it cannot check this feature: a prediction that is borne out by the ungrammaticality of the example in (28*a*), where the Broad Subject stands alone before the verb. The minimally different example in (28*b*), on the other hand, is fully grammatical because the Narrow Subject has moved and checked off the XP-feature.

(28) (*a*) *kol sar 'omed Somer roS-o leyad mexonit-o
each minister stands body guard-his by car-his

(*b*) kol sar Somer roS-o 'omed leyad mexonit-o
each minister body guard-his stands by car-his
Both: 'The bodyguard of each minister stands by his car.'

3.2. *The distribution of* pro *and trace*

Since in our analysis the Broad Subject does not occupy a position to which the verb assigns a theta-role, nor has it moved from such a position, it follows that the element that occupies the argument position in Hebrew and Arabic and is coindexed with both the Broad Subject and the agreement clitic on the verb is the null pronoun *pro* rather than a trace. This is a desirable consequence, since the argument positions in which *pro* occurs under our analysis are those in which it is standardly taken to appear in simple sentences; conversely, since these are Case positions, under normal assumptions traces are not expected to be able to occur there. For example, consider the MSC in (29), which under our hypothesis contains a *pro* in the position indicated.

(29) ha-arye [mekor-o *pro*] be-africa
the-lion origin-his in-Africa
'The lion originates in Africa.'

Our assumption that there is a *pro* in this sentence is based on prior analyses of simple sentences like (30).

(30) xakarti et toldot ha-arye. [mekor-o *pro*] be-africa
researched(1S) ACC history the-lion origin-his in-Africa
'I researched the history of the lion. It (the lion) originates in Africa.'

Note that *-o* is not a fully fledged pronoun but rather a marker of agreement, as shown by the fact that it occurs together with a full noun phrase possessor (see e.g. Borer 1984; Engelhardt 1996):

(31) [mekor-o Sel ha-arye] be-africa
origin-his GEN the-lion in-Africa
'The origin of the lion is in Africa.'

Nevertheless, (30) is fully felicitous, unlike a discourse containing a sentence where a 3rd person subject is missing, such as (32). In Hebrew *pro* cannot appear in subject position in non-embedded contexts if the subject is 3rd person (Borer 1989).

(32) xakarti et toldot ha-arye. *higi'a me-africa
researched(1S) ACC history the-lion arrived from-Africa
'I researched the history of the lion. It(?) arrived from Africa.'

The contrast between examples like (30) and (32) is the basis for maintaining that there is a *pro* in the former.[9]

The null hypothesis is therefore that there is also a *pro* in the MSC given in (29). If instead we were to propose that the Broad Subject had moved from the

[9] The second sentence in (30) cannot be analysed with a trace in the place of *pro*, with *pro* itself as a Broad Subject, since we know from (32) that 3rd person *pro* cannot occur in subject position.

argument position, we would be positing movement from a Case position to a Case position—and in fact in many cases movement of the possessor from within a noun phrase—types of movement that are generally impossible.

3.3. *Islands for movement*

As just stated, any analysis of MSCs in terms of movement of the Broad Subject from a VP-internal argument position will have to explain how such movement can freely violate island constraints: in particular, how it can allow movement of a possessor out of a containing noun phrase. Ura (1996) proposes an analysis which accounts for such movement: but only in one special case. Under his account A-movement of a possessor out of a noun phrase can occur, but is limited to movement from one specifier of a head H to form a higher specifier of H. So, for example, in a language that allows multiple subjects, a possessor inside one subject (in Spec-TP) may raise to become the next-higher specifier of TP.[10]

This analysis, therefore, would allow for a movement account of examples like the Hebrew (29) or Arabic (3*b*). It would not, however, extend to Hebrew examples like (33), or Arabic (34), where possessor raising would have to have taken place from out of the (unmoved) object.

(33) af bamay zar lo makrinim et srat-av le-lo targum
no director foreign not show(3MP) ACC films-his without translation
'No foreign director has his films shown without subtitles.'

(34) ayy-u muxrij-in ?ajnabiyy-in la nu'riD ?afla:m-a-hu
any-NOM director-GEN foreign-GEN not show(1P) films-ACC-his
min-du:n-i tarjamat-in
without translation-GEN
'No foreign director has his films shown by us without subtitles.'

Since these cannot be analysed in terms of movement, but must involve merging of the Broad Subject at Spec-TP, we assume that this is true in all cases.

[10] Briefly, Ura's argument is as follows: What generally prevents A-movement of a possessor out of the containing noun phrase is the locality built into Attract: as mentioned before, Attract is defined to affect the phrase with the relevant features that is *closest to the attracting head*. Since the noun phrase containing a possessor will always be closer to an external head than the possessor is, the latter can typically not be 'attracted' out of the noun phrase. However, there is one circumstance where this will not hold: precisely in languages that allow multiple specifiers. By hypothesis, a language allows multiple specifiers for a particular head H if that language allows multiple checking of some feature [F] of H, and multiple violations of Procrastinate. Suppose that a noun phrase with a feature [F] of this type, containing a possessor also bearing [F], is attracted: it can check its feature against H, and its copy of the feature then deletes. But now the possessor within the noun phrase is the closest [F] element to H; it is therefore free to be attracted, and can move to a higher specifier position in order to check its [F] feature (Ura 1996: 127ff.). Thus A-movement of a possessor out of a noun phrase can occur, but is limited to movement from out of one specifier of a head H to a higher specifier of H.

In Japanese, too, the Broad Subject may correspond to the possessor of an unmoved object:

(35) sono sakka-ga minna-ga sakuhin-o yomi-tagatte-iru (koto)
that author-NOM everyone-NOM works-ACC read-wants-be (fact)
'That author [is such that] everyone wants to read [his] books.'

Again, rather than positing two distinct constructions, we conclude that since some Broad Subjects can only have been base-generated in sentence-initial position, this is true of all.[11]

3.4. *Idioms*

A standard illustration of the difference between raising and control is that phrases that are themselves idiomatic, and hence do not refer in the normal way, can be raised, but cannot act as controllers:

(36) (*a*) The cat seems to be out of the bag (idiomatic)
(*b*) The cat tried to be out of the bag (literal only)

As suggested by Ura (1996: 106ff.), we can apply this test to MSCs: if they involve raising, we would expect to find the pattern in (36*a*). While it is difficult to establish that there are *no* idioms that exhibit the pattern in (36*a*), we have found that the evidence supports our hypothesis that the MSC does not involve movement. Consider for example the Hebrew idiom *to blunt someone's teeth* meaning *to scold someone*, as in (37).

(37) kvar hikheti et Sin-av Sel dani pe'amim rabot
already blunted(1S) ACC teeth-his GEN Dani times many
'I have scolded Dani many times.'
Literally: 'I have blunted Dani's teeth many times.'

The phrase *Sin-av Sel dani* (Dani's teeth) can undergo A-movement, as shown by its ability to passivize:

[11] In order to deal with the problem for his movement analysis posed by examples like (35), Ura proposes precisely that there are two MSCs in Japanese, only one of which involves movement. His principal empirical argument for this distinction is the claim that there can be only one base-generated Broad Subject in a clause, while Broad Subjects formed by raising an inalienable possessor can iterate. However, we find that there is no such difference: Broad Subjects that are not inalienable possessors can also iterate:

(i) oranda-no sakana-ga huyu-ga nisin-ga yoi
Holland-GEN fish-NOM winter-NOM herring-NOM good-is
'Fish in Holland [are such that] [in] winter herring is the best.'

Neither of the Broad Subjects *oranda-no sakana* (fish in Holland) or *huyu* (winter) is an inalienable possessor; hence by Ura's own assumptions both must be base-generated. (An example similar to (i) is cited by Ura (1996: 104, (4.8)) as ungrammatical; although less acceptable, some of our informants find that example grammatical as well.) We conclude that there is no independent empirical basis for two distinct MSCs in Japanese.

(38) Sin-av Sel dani kvar hukhu pe'amim rabot
teeth-his GEN Dani already were-blunted times many
'Dani has been scolded many times.'
Literally: 'Dani's teeth have been blunted many times.'

However, the same phrase cannot retain its idiomatic interpretation as a Broad Subject:

(39) Sin-av Sel dani kvar hikheti ot-an pe'amim rabot
teeth-his GEN Dani already blunted(1S) ACC-them times many
'Dani's teeth, I have blunted them many times.' (literal only)

The same pattern is found in the idiom *to hang the collar round someone's neck* meaning *to blame someone*:

(40) (*a*) tamid tolim et ha-kolar be-cavar-o Sel ha-nasi
always hang(3MP) ACC the-collar at-neck-his GEN the-president
'One always blames the president.'
Literally: 'One always hangs the collar round the president's neck.'

(*b*) ha-kolar tamid nitle be-cavar-o Sel ha-nasi
the-collar always is-hanged at-neck-his GEN the-president
'One always blames the president.'
Literally: 'The collar is always hung round the president's neck.'

(*c*) ha-kolar tamid tolim ot-o be-cavar-o Sel ha-nasi
the-collar always hang(3MP) ACC-it at-neck-his GEN the-president
'The collar, one always hangs it round the president's neck.'
(literal only)

3.5. *Lack of scope ambiguity*

A further empirical difference between Broad and Narrow Subjects which can be explained by our proposal is the difference in their scope behaviour. A Narrow Subject can be construed under the scope of a quantifier in the predicate, whereas a Broad Subject always has scope over a quantifier in the predicate. Examples (41*a*, *b*) are from Arabic.

(41) (*a*) fata:t-un Tawi:lat-un raqasat ma'a kull-i Sa:bb-in
girl-NOM tall-NOM danced(3FS) with every-GEN boy-GEN
'A tall girl danced with every boy.' (ambiguous scope)

(*b*) fata:t-un Tawi:lat-un 'arraftu-ha bi-kull-i Sa:bb-in
girl-NOM tall-NOM introduced(1S)-to-her every-GEN boy-GEN
'I introduced all the boys to a (specific) tall girl.'

If *tall girl* is base-generated within the predicate in (41*a*) and moved to Spec-TP, it is predicted to have either scope relative to quantifiers in the VP. This conforms with the two possible readings of (41*a*): *tall girl* may be interpreted

as having either wide or narrow scope relative to *every boy*. In (41*b*), on the other hand, *tall girl* is base-generated as a Broad Subject, and thus has wide scope over a quantifier in the VP. This corresponds to the only interpretation of (41*b*), where *tall girl* must have wide scope over *every boy*. Data from Classical Arabic that establish the same point can be found in Fassi Fehri (1993).

The same scope differences appear in Hebrew. Narrow Subjects have ambiguous scope with respect to other quantifiers, whereas Broad Subjects have wide scope only. In (42*a*), the subject has either wide or narrow scope relative to the adverb *every now and then*. In (42*b*), on the other hand, the Broad Subject has unambiguously wide scope.

(42) (*a*) hacagot tovot 'olot midey pa'am
plays good are-performed every now and then
'Good plays are performed every now and then.' (ambiguous)

(*b*) hacagot tovot ma'alim ot-an midey pa'am
plays good perform(3MP) ACC-them every now and then
'Good plays are performed every now and then.' (unambiguous)

Similar data exist also in Japanese. Sakai (1994) notes that an example like (43)—his (13*a*)—is ambiguous as to the scope of the universal quantifier: it may take scope only within the relative clause, or over the whole clause.

(43) daremo-ga kinoo-made tukatte-ita konpyuuta-ga
everyone-NOM yesterday-until used computer-NOM
kowarete-simatta (koto)
broke-down (fact)
'The computer which everyone used has broken.' (only one computer)
Or 'For each person, the computer which he used has broken.'

He argues that this is so because the initial nominative *daremo-ga* (everyone-NOM) could be interpreted as being either inside the relative clause (hence the lower scope) or in our terms a Broad Subject of the whole clause (hence the higher scope). Sakai demonstrates that if the nominative quantifier is unambiguously inside the relative clause, only the lower scope is possible (note that this rules out the possibility that the scope ambiguity is due to scope interactions of the quantifier and some null relative operator within the relative clause). What he does not discuss is what readings are available if the nominative is unambiguously outside the relative—that is, a Broad Subject. It turns out that, just as we would expect from our analysis and from what we have seen in Semitic, the Broad Subject unambiguously has wide scope:

(44) daremo-ga kesa kinoo-made tukatte-ita
everyone-NOM this-morning yesterday-until used
konpyuuta-ga kowarete-simatta (koto)
computer-NOM broke-down (fact)
'This morning, for each person, the computer which s/he had used until yesterday was broken.'

Again, the lack of ambiguity argues for an analysis in terms of merging rather than movement. It is well known that scrambling in Japanese results in scope ambiguity: the scrambled phrase can have either the scope associated with its scrambled position or that of its original position. If the Broad Subject in (44) had been moved out of the relative clause (as Sakai proposes) we would expect that it too would be ambiguous in its scope, contrary to fact.

4. INTERPRETATION

As we have just seen, our proposal has consequences for the semantic analysis of multiple-subject constructions. We now turn to look in more detail at the interpretation of Broad Subjects, demonstrating the difference of interpretation between a Broad Subject and a left-dislocated noun phrase on the one hand, and between a Broad Subject and a Narrow Subject on the other.

The first difference between a Broad Subject and a left-dislocated element concerns discourse structure: a left-dislocated noun phrase (and we include here a *wa*-marked phrase in Japanese) has a fixed pragmatic role of topic, whereas the Broad Subject, like any subject, may be (part of) the focus.

The second, related, difference has to do with denotation. A left-dislocated noun phrase must be referring, that is, denote an individual (or a group of individuals). It must therefore be a name or a definite description or at least a quantifier with a 'witness set', that is, upward-entailing. The clause which follows a left-dislocated element denotes a full proposition, not just a property: the proposition is related to the reference of the left-dislocated noun phrase by general discourse processes. One way that the proposition can be taken to relate to the left-dislocated topic is through containing a pronoun which serves to pick up the reference of the noun phrase, either by pragmatic coreference or by the e-type mechanism. In other words, this pronoun does not serve as a bound variable or a pronoun of laziness, but as a marker of coreference. In other cases (such as those that have been extensively documented for Japanese) an 'aboutness' relation may be established without any coreferential pronoun.

In MSCs, on the other hand, there exists a relation of predication between the Broad Subject and the clause following it. The clause denotes not a proposition but a property. One way of achieving a property denotation is through abstracting on a pronoun in the clause (a 'resumptive' pronoun).[12] A Broad

[12] In Japanese, there is not necessarily such a pronoun, and abstraction could be on the implicit Davidsonian argument. Thus for example the following (from Saito 1982) is possible in Japanese, but there is no equivalent in Semitic:

(i) natu-ga biiru-ga umai
summer-NOM beer-NOM good
'[it is in] summer [that] beer tastes good.'

Ornan (1979) cites some examples in Hebrew of MSCs without an overt pronoun—all, however, from the work of a single author, Shmuel Yossef Agnon. In contrast to the Japanese example in (i), in each case there is a grammatical alternate with an overt pronoun.

Subject may therefore be a quantifier, including downward-entailing quantifiers, unlike a left-dislocated noun phrase; this was shown in Section 2.2.4. The Broad Subject binds the resumptive pronoun in the same way as the Narrow Subject binds its trace in the VP.

As we have just seen, a Broad Subject is like a Narrow Subject in the range of quantifiers that it allows. Nevertheless, there are semantic differences between a Broad Subject and a Narrow Subject. Recall that in Section 3.5 we saw that a Broad Subject cannot take narrow scope with respect to other quantifiers in the sentence; we argued that this followed from the fact that, not having a trace internal to the VP, Broad Subjects could not be interpreted in a lower position at LF. According to many analyses that follow the basic insights of Kratzer (1989, 1995) and Diesing (1992), the position in which a phrase is base-generated determines whether it will fall within the restrictive clause or the nuclear scope of any operators in the sentence, including the generic operator. Consequently, our hypothesis that the Broad Subject is merged at Spec-TP predicts that it should be able to occur only within the restrictive clause. This prediction is met. Consider the following two Hebrew examples, where the second is an MSC:

(45) (*a*) ba- boker Sotim kafe tov
in-the morning drink(3MP) coffee good
'In the morning, one drinks good coffee.'

(*b*) kafe tov Sotim ot-o ba- boker
coffee good drink(3MP) ACC-it in-the morning
'Good coffee, one drinks it in the morning.'

In (45*a*), where the bare noun phrase *kafe tov* (good coffee) is in the argument position within the VP, it can be interpreted either existentially or generically; in (45*b*) on the other hand, where it is generated as a Broad Subject, it can only be interpreted generically. Note that while we have translated (45*b*) as an English left-dislocation (English not allowing MSCs), in Hebrew there is at least one derivation of this sentence where the initial phrase is a Broad Subject, as shown by the following coordination (as there is no *pro*-drop in the present tense in Hebrew, the second conjunct is unambiguously a predicate, so that this is not coordination of two full sentences):

(46) kafe tov Sotim ot-o ba-boker ve maSpi'a kol
coffee good drink(3MP) ACC-it in-the-morning and effects all
ha-yom
the-day
'Good coffee, one drinks it in the morning and [it] has an effect all day.'

The following examples demonstrate that the lexical predicate need not be individual-level, or even stative, but can be episodic:

(47) (*a*) hor-av Sel adam ben Siv'im nifteru
parents-his of man aged seventy died
'The parents of a seventy-year-old died.'

(*b*) adam ben Siv'im hor-av nifteru
person aged seventy parents-his died
'A seventy-year-old has parents who have died.'

The same is known to be true of MSCs in Japanese, as illustrated in (17), repeated here as (48).

(48) john$_i$-ga zibun-zisin$_i$-no hisyo-ga kubi-ni natta (koto)
John$_i$-NOM self$_i$-GEN secretary-NOM was-fired (fact)
'John$_i$ [is such that] his$_i$ secretary was fired.'

In (48), the property which is predicated of John is implicated from the particular event of the firing, which is an episodic eventuality; similarly for the Hebrew example (47*b*). We will not elaborate on the semantics of this implication, but it is much the same as is sometimes needed for interpreting the habitual operator in English. Thus, the following sentence can be judged true on the basis of an episodic event of John having signed a contract with a big company (Carlson and Pelletier 1995):

(49) John sells vacuum cleaners

The event must be 'crucial' in that it determines the property. This is why, for example, Japanese speakers judge the following to be odd:

(50) #john-ga musuko-ga waratta (koto)
John-NOM son-NOM laughed (fact)
'John [is such that] his son laughed.'

5. CONCLUSION

In this chapter we have argued that the hypothesis that certain heads may allow multiple specifiers allows for an insightful analysis of constructions involving multiple nominative phrases both in Japanese and in Semitic. On the one hand we have given evidence concerning the syntax, semantics, and pragmatics of these constructions that demonstrates that they are not instances of left-dislocation or focus movement. The possibility of multiple specifiers of TP and of multiple checking of nominative case provides the necessary left-peripheral A-positions for these nominative phrases.

On the other hand we have also demonstrated that these 'Broad Subjects' have some syntactic and semantic properties that distinguish them from Narrow Subjects: in particular, they do not induce verbal agreement and cannot take narrow scope with respect to any other quantifier in the sentence. We have argued that these differences arise because specifiers can be the result of two

different operations: Merge and Move. Specifically, Broad Subjects are merged at Spec-TP while Narrow Subjects are merged at Spec-VP and achieve their Spec-TP position by movement. Granted Chomsky's proposal that strong features cannot be checked by a phrase in the position in which it is merged, the lack of agreement with Broad Subjects follows immediately, as does their ordering with respect to the Narrow Subject. With respect to their interpretation, the obligatorily broad scope and typically generic interpretation of Broad Subjects follows directly from their lack of a VP-internal trace, given widely held assumptions concerning the correspondence between syntactic structure and semantic partitioning.

In order to satisfy Full Interpretation, there must be some interface role which Broad Subjects assume. This role cannot be any thematic role assigned by the clause's main predicate, since a Broad Subject does not have a trace in the argument position of any lexical predicate. What the MSC achieves syntactically is the construction of a new predicate for the Broad Subject. This predicate is interpreted as a new complex property which assigns an argument role, albeit not a thematic role in the lexical sense.

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