Two Syntactic Positions for Determiners in Hebrew

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1. Basic and derived determiners

1.1. Derived determiners

This paper will discuss some of the syntactic properties of determiners and the problems associated with them, and will suggest a syntactic analysis that focuses mainly on the similarities between determiners and nouns. Even though the focus of this paper will be primarily on numerals, most of what will be said can be extended to other determiners¹ as well.

Let us begin by noting that many determiners in Hebrew, and numerals in particular, have two forms which seem to be derived from each other by the same rule that derives heads of construct-state (CS) nominals (סמיכות) from the basic form of the noun; I will refer to these two forms as the "basic" and "derived" forms. This is illustrated for determiners (numerals in this case) and for nouns in the following table:

Determiners:			Nouns:	
Basic	Derived	Basic	Derived	
šnàyim	šnèy	raglàyim	raglèy	
šlošà	šlòšet	macevà	macèvet	

The question now is whether the similarity is only morphological, or does it extend to syntax as well.

Taking a look at derived determiners, we note that they have the following properties:

1. Like other heads in Hebrew (N, P, V), derived determiners can host pronominal clitics. This is illustrated in example (1) below.

¹The term "determiner" will be used here in its broadest sense, covering numerals, quantifiers, measure phrases etc.

- 2. Derived determiners are necessarily one-word elements, and cannot be syntactically complex (2).
- 3. Derived determiners assign (abstract) genitive case. Even though this property has no overt evidence in Hebrew, in related languages such as Arabic there is overt morphological evidence.
- 4. Derived determiners can't have the definite article ha- adjoined to them, as seen in (3).
- 5. A sequence of determiners can appear in what seems to be a recursive configuration (4).
 - (1) a. ra'iti et š ney ha-yeladim (I) saw ACC two the-children 'I saw the two children'
 - b. ra'iti et š ney-hem(I) saw ACC two-them'I saw the two of them'
 - (2) * ra'iti et š ney o šlošet ha-yeladim
 (I) saw ACC two or three the-children
 - (3) a. šlošet ha-sfarim three DEF-books 'the three books'
 - b. * ha-šlošet sfarim
 - (4) a. kol šloša anašim / kol šlošet ha-anašim
 - b. kol esrot alfey ha-anašim every tens thousands the-men 'all tens of thousands of men'

All the properties listed above hold for nominal heads of construct state as well. It seems, therefore, natural to compare examples such as (4b) with recursive construct state nominals like the phrase in (5); this comparison suggests that derived determiners are indeed heads of CS. The idea that determiners can be heads of CS is even more attractive once we note that other categories besides nouns have been claimed to head CSs: in (6) we see an adjectival CS, a CS headed by a gerund, and one headed by a present-tense verb.

(5) sifrey morey ha-kfar books teachers the-village 'the village teachers' books'

- (6) a. (yalda) kxul-at enayim (girl) blue-FEM eyes 'blue eyed girl'
 - b. cet ha-nešama exiting the-soul
 - c. oxley sfanim eaters rabbits 'rabbit eaters'

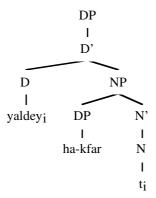
1.2. Construct state (CS) nominals

At this point, it would be helpful to quickly review the central properties of CS nominals. The properties listed below have been discussed extensively in the literature (see, for instance, Borer (1994), Siloni (1994) and references cited there), so they will only be noted here briefly:

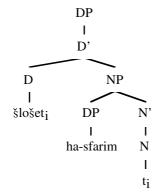
- The head noun in a CS differs morphophonologically from the free form of the noun, as was shown in the table at the beginning of this paper.
- CS nominals are head-initial and right-branching.
- The definite article cannot appear on the head noun in CS.
- The definiteness value of the most deeply embedded branch of the CS is "inherited" by the entire construct.
- When the head of a CS is modified by an AP, the modifier isn't adjacent to the modified noun, but instead it follows the genitive DP.

The standard analysis of simple CS nominals like the one in (7a), following Ritter (91) and others, is shown in (7b). Abstracting away from all functional categories which might exist between NP and DP, it is widely assumed that the head of the construct is generated under N and moves from that position to D, giving the head-initial word order.

(7) a. yaldey ha-kfar children the-village 'the village children'



c.



Applying this analysis to derived determiners, taking for example a simple DP like š*lošet ha-sfarim* ('the three books'), we get the tree in (7c), where š*lošet* moves from N to D to give a tree which is structurally identical to the one in (7b). This is the null hypothesis: derived determiners form the same kind of structure as derived nouns. Before we go on to investigate some aspects of this hypothesis, some remarks should be made about non-derived determiners.

1.3. Basic and complex determiners

Looking at basic determiners, such as $\S lo\S a$, we must note that these determiners share the same distribution as complex determiners that can't possibly be analyzed as heads. Some examples of such complex determiners are given in (8):

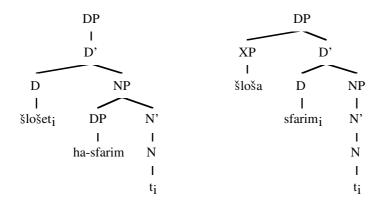
(8) a. ben šnayim le-šloša (sifrey šira) between two to-three (books poetry)

- b. lefaxot šnayim ve-ulay afilu šloša (sifrey šira) at least two and-maybe even three (books poetry)
- c. lo harbe paxot (sifrey šira) not much less (books poetry)

Assuming, then, that these determiners are not heads, we are led back to the traditional view that such determiners form some sort of maximal projection which occupies a position preceding the head of the DP. The most natural position that can host such a "determiner phrase", without requiring any additional functional categories to be assumed, is [spec, DP]. The simplest assumption is therefore that basic determiners like $\S lo\S a$, as well as complex determiners like those in (8), occupy in Hebrew the specifier of DP. Since no other constituents are assumed to fill this position in Hebrew (as opposed to Germanic languages, for instance, where possessors are widely assumed to be located in [spec, DP]), there is no obvious reason to reject this idea. The rest of this paper will focus on derived determiners, so I will not go any further with the analysis of basic determiners here, and will assume this simple analysis.

To summarize, the two structures shown in (9) were suggested for the two types of determiners available in Hebrew:

(9)



On the left, a derived determiner functions as the head of a CS; and on the right we have a basic determiner projecting its own maximal projection in specifier of DP. Complex determiners would occupy the same position as $\S lo\S a$; I will ignore at this point the internal structure of the XP dominating $\S lo\S a$.

2. Additional nominal properties of determiners

Perhaps the most striking aspect of the suggestion that determiners can act as heads of CS is that determiners are generated under N. If this is so, we would expect to find further similarities between determiners and nouns—and we really do. Some of these similarities will be reviewed in this section.

2.1. Plural, definiteness and gender marking

The first similarity between determiners and nouns is morphological: determiners share much of the inflectional morphology of nouns. Thus, in (10) we see that some determiners can be pluralized; (11) illustrates how the definite article (which acts as an inflectional affix in Hebrew) can be attached to determiners; and (12) shows examples of gender marking on numerals.²

- (10) a. elef/hamon thousand/multitude
 - b. alaf-im/hamon-im
- (11) ha-kol / ha-rov / ha-šnayim the-every /the-most / the-two 'everything' / 'the majority' / 'the two'
- (12) a. šloš-a xatul-im three-MASC cat-MASC-PL
 - saloš xatul-ot three cat-FEM-PL

2.2. Marginal and ambiguous lexical items

Next, it should be noted that there are many lexical items which are either ambiguous or marginal between a determiner and a noun interpretation. Two such examples are given in (13) and (14); some other examples are *xeci* ('half') and *xelek* ('part/some').

- (13) a. hayu šam hamon anašim were there lots men 'there were lots of people there'
 - b. ha-hamon daraš pe'ula the-crowd required action

 $^{^2}$ Gender marking on determiners differs somewhat from that on nouns: the suffix $\cdot a$, which marks feminine nouns, marks masculine numerals. I have no explanation for this reversal, which many speakers tend to "undo"; apart from this fact, it seems to be the same morpheme marking gender on both nouns and determiners.

- (14) a. rov ha-sfarim meša'amemim most the-books boring
 - b. ha-rov kove'a the-majority decides

2.3. Definiteness in CS

Another property which is shared by determiners and nouns in CS, is the fact that they both seem to be "transparent" to definiteness. The sentences in (15) illustrate how the definiteness of a nominal CS is determined by the "complement" (the DP following the head), and not by the head noun itself; this can be tested by the presence or absence of the accusative marker et, which must precede definite DPs, and only them. Example (16) shows that the same holds for determiners: the same lexical item š*ney* can be the head of an indefinite DP, as in (16a), and of a definite DP (16b). This is a surprising fact, which contradicts the traditional tendency to see definiteness as a property of the determiner.

- (15) a. ra'iti (*et) tmunat perax
 (I) saw ACC picture flower
 'I saw a picture of a flower'
 - b. ra'iti *(et) tmunat ha-perax
- (16) a. ra'iti (*et) š ney anašim
 (I) saw ACC two men
 'I saw two men'
 - b. ra'iti *(et) š ney ha-anašim

2.4. Modification and word-order

Finally, in those rare cases where a determiner can be modified by an AP, the observed word order in determiner-headed CS is the same as in "regular" CS: When an AP modifies the head of a CS, that AP is not adjacent to the head; instead, it appears at the end of the DP. When the head is a derived determiner, as in (17a)—we also get this word order, and not the word order of the equivalent non-CS phrase which is shown in (17b):

- (17) a. mispar ha-mištatfim ha-mu'at number the-participants the-little 'the small number of participants'
 - b. ha-mispar ha-mu'at šel ha-mištatfim

3. Distributional restrictions on determiners

3.1. The central problem

So far, the discussion focused on similarities between determiners and nouns. But the picture is complicated by the fact that the syntactic distribution of these two classes is not identical. As a simple example, compare (18a) with (18b). In (18a) we see that a "regular" noun can be followed in a CS by all combinations of definite or indefinite, singular or plural nouns. Determiners, on the other hand, are much more restricted, as (18b) shows.

- (18) a. kri'at ha-sfar-im/sfar-im/ha-sefer/sefer reading the-book-s/book-s/the-book/book
 - b. šlošet ha-sfar-im/*sfar-im/*ha-sefer/*sefer three (the-)book(-s)
 - sney ha-sfar-im/sfar-im/*ha-sefer/*sefertwo (the-)book(-s)
 - d. kol ha-sfar-im/*sfar-im/ha-sefer/sefer every/all (the-)book(-s)
 - e. rov ha-sfar-im/*sfar-im/ha-sefer/*sefer most (the-)book(-s)

Naturally, we would expect some of these differences to be accounted for by the semantics of determiners. But comparing minimal pairs like (18b) and (18c), it is obvious that some of these restrictions are not semantic; it would be very difficult to argue that there is a substantial semantic difference between the numerals 2 and 3 which can account for these differences in their distribution. Further complications are introduced by (d) and (e), which together with the previous examples illustrate the fact that the class of determiners is far from being homogenous with respect to its distribution in CS. This might lead us to conclude that the distribution of determiners is governed solely by idiosyncratic properties of lexical items; I would like, however, to propose that this is not the case, and that there is a certain regularity involved.

3.2. Determiners vs. nouns: the distinctive feature

The central observation that should be made with respect to these variations is this: Determiners with overt plural morphology have a different distribution from those which lack it. This is illustrated in examples (19) and (20):

- (19) a. aseret ha-sfarim/*sfarim ten the-books/books
 - b. asara *ha-sfarim/sfarim
- (20) a. esrot ha-sfarim/sfarim tens the-books/books
 - b. asarot *ha-sfarim/*sfarim

In (19a) we see that *aseret* ('ten'), the derived form of *asara*, which has no plural suffix, must be followed by a definite noun; in contrast, the plural *esrot* ('tens'), can also have an indefinite noun after it. The same can be seen with other minimal pairs such as *elef-alfey*, *milyon-milyoney*, and surprisingly also *šney-šlošet*: *šney* has the dual suffix *-ey* (*-ayim*) and patterns with other pluralized determiners such as *esrot* and *alfey*, as opposed to *šlošet* which has no plural morphology and patterns with *aseret* and *elef*.

Once the question is made explicit, it is actually not at all clear whether something like *ten* is plural or not: on the one hand, we intuitively think of numerals as denoting something which is plural (perhaps a set of ten elements); but on the other hand, if *ten* is plural, then what is the status of *tens*? Can a plural be pluralized? The solution that I want to suggest is that determiners such as *ten* are syntactically neither singular nor plural: they simply lack a formal number specification. Furthermore, I propose that this is what makes them different from 'ordinary' nouns, which are always specified as [±plural].

Under the framework of the Minimalist Program (Chomsky 1995), this suggestion is not just a theory-internal matter of notation, but something which bears empirical consequences, some of which might allow us to explain the restrictions on CS headed by derived determiners. Since head movement from N to D has to be motivated by the need to check some formal feature, the presence or absence of a number feature becomes a central issue. I propose that the lack of a number feature on a determiner like §lošet makes this movement possible only if there is some other feature that can motivate the movement; thus, as a head of CS, a determiner is more restricted than regular nouns are, since it is dependent on the existence of other features to motivate its movement to D. Such other features will be discussed later.

If determiners lack an inherent number feature, the number agreement that they trigger should be somewhat different from that triggered by lexical nouns. One prediction is that when DPs which are made up only of a determiner, with no

lexical noun, appear in subject position, they will be able to agree either with a singular verb or with a plural verb. In examples (21)-(23) we see that this prediction is correct:

- (21) alaf-im higi-u hayom, ve-maxar kanir'e yagi-a/yagi-u od elef thousand-PL arrived-PL today, and-tomorrow probably will arrive-SG/arrive-PL another thousand
- (22) a. ha-rov hicli'ax the-most succeeded(SG)
 - b. ha-rov ahav-u et ha-seret the-most liked-PL ACC the-film
- (23) a. harbe hištana me-az much changed(SG) from-then
 - b. harbe azv-u ba-emca much left-PL in-the-middle

3.3. Definiteness and raising

It was suggested in the previous subsection that when determiners lack a number feature, they can move from N to D only if there is some other feature that can motivate this movement. As shown in (24), such determiners are sensitive to definiteness; this should be contrasted with determiners which have overt number marking, like those in (25), and are not sensitive to definiteness. The conclusion is that definiteness is another feature that has to be checked in D and that can license head movement.

- (24) šlošet/rov ha-sfarim/*sfarim three/most (the-)books
- (25) alfey/sney ha-sfarim/sfarim thousands/two (the-)books

This raises two questions. First, why should a semantic property such as definiteness be relevant to a syntactic process like head movement? The answer is simply that in Hebrew, definiteness is also a syntactic feature. One fact that supports this idea is that adjectives in Hebrew agree in definiteness, and not just in number and gender, with the noun they modify, as shown in (26). Another realization of the syntactic relevance of definiteness was already mentioned earlier: the accusative marker *et* is sensitive to the definiteness of the object, as shown in (27). In both cases, syntactic phenomena (agreement and case marking) are seen to be sensitive to the definiteness of the DP.

- (26) ha-sfar-im ha-av-im
 DEF-book-PL DEF-thick-PL
- (27) a. ra'iti (*et) yeled (I-)saw (*ACC) boy 'I saw a boy'
 - b. ra'iti *(et) ha-yeled

These phenomena lead us to conclude that the definite article in Hebrew is the realization of a formal feature which is relevant to syntax; this formal feature also has the semantic interpretation that is normally associated with it. Note also that this 'syntactic definiteness' should not be confused with semantic definiteness, which can also be achieved in other ways; for instance, by using a demonstrative, as in (28): the two forms in (28a) and (28b) share the same meaning (both are semantically definite), and differ only in their syntactic definiteness, present only in the first.

- (28) a. Dani azav et ha-bayit ha-ze
 Dani left ACC DEF-house DEF-this

 'Dani left this house'
 - b. Dani azav bayit ze

The second question raised by the proposal that definiteness motivates N-to-D movement is: Why can't we have N to D movement with indefinites? The answer I propose is that the source of this asymmetry is that there is no formal feature of indefiniteness; the two possibilities available in Hebrew are not [±def], but rather [+def] or no feature at all. This idea is supported by the fact that there is no indefinite article in Hebrew, nor any other kind of evidence for the existence of a formal feature [-def]³. Indefiniteness, therefore, is simply the lack of definiteness; apart from our natural tendency to view the system of definiteness as a symmetric one with two values, there is no empirical evidence that I am aware of which can support the existence of a [-def] feature. Thus, in the absence of a [+def] feature or a number feature, movement is impossible.⁴

³Note also that speakers judge the absence of the accusative marker *et* in front of definites to be much less ungrammatical than the presence of this marker in front of indefinites. This rules out viewing the lack of *et* as indirect evidence for indefiniteness as a feature symmetric to definiteness.

⁴Ignoring, at the moment, the phenomenon of genitive case-assignment, which might license partial movement to an intermediate functional category; I will return to this briefly in §§3.4.

To conclude, we have the following generalization:

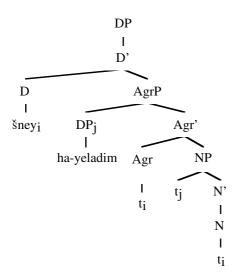
Det-CS formation is only possible when:

- The determiner is overtly plural-marked, as in (25), or
- The complement is definite, as in (24).

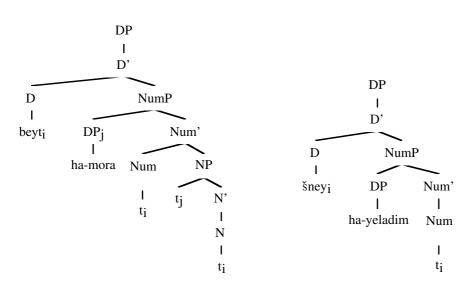
3.4. Intermediate functional categories inside the DP

So far, I have ignored any functional categories which might exists below the DP level, because this topic is much beyond the scope of the current discussion. It should be mentioned, however, that in order to account for the "inheritance" of definiteness from the embedded branch of the construct, and also in order to explain various facts related to genitive case assignment, I suggest to adopt Siloni's (94) proposal that construct state structures include an agreement projection dominating NP. Thus, the modified structure of a phrase such as § ney ha-yeladim ('the two children') will be:

(29)



It is natural at this point to make a short comparison with the structures suggested by Ritter (1991), which are illustrated in (30) below:



The tree on the left is Ritter's structure of a nominal CS, which has an intermediate projection NumP; this structure, apart from the labeling of the nodes, is precisely the same as the one I am assuming (following Siloni 1994). Ritter's structure for determiner-headed CS, on the other hand, is quite different from the one that I propose: Ritter views determiners as Nums, not Ns, and therefore the structure is lacking an NP projection altogether. I believe that my analysis offers some advantages over this one in two main areas: accounting for the similarities between determiners and nouns; and explaining the distributional restrictions on determiner as heads of CS, which were discussed in previous sections.

3.5. Summary of CS licensing

I have argued that there are three features that have to be checked inside the DP, and that these features can therefore drive movement of its constituents:

- 1. <u>Number.</u> Lexical nouns are always specified for this feature, namely—they are always [±plural]. Determiners, on the other hand, are not inherently specified for this feature, but some may optionally be [+plural]; in this case, they show overt plural morphology. The syntactic number feature should not be confused with the semantic plurality associated with most determiners.
- 2. <u>Definiteness</u>. Both nouns and determiners can be either [+def] or unspecified for definiteness (in which case they are usually interpreted as indefinites). Heads of CS (nouns or determiners), although they show no morphological

- indication of the presence of the [+def] feature, are ambiguous between being [+def] and being unspecified.
- 3. <u>Genitive case</u>. Heads of construct are specified for the feature [assign gen]; arguments (which are generated inside NP) are marked [gen]; case is checked in AgrP. Heads of non-CS DPs, on the other hand, do not have a case assignment feature.

4. Determiners in specifier of DP

Let's turn now to see what kind of restrictions exist on the distribution of basic determiners. As we can see in (31), the presence of a lexical noun after a basic determiner limits the choice of the determiner: except for the cases when a determiner appears in isolation and acts as an entire argument, a determiner which is plural marked is impossible, as shown in (b), and so are definite-marked determiners, as in (c). The only possibility is a zero-marked determiner, like the ones in (a):

- (31) a. elef/šloša anašim thousand/three men
 - b. * alaf-im/s nayim anasim thousands/two men
 - c. * ha-šloša (ha-)anašim the-three (the-)men

This observation, combined with the ideas developed earlier for derived determiners, suggests the idea that determiners such as $\S lo\S a$ project only an NP, and not a DP. In the presence of a number feature or a definiteness feature, head movement to D would presumably be necessary, and it seems that DPs in Hebrew can't occupy [spec, DP]. Note that, in contrast to languages such as English, possessors in Hebrew follow the noun; therefore, it is clear that they too don't occupy [spec, DP], and thus the most well-known example of DPs which could appear in this position is not witnessed in Hebrew. I would like to suggest that the impossibility of DPs in this position in Hebrew can probably be reduced to the lack of a case assigner, which would be required in order to assign case to a DP in this position.

5. Determiners and the semantic interface

The last question to be discussed here, and perhaps the most interesting one, is what kind of implications my analysis has for the syntax-semantics interface. I

have proposed two different structures for noun phrases that contain a determiner, and it is natural to check whether these two structures correspond to any known semantic classification of noun phrases. The ideas presented in this section are mostly of a speculative nature, and represent work in progress; the facts, however, are interesting nonetheless.

5.1. Weak and strong nouns phrases

The first idea that comes to mind is that the two proposed structures correspond to the weak-strong distinction (Barwise&Cooper 1981, Keenan 1987 and others). Looking first at simple examples such as (32), it might seem as if this actually works:

(32) a. šlošet ha-sfarim three the-books (strong) šloša sfarim b. three books (weak) (33)šney/esrot sfarim two/tens books (weak) (34)kol yeled every boy

In (32) we see that the same determiner, $\delta lo\delta a$, when acting as a head of a construct (in its derived form) gives a strong DP; while the same determiner, in its free form, produces a weak DP. But as we see in the next example (33), there are also weak DPs formed as construct states; and (34) shows an example of a strong DP which might be analyzed as a non-CS (though it is hard to tell for sure in this case whether this is a derived determiner or not, because of the lack of any morphophonological evidence- monosyllabic words do not display any overt alternation between their basic and derived forms). So it seems that the correlation in (32) is accidental and is not the general rule; the weak-strong distinction in this case can be simply reduced to the presence or absence of the definite article on the noun, which projects a definiteness value to the entire DP.

(strong)

5.2. Simple and complex determiners

Another idea, which has been pointed out to me by Tanya Reinhart and Yoad Winter, is that certain semantic differences between simple and complex determiners could correlate at least partially with the two structures that I propose. Clearly, only one of the two structures— the one where the determiner projects its own XP in specifier of DP- allows for complex determiners; it is interesting, thus, to consider the semantic phenomena which show a difference between complex and simple determiners, and see whether these can somehow be derived from the underlying syntactic structures.

One kind of sensitivity to the complexity of the determiner is illustrated by the following sentence (taken from Reinhart 1997):

(35) If (exactly/more than) three relatives of mine die, I will inherit a house.

Without the terms in parentheses, there is a reading where the DP three relatives of mine has wide scope out of the *if*-clause— what might be called the "specific" reading. But when we take, instead, a complex determiner such as *exactly three* or *more than three*, this reading is not available. The same judgements hold for Hebrew as well.

Another place where the simple-complex distinction shows up is with collective predicates. In (36), a DP having a simple determiner (ten workers in our office) can occur as the subject of a collective predicate. But once we replace that with a complex determiner, the sentence is much harder to accept—perhaps even ungrammatical (given that the predicate is necessarily a collective one).

(36) (Exactly/More than) ten workers in our office are a good team.

It is important to note that no known semantic distinction can capture these two facts; it seems that the only relevant factor here is the difference between simple and complex determiners. The syntactic analysis that was presented earlier, however, does distinguish determiners which are heads, and therefore necessarily simple, from those which form their own maximal projections. It could, therefore, turn out that the semantic contrasts just illustrated are derived somehow from the underlying syntactic difference. It is easy to see, however, that this basic idea would require certain modifications or refinements to my theory as it was presented here, which are beyond the scope of the current discussion.

5.3. Nouns and quantifiers

Finally, one last aspect of my suggestions with potential semantic implications is the idea that determiners should be analyzed as nouns. In many languages, numerals have often been viewed as nouns, both by traditional grammars and by linguists. From a semantic point of view, this is very close to the analysis of numerals as modifiers, and doesn't seem to raise any real problems to standard analyses of numbers. Consider, for instance, a simple theory of plurality which interprets a plural noun like *boys* as denoting a set of sets of boys, as shown in (37):

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    (37) boys: {{John,Tom}, {Tom,Bill}, {John,Bill,Tom}...}
    (38) three: {{a,b,c}, {a,b,d}, {c,e,t}...}
    (39) most, all: ???
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Under this approach, we can easily say that the denotation of *three* is the set of all 3-element sets, and that the semantic value of *three boys* is obtained compositionally by intersecting the noun and the determiner denotations, to give the set of all 3-element sets of boys. But if we consider quantifiers like *all* and *most*, it is much less obvious how to interpret these as nouns. However, it was shown earlier in (18) that these determiners also differ from numerals in their syntactic distribution, at least in Hebrew. It might turn out that some of these facts are due to the distinction between determiners which have a noun interpretation and those which don't. If this turns out to be true, then semantic properties of determiners could be used to help figure out syntactic details, where morphology and word-order alone fail to make a clear test.

References

- Abney, Steven Paul: 1987, "The English Noun Phrase in Its Sentential Aspect," Ph.D. thesis, MIT.
- Barwise, Jon and Cooper, Robin: 1981, "Generalized Quantifiers and Natural Language," *Linguistics and Philosophy* 4.
- Borer, Hagit: 1994, "Deconstructing the Construct," Ms., Umass Amherst.
- Chomsky, Noam: 1995, *The Minimalist Program*. Cambridge, Massachusetts: The MIT Press.
- Danon, Gabi: 1996, "The Syntax of Determiners in Hebrew," MA thesis, Tel-Aviv University. Available through the Internet at the following URL: http://www.tau.ac.il/~danon/Thesis.html
- Keenan, Edward L.: 1987, "A Semantic Definition of Indefinite NP," in *The Representation of (In)definiteness*, Reuland, Eric J and ter Meulen, Alice G. B., Eds. MIT Press.
- Reinhart, Tanya: 1997, "Quantifier Scope", Linguistics and Philosophy.
- Ritter, Elizabeth: 1991, "Two Functional Categories in Noun Phrases: Evidence from Modern Hebrew," *Syntax and Semantics* 25.
- Siloni, Tal: 1994, "Noun Phrases and Nominalizations," Ph.D. thesis, Université de Genève.