Lingua xxx (2009) xxx-xxx



Contents lists available at ScienceDirect

### Lingua

journal homepage: www.elsevier.com/locate/lingua



### In support of broad subjects in Hebrew

Edit Doron a, Caroline Heycock b,\*

- <sup>a</sup> Linguistics Department, Faculty of Humanities, The Hebrew University, 91905 Jerusalem, Israel
- b Linguistics & English Language, School of Philosophy, Psychology and Language Sciences, University of Edinburgh, Edinburgh EH8 9AD, Scotland, UK

#### ARTICLE INFO

### Article history:

Received 3 December 2009 Accepted 7 December 2009 Available online xxx

Keywords:
Broad subject
Hebrew
Japanese
Left dislocation
Multiple nominative construction

#### ABSTRACT

In previous work we have argued that Hebrew and Arabic share with Japanese the property of allowing an "extra" clause-initial DP that has the properties of a subject rather than, e.g. a left-dislocated or topicalized phrase in an A-bar position: we called this type of clause-initial phrase the "Broad Subject". Landau (2009) argues that this analysis is incorrect for Hebrew, and that all the cases that we discuss are better analysed as left-dislocations. In this reply we show that

- 1. much of Landau's argumentation is based on a fundamental misreading of our work,
- of his proposed tests for subjecthood, those that are valid confirm the status of the broad subject,
- 3. the distinction between left-dislocation and broad subjects in Hebrew stands.

© 2009 Elsevier B.V. All rights reserved.

### 1. Introduction

In our previous work, some of it conducted in collaboration with Theodora Alexopoulou—Doron and Heycock, 1999 (DH), Heycock and Doron, 2003 (HD), and Alexopoulou et al., 2004 (ADH)—we have argued that Hebrew and Arabic have a construction in which an initial nominative DP has the properties associated with occupancy of Spec,TP, despite the apparent similarity to, and in some cases ambiguity with, clitic left dislocation or left dislocation (the latter sometimes also referred to as the Hanging Topic construction, although that term covers a wider range of cases). We called DPs in this construction "broad subjects," and argued that this is essentially the same phenomenon more widely discussed for Japanese under various terms (multiple subject, multiple nominative, major subject). Examples of the broad subject construction are given in (1), from ADH:334:

1. a. ruti yeš la savlanut Ruti there-is to-her patience 'Ruti has patience.'

[Hebrew]

0024-3841/\$ – see front matter © 2009 Elsevier B.V. All rights reserved. doi:10.1016/j.lingua.2009.12.002

Please cite this article in press as: Doron, E., Heycock, C., In support of broad subjects in Hebrew. Lingua (2010), doi:10.1016/j.lingua.2009.12.002

<sup>\*</sup> Corresponding author.

E-mail addresses: edit@vms.huji.ac.il (E. Doron), heycock@ling.ed.ac.uk (C. Heycock).

<sup>&</sup>lt;sup>1</sup> The original argumentation for the treatment of the initial nominal DP in this construction in Arabic as a subject rather than a dislocated element is found in Doron (1995, 1996), independently of Japanese. The parallels between the Japanese multiple nominative construction and the Arabic and Hebrew construction are first set out in DH, and the term "broad subject" introduced to cover both. In ADH we discuss broad subjects in Arabic and Hebrew, comparing this construction with other cases of phrases appearing at the left periphery, in particular topicalization, left dislocation (LD), and clitic left dislocation (CLLD). HD focuses rather on the interpretation of broad subjects in Hebrew and Japanese, in particular the relation to the categorical/thetic distinction.

2

### ARTICLE IN PRESS

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

b. mary-ga kami-ga nagai (koto) [Japanese]
Mary-nom hair-nom long (fact)

'(the fact that) Mary has long hair'

c. ?al-bayt-u ?alwaan-u-hu zaahiyat-un [Modern Standard Arabic] the-house-nom colours-nom-its bright-nom

'The house has bright colours.' d. ?il-beet ?alwaan-o faatha

[Levantine Arabic]

the-house colours-its bright
'The house has bright colours.'

Landau (2009) is devoted to arguing that while the initial phrase in Japanese clauses like (1b) is a subject-like A-position, this contrasts with the examples that we give from Hebrew; he claims that in all cases the examples that we give of the broad subject construction in Hebrew are simply instances of left dislocation (the data from Arabic he does not discuss, beyond a passing mention).

Our main impetus for writing this reply is that a major part of Landau's argument is based on a misrepresentation of our original discussion. Particularly because our work did not appear in this journal we wish to clarify what our actual claims are about this construction, and to show that much of Landau's argumentation depends entirely on a false premise: namely, the premise that we claimed that the broad subject construction can be distinguished from left dislocation because the former alone is subject to a strict condition of locality. This is the topic of section 2. In section 3 we will outline the evidence for a distinction between broad subjects and left dislocations in Hebrew, evidence which we do not believe to be adequately addressed in Landau (2009). Then, in section 4, we will turn to the arguments that Landau gives that DPs that we would categorise as broad subjects in Hebrew have no relevant properties in common with "ordinary" or "narrow" subjects. Finally, in the conclusion we address also Landau's objection that our analysis is inherently implausible as it disturbs the homogeneity of an established "typological picture" of the distribution of multiple subjects.

#### 2. Island violations with broad subjects

The first half of Landau's paper (sections 1–3) has the following structure: in the three cited papers, Doron and Heycock (and, in one paper, Alexopoulou) argue that some cases of peripheral XPs with resumption that might be taken to instantiate left dislocation in Hebrew instead have a possible analysis as a type of multiple subject construction—the broad subject construction. DH propose a constraint that however distinguishes the two: the locality constraint quoted as (2) in Landau's paper (the quotation marks below are as they appear in Landau's paper, as is the numbered heading):

#### (2) DH's locality constraint on broad subjects in Hebrew

"The position of abstraction is either that of the highest XP argument or a possessor of that argument. This suggests either A-movement or an anaphoric relation between the broad subject and the pronoun." (Heycock and Doron, 2003:8)

If it can be shown that cases of left-peripheral XPs that do not obey this locality constraint (and hence have *only* a derivation as left dislocation) have the same properties as those that do (and hence have an available derivation as Broad Subjects), then the case for the Broad Subject construction collapses. Landau shows that indeed cases that violate the constraint that he gives as (2) have the properties that D&H attribute to the Broad Subject construction.

The internal logic of this argument is coherent. However, the premise on which it is based is false: not only have we never proposed that the broad subject construction is subject to a locality constraint between the peripheral XP and the position of the clitic pronoun (Hebrew) or null pronoun/gap (Japanese) within the sentential predicate, we have quite specifically argued that it is not (in contrast, for example, to CLLD). The constraint that Landau attributes to us appears to have been constructed by selective quotation from the following passage in the text of Heycock and Doron (2003:107–108). Material omitted from Landau's quotation is given in bold face:

**In all the cases discussed above, it appears that** the position of abstraction is either that of the highest XP argument or a possessor of that argument. This suggests either A-movement or an anaphoric relation between the broad subject and the pronoun.

In this passage we do not propose a "constraint," far less one dignified with a number and set off from the running text. On the basis of this misquotation—which Landau presents as a "locality constraint" formulated by us, when we formulated no such constraint and indeed argued specifically against it in the articles which Landau is critiquing—Landau attributes to us the absurd position of analysing (2a) below as a broad subject and (2b) as left-dislocation, and then immediately goes on to show that there is nothing in their grammatical properties that distinguishes them:

Please cite this article in press as: Doron, E., Heycock, C., In support of broad subjects in Hebrew. Lingua (2010), doi:10.1016/j.lingua.2009.12.002

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

2. a. ruti yeš la savlanut Landau, 2009:(3a) Ruti there-is to-her patience

'Ruti, she has patience.'

b. ruti ani xošev še-yeš la savlanut Landau, 2009:(3c)
Ruti I think that-there-is to-her patience
'Ruti, I think she has patience.'

The article misquoted by Landau focuses on the semantics rather than the syntax of the broad subject construction, and hence there is only minimal discussion of locality. Nevertheless, even that article includes more than half a dozen examples that would be violations of the constraint that Landau attributes to us. Moreover, Landau (2009) is not a response just to this paper, but rather to all three of our papers on broad subjects. For example, Landau cites the following examples of broad subjects from ADH (they appear as (4a,b) in his article) to show that our discussion is "inadequate on [our] own terms" as the relation between the left-peripheral phrase and the clitic—the position abstracted over—is clearly nonlocal, a contradiction, he clearly implies, that we have missed:

- 3. a. af exad lo maxnisim le-kan et ha-anašim še-ovdim ito no one not (they) let in to-here ACC the-people who work with-him 'No one is such that they allow in here the people who work with him.'
  - af talmid šelo lo keday levakeš mi af more lehamlic alav no student his not advisable to-ask from no teacher to-recommend on-him
     'No student of his is such that it is advisable to ask any teacher to recommend him.'

But Landau fails to observe that the section in which (3a) appears, as (44)—section 3.4 of ADH—is entitled "Island Violations," and is entirely devoted to demonstrating that broad subjects in Hebrew (and Arabic) contrast with CLLD precisely in not respecting islands. Our presentation there still seems straightforward to us ("the BS construction, on the other hand [unlike CLLD] clearly does not respect islands" ADH:343). Example (3a) that Landau cites above as an example of our failure to notice our own inconsistency is specifically cited in this section as an island-violating case. Our first discussion of broad subjects, DH, also includes a section entitled "Islands for movement" that discusses the fact that the relation between the initial phrase and the clitic "can freely violate island constraints" and that the clitic may be the possessor of the object, rather than the subject (DH:81). Landau goes to the trouble of noting in a footnote that an anonymous referee observes that "In fact, long-distance Multiple Nominative Constructions, crossing clause boundaries, are marginally possible in Japanese" (a fact that is pointed out, with examples, in Heycock, 1993); Landau comments that this "rais[es] the question for DH of why the Hebrew MNCs are clause-bound". We find it hard to understand how he could have missed the two entire named sections in our articles—the specific articles that Landau purports to be discussing—that are devoted to the non-clause-boundedness of MNCs (=BS) in Hebrew and Arabic.

We insist on this point not only because we wish to set the record straight for readers of *Lingua* who may be familiar with our work only as represented in Landau's paper, but above all because all the argumentation in the first three sections of Landau (2009) is premised on the claim mistakenly attributed to us that an initial DP in Hebrew related to a clitic in a nonlocal position (as defined above) cannot be a broad subject but must an instance of left dislocation. Landau does indeed show—this is the argument throughout the first three sections—that there are cases where such DPs have the properties that we attribute to broad subjects. But as should now be clear, this is entirely as we would expect, rather than evidence against the position taken in DH, HD, and ADH.

### 3. Distinctions between broad subjects and left dislocations

Landau (2009) claims that "DH and ADH do not offer any alternative characterization of the distinction between MNC (our broad subject construction) and Left Dislocation" (p. 91) and that it is for that reason that he relies on the imputed locality constraint. In fact, however, we argue that there are a number of distinctions between the broad subject construction and left dislocation as it has been described in the literature, primarily in section 3 of ADH—"Broad Subjects are distinct from LD and CLLD." Landau mentions these distinctions in his paper but dismisses them all on the basis of the fact that they fail to distinguish between cases where the relation is local or long distance; as we have just shown this is irrelevant. Presumably on the basis that this is argument enough, there is very little or no discussion of the plausibility of treating as left dislocation all the cases that we discuss, in the light of the properties typically ascribed to left dislocation in the literature. We continue to contend that the evidence is against such an assimilation. While it would not be appropriate to rehearse here all the contents of our earlier papers, we discuss in the remainder of this section the central aspects of this evidence discussed in Landau's paper.

J

## ARTICLE IN PRESS

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

#### 3.1. Quantifiers

First, broad subjects in Hebrew (we concentrate on Hebrew here as Landau does not discuss our evidence from Arabic or contest our characterization of Japanese) can be downward-entailing quantifiers, including wh-operators. We provide examples where the clitic is "local" to the broad subject (4a,b), and—contra the claim that we "fail to provide" such cases—examples where the clitic is in a lower clause (4c)<sup>2</sup>:

4. a. mi yeš lo zman la-dvarim ha'ele ADH:338 who there-is to-him time to these things 'Who has time for these things?'

b. af exad eyn lo savlanut la-dvarim ha'ele ADH:339 no one NEG to-him patience to these things 'No one has patience for these things'

c. af exad lo mecapim še yegale savlanut la-dvarim ha'ele ADH:339 no one not (they) expect that (he) will show patience to these things 'No one is such that people expect that he would show patience for these things.'

We have not been able to pin down where in the literature it was originally claimed that such quantifiers are not possible in clear cases of left dislocation, but this claim does appear to be generally assumed (see for example Cardinaletti's (1997) passing remark about the failure of Italian *nessuno* (no one) to appear in left dislocation) and we are not aware of presentation of counterexamples. Certainly in English this is ruled out, whether or not accompanied by "inversion":

- 5. a. \*No one, I would expect him to be patient.
  - b. \*No one, would I expect him to be patient.

In his discussion of (4a) Landau refers to Prince's (1997) discussion of left dislocation in English.<sup>3</sup> As he notes, Prince proposes that in English there are three functions of left dislocation: simplifying discourse information by removing constituents introducing Discourse-new entities from positions favouring interpretation as Discourse-old, triggering the inference that the entity introduced by the left-dislocated phrase is in a salient partially ordered set relation to some entity or entities already evoked in the discourse model, or amnestying a "syntactically impossible Topicalization." Prince limits her discussion to English, but if we follow Landau in assuming that left dislocation in Hebrew is similar in its functions, it is predicted that the kind of quantifiers exhibited in (4) should be excluded from this construction. The argument is straightforward for the first two of Prince's functions as described above, since such quantifiers do not of course introduce discourse entities at all. The argument for the last case is only slightly more indirect: since here Prince argues that left dislocation is Topicalization + resumption we need to consider what she considers the discourse function of topicalization to be. She argues that it has a double function; here the relevant point is that the first part of this double function is again "trigger[ing] an inference on the part of the hearer that the entity represented by the initial NP stands in a salient partially-ordered set relation to some entity or entities already evoked in the discourse model" (Prince, 1997:128). Again we would therefore not expect downward-entailing quantifiers to occur in this construction. Hence left dislocation does not appear to be a plausible analysis for examples such as those in (4).

### 3.2. (Non)restriction to root contexts

A second important distinction that we made between broad subjects and left dislocation is that broad subjects can occur in a wide range of subordinate clauses, while left dislocation is essentially restricted to root clauses and those embedded clauses that are otherwise known to exhibit root phenomena. Landau disputes this characterization of left dislocation, but again the only evidence that he provides—example (8) in his paper—is based on the false premise that any case where the relation between the clitic and the initial phrase is not local must be an instance of left dislocation rather than the broad subject construction. As far as we can ascertain, the restriction of true left dislocation to root clauses is generally accepted in the literature (see e.g. Cinque, 1990:58, and the citations there of Ross, 1967:424, Emonds, 1970:19–20; Postal, 1971:136;

<sup>4</sup> Landau represents this last function simply as "amnestying island violations by resumption," but Prince is explicit that her claim is that these left dislocations are "resumptive pronoun versions **of Topicalization**" (Prince, 1997:133; our emphasis).

<sup>&</sup>lt;sup>2</sup> For a discussion of why examples like (4b,c) are also not analysable as CLLD, see ADH:339–342.

<sup>&</sup>lt;sup>3</sup> Landau invokes Prince's discussion of Left Dislocation as evidence against the statement we made in the conclusion of DH that "a left dislocated noun phrase [...] has a fixed pragmatic role of topic, whereas the Broad Subject, like any subject, may be (part of) the focus." and he states that we introduce the example given above as (4a) to support this claim (Landau, 2009:92). We agree that our characterization of the discourse function of left dislocation in the passage Landau cites is inaccurate. However, the example (4a) is not cited to support this claim (it does not even occur in the same paper); it is introduced in ADH to show that the broad subject construction, in contrast to CLLD, is orthogonal to Information Structure (ADH:338).

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

Gundel, 1975; Baltin, 1982, or more recently Alexiadou, 2006:672). Thus we continue to maintain that examples where the construction in question appears in a clearly nonroot context such as the antecedent of a conditional, such as the one cited in Landau's paper, or his own (8)—both of which he characterises as "awkward, but passable"—or the one in (6) below, cannot be analysed as instances of left dislocation:

6. im be'emet ruti yeš la savlanut, eyx ze še hi sonet tašbecim if indeed Ruti there-is to-her patience how it that she hates puzzles 'If indeed Ruti has patience, how come she hates crossword puzzles?'

ADH:335

A similar example where the conditional does not modify the speech-act but the propositional content is acceptable to the same extent:

- 7. im be'emet ruti yeš la savlanut, az hi mat'ima la-misra hazot if indeed Ruti there-is to-her patience, then she suitable to this job 'If indeed Ruti has patience, then she is suitable for this job.'
- 3.3. (Non)peripheral position

Broad subjects in Hebrew can occur in nonperipheral positions, for example following an adjunct or a wh-phrase:

- 8. be anglit kol mišpat yeš lo nose ADH:336 in English each sentence there-is to-it subject 'In English each sentence has a subject.'
- 9. a. le-eyze dvarim af exad eyn lo savlanut to-which things no one NEG to-him patience 'For which things does no one have patience?'

ADH:349

 \*af exad le-eyze dvarim eyn lo savlanut no one to-which things NEG to-him patience
 Intended: 'For which things does no one have patience?'

On the other hand, as Landau points out, left-dislocated phrases precede wh-phrases:

10. ha-baxur ha-ze le'an amru lo lalexet the-guy the-this where said.3P to-him to-go 'This guy, where did they tell him to go?'

Landau, 2009:97

Landau contrasts (10) with the ungrammatical (11):

11. \* le'an ha-baxur ha-ze amru lo lalexet where the-guy the-this said.3P to-him to-go 'This guy, where did they tell him to go?'

Landau, 2009:97

He remarks that (11) ought to have a grammatical derivation as a broad subject construction. But this is to leave out of consideration other factors that affect the acceptability of such sentences. What seems to make (11) so unacceptable is that a highly topical element (the definite description) is placed after a focal element (the wh-expression). If a less topical BS is chosen, the contrast is reduced. The contrast between (12a,b) is much less sharp than that between (10) and (11)—although (12b) is still degraded for reasons we will discuss below, concerning the interaction between resumptive pronoun and gap binding.

- 12. a baxur kaze le'an mat'im lo lalexet guy such where likely to-him to-go 'Such a guy, where is it likely for him to go?'
  - b ? le'an baxur kaze mat'im lo lalexet where guy such fit to-him to-go 'Where is such a guy likely to go?'

Please cite this article in press as: Doron, E., Heycock, C., In support of broad subjects in Hebrew. Lingua (2010), doi:10.1016/j.lingua.2009.12.002

### **ARTICLE IN PRESS**

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

The grammaticality of examples like (9a) is again unexpected if they can only be analysed as left-dislocation. Similarly, if downward entailing quantifiers like *af exad* (no one) can appear in left-dislocations, as Landau has to maintain, the contrast between (9b) and (10) is mysterious. On our analysis this contrast arises precisely because (10), but not (9b), can be analysed as left dislocation.

#### 3.4 Coordination

In ADH we give examples from Hebrew of coordinations where a single initial noun phrase may be "shared" between two conjuncts, in one of which it functions as the broad subject, and in the other as an ordinary subject (examples from Arabic are given in DH and ADH). Landau rejects the Hebrew examples as "dubious" (91).<sup>5</sup> While the examples given are indeed somewhat awkward; the following example is fully acceptable:

13. af mitmoded eyn lo be'ayot mula no contestant (there is) NEG to-him problems facing-her ve lo mehases litqof ota and not hesitates to-attack her 'No contestant has problems in facing her or hesitates to attack her'

Note that the second conjunct cannot be analyzed as a full sentence with a null subject, as pro-drop is not licensed in the present tense in Hebrew. Further, even if the first conjunct were taken to be a case of left dislocation (that is, setting aside what we have argued above about the absence of downward entailing quantifiers from left dislocation), this would still leave the grammaticality of this example as a puzzle, since there is no corresponding pronoun in the second conjunct. Compare for example the English case in (14):

14. That guy, I just gave him a glance and \*(he) immediately attacked me!

#### 3.5. Subject clefts

Broad subjects can occur in a particular type of cleft construction in Hebrew that is restricted to subjects (DH:77). Rather than constructing an example, in this case we cite an attested example from a novel, providing the details of the source. Landau's only argument here (apart from the recurrent reliance on the false dichotomy between "local" broad subjects and "long distance" left dislocation) is that the example is "highly literary." This is certainly true, but we do not see why it is particularly relevant; importantly, it is the cleft construction that is literary, quite independently of the status of the broad subject.

### 4. Subject properties of broad subjects in Hebrew

Landau provides what appears to be a quite impressive battery of tests for subjecthood in Hebrew, all of which the broad subject construction fails. However, these tests need to be looked at carefully. Some do not at all test for the A-position nature of the BS. Others are crucially restricted by conditions which are not discussed. When all these problems are dealt with, there remain two valid tests (constituent negation and control). Landau does not however consider interfering factors when applying these tests; we show that when these are controlled for the broad subject construction behaves as we predict.

But before discussing subject properties of Hebrew broad subjects, we would like to re-emphasize our claim that broad subjects are different from narrow subjects in that they are not arguments of the verb. Narrow subjects are re-merged as specifiers of TP from their original thematic position. As such, they are arguments of the verb, in particular they are coarguments with the other arguments of the verb. Broad subjects, on the other hand, are directly merged as specifiers of TP and are licensed by predication, as subjects of a sentential predicate, rather than as arguments of the verb.

The difference in the origin of BS and NS subjects is shown by the fact that BS, like LD, and unlike NS, does not interact quantificationally with arguments of the clause. The following examples—(29a,b) in HD—are a minimal pair with the bare plural *hacagot tovot* 'good plays' an NS in (15a) and a BS in (15b). As an NS it can be read as a generic, with wide scope over the adverbial, or as an existential with narrow scope; as a BS only the former reading is available.

- 15. a hacagot tovot 'olot midey pa'am
  plays good raise 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 they-raise ACC-them every-now-and-then
    'Good plays are performed every now and then.' *Unambiguous*

<sup>&</sup>lt;sup>5</sup> Landau's further discussion of coordination concerning his example (6) is again irrelevant as it is based on the false premise of locality for broad subjects.

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

The fact that NS originates as an argument of the verb, whereas BS is essentially a peripheral element, results in differences in the properties of narrow and broad subjects, but this does not justify any conclusions as to the nature of the broad subject *position*, in particular whether it is A or A-bar. There can be peripheral A positions, i.e. A positions without a trace in argument position, but rather an ec locally bound by a clitic. We have shown in our work that for those tests that test the nature of the position, the broad subject, like the narrow subject, can be shown to occupy an A-position. In this, they both differ from phrases in A-bar positions, such as left-dislocated elements. On the other hand, for tests which test for *arguments* of the verb the broad subject differs from the narrow subject.

As mentioned above, Landau proposes a whole battery of what he calls "subjecthood tests", but does not really tease apart what these tests test for. In particular, he does not check whether they test for properties of the subject argument, or for properties of the subject position. When inspected carefully, it turns out that some of his "subjecthood" tests are tests for the subject argument, and others are tests for its structural position. Not surprisingly, the broad subject fails the subject-as-argument tests, which narrow subjects pass. Landau takes this as evidence that the broad subject occupies an A-bar position. But this conclusion in no way follows. From the fact that both broad subjects and left dislocated elements do not have the thematic properties of narrow subjects one should not conclude that broad subjects are left dislocated elements. In other words, from  $a \neq c$  and  $b \neq c$ , it does not follow that a = b.

One such issue is the binding of anaphors. In Hebrew, reflexive and reciprocal anaphors are SELF anaphors in the terminology of Reinhart and Reuland, and thus only appear in reflexive predicates, i.e. they must be bound by a coargument. This results in anaphors being bound **within** the sentential predicate in which they appear. As the BS is not a coargument, it cannot bind the anaphor, regardless of locality. In Landau's example (15b) repeated below as (16a), the anaphor must be bound by an argument within the sentential predicate, but the possessor clitic *-o* (his) does not c-command the anaphor:

As Landau notes, the Japanese anaphor *zibun-zisin*, in contrast, allows binding by the Broad Subject. However, although *zibun-zisin* is a local non-logophoric anaphor, it is not a SELF anaphor, and in particular it does not need to be bound by a coargument. For example, when *zibun-zisin* is in the subject position of a tensed clause, its antecedent can be in a different clause, as illustrated in (16b) below, adapted from Katada (1991):

```
16. b John_i-ga Bill_j-ni [zibun-zisin_{i/*j}-ga katta to] itta. 
 John-nom Bill-dat self-nom won comp told John_i told Bill_j that self_{i/*j} won.
```

Thus the distinction in the binding possibilities for anaphors within the Broad Subject construction in Hebrew and Japanese can plausibly be derived from differences in the nature of the anaphors in the two languages, without needing to posit in addition a difference in the A/A-bar status of the Broad Subject position.

Conversely, pronouns are generally not allowed in the domain of the BS in Japanese, but they are in Hebrew, which is expected if pronouns are not allowed where anaphors are. This might account for the contrast between the Hebrew and Japanese examples in (17)—recall that in Japanese pronouns are generally null—although the situation in Japanese is not straightforward (for discussion see Heycock, 1993:181–182 fn. 12):

- 17. a af saxqan qolno'a lo mera'aynim oto bli ipur [Hebrew]
  no actor cinema not interview-3P him without makeup
  'No film actor is interviewed without makeup.' (literally: No film actor do they interview (him)
  without makeup.)
  - b. \* Yamada sensei<sub>i</sub>-ga gakusei-ga *pro<sub>i</sub>* hihan suru [Japanese]
    Yamada teacher-Nom students-Nom criticize
    Intended: 'Professor Yamada [is such that] the students criticise him'

We now discuss the problems created by Landau's ignoring the restrictions under which his tests are applicable. This is particularly evident in the test of Triggered Inversion. Triggered Inversion is the name given by Shlonsky (1987) to an operation whereby the verb, which typically follows the subject in Hebrew clauses, can nevertheless be raised to a position

<sup>6</sup> Clearly, adjustments are made by Reinhart and Reuland for reconstructed predicates created by raising, this would apply to Hebrew similarly as to English.

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

preceding it. One restriction, mentioned by Landau, is that the verb can be raised to the left of its subject on the condition that some other constituent—the Trigger—precedes it (Shlonsky and Doron, 1991). An example is given in (18), where the verb *ma'avir* 'pass on' moves to the left of the subject *ha-yevu'an* 'the dealer', a movement licensed by the occurrence of the *wh*-phrase *le-mi* 'to whom' in preverbal position:

18. le-mi ma'avir ha-yevu'an mexoniyot yapaniyot me-ha-yacran to whom pass-on the-dealer cars Japanese from-the-manufacturer be-hazmanat ha-xevra by order the company

'To whom does the dealer pass on Japanese cars from the manufacturer by order of the company?'

However, there are further restrictions on the application of Triggered Inversion that are not mentioned in Landau's article. Triggered Inversion moves the verb immediately in front of the subject, and cannot apply if any other phrase (larger than a clitic) would interrupt between the verb and the NS, quite irrespective of the nature of the interruptor. Thus (19a)—where an adjunct intervenes between the moved verb and the NS—and (19b)—where an argument intervenes—are both ungrammatical. The intervenor is shown in bold face.

19. a. \*le-mi ma'avir **be-hazmanat ha-xevra** ha-yevu'an
to whom pass-on by order the company the dealer
mexoniyot yapaniyot me-ha-yacran
cars Japanese from-the-manufacturer
'To whom does the dealer pass on Japanese cars from the manufacturer by order of the company?'

b. \*le-mi ma'avir **mexoniyot yapaniyot** ha-yevu'an me-ha-yacran to whom pass-on cars Japanese the dealer from-the-manufacturer be-hazmanat ha-xevra by order the company

'To whom does the dealer pass on Japanese cars from the manufacturer by order of the company?'

In this respect Hebrew behaves not unlike English, where it is also the case that elements that can normally immediately precede the subject nevertheless cannot precede it when there is "inversion":

- 20. a. I wonder whether sometimes they might not be showing off.
  - b. \*Might **sometimes** they be showing off?

Landau only shows that one cannot apply Triggered Inversion to the BS. But this is to be expected: the BS acts as an intervenor between the verb and the NS just like the elements in (19a,b), thus disallowing Triggered Inversion, as expected. To illustrate, an example of a BS is shown in (21a); (21b) shows the corresponding ungrammatical case of Triggered Inversion.

21. a raq mexoniyot yapaniyot<sub>1</sub> ha-yevu'an ma'avir lanu xalafim only cars Japanese the dealer pass-on to-us spare-parts me-ha-yacran šelahen<sub>1</sub> from-the-manufacturer theirs 'The dealer only passes on to us spare parts from the manufacturer of Japanese cars.'

The dealer only passes on to us spare parts from the manufacturer of Japanese cars.'

b \*le-mi ma'avir raq mexoniyot yapaniyot<sub>1</sub> ha-yevu'an xalafim

to whom pass-on only cars Japanese the dealer spare-parts me-ha-yacran šelahen<sub>1</sub> from-the-manufacturer theirs

'To whom does the dealer pass on spare parts only from the manufacturer of Japanese cars?'

Another factor that crucially interacts with Landau's subject tests is that the BS construction must be tensed in Hebrew—it cannot be infinitival. This is not a stipulation, but follows because a sentential predicate in Hebrew (i.e. the clause predicated of the BS) must be able to case-license the narrow subject. Since raising verbs only select untensed complements they will

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

not take complements with sentential predicates, i.e. they will not take broad subject complements. As a result, BS does not undergo raising. Again, this does not entail that the BS is not a subject.<sup>7</sup>

We can first see the contrast in predicate nominal clauses. As argued in Doron (2003), predicate nominal sentences with a pronominal copula (called "pron"), as in (22b), have a broad subject, unlike the ones with NS, as in (22a). Only the ones with a narrow subject can be embedded under a perception verb:

- 22. a. dani roš-memšala

  Dani prime-minister

  'Dani is prime minister.'
  - b. dani hu roš-memšala Dani pron prime-minister 'Dani is prime minister.'
- 23. a. matay nizke lir'ot et dani roš-memSala when will-achieve.1P to-see ACC Dani prime-minister 'When will we get to see Dani prime-minister?'
  - b. \*matay nizke lir'ot et dani hu roš-memSala when will-achieve.1P to-see ACC Dani pron prime-minister 'When will we get to see Dani prime-minister?'

The same pattern is found with other cases of NS vs BS:

- 24. a. matay nizke lir'ot et dani mesoraq when will-achieve.1P to-see ACC Dani combed 'When will we get to see Dani combed?'
  - b. \*matay nizke lir'ot et dani se'aro mesoraq when will-achieve.1P to-see ACC Dani hair-his combed 'When will we manage to see Dani with his hair combed?'

This constraint is a general property of the language, not a necessary property of the BS construction. Thus in Arabic, a clause with a BS can be selected by raising verbs, both raising to subject (25) and object (26). This is presumably because NOM case is default in Arabic and can be assigned even in non-tensed clauses. Nominative case in Japanese has also been argued to be available in the absence of Tense (see for example Saito, 1982; Fukui, 1986; Heycock, 1993). For a number of reasons it is difficult to diagnose raising to subject in Japanese, but we showed in our earlier papers that raising to object is available for BS in Japanese also.

25. Raising to Subject:

[Modern Standard Arabic]

- a. ka:na l-bayt-u ?alwa:n-u-hu za:hiyat-un was the house-nom colors-nom-its bright-nom 'The house was of bright colors.' (ADH (9))
- b. <u>d</u>unna l-bayt-u ?alwa:n-u-hu za:hiyat-un was-thought the house-NOM colors-NOM-its bright-NOM 'The house was believed to be of bright colors.' (Doron, 1996 (6b))
- 26. Raising to Object:

[Modern Standard Arabic]

danantu l-bayt-a ?alwa:n-u-hu za:hiyat-un thought-I the house-ACC colors-NOM-its bright-NOM 'I believed the house to be of bright colors.' (ADH:(6a))

Landau gives examples where under our proposal the embedded NS would be predicted to be grammatical, as there is independent evidence that "long distance" Case assignment is available, and such examples are indeed grammatical, despite Landau's claim to the contrary in his (24b). Thus there is no difference in grammaticality between (i) and (ii):
 (i) lo vaxol lehitparsem kan ha-šir ha-rišon šel af axat

<sup>(</sup>i) lo yaxol lehitparsem kan ha-šir ha-rišon šel af axat not can.M to-be-published here the first poem.M of no-one.F 'Noone's first poem can be published here.'

<sup>(</sup>ii) af axat lo yaxol lehitparsem kan ha-šir ha-rišon šela no-one.F not can.M to-be-published here the first poem.M of-her 'Noone can have her first poem published here.'

### **ARTICLE IN PRESS**

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

In sum: the availability of raising is not a function of the position of the BS but of the fact that it cannot participate in a clause without a finite tense in T if there is no other source of Case.

A third independent restriction is related to a difference between BS and NS, which nevertheless does not preclude both being subjects: NS always agrees with verbal inflection, whereas BS always agrees with pronominal clitics. This is a serious asymmetry, and it causes the "intervention effects" that Landau refers to: the presence of a BS blocks wh-movement out of its clause. Landau is quite correct that we did not explain this effect in ADH. In fact we are still not sure what is the ultimate explanation for this restriction; however whatever it will turn out to be, the restriction is not specific to the BS construction; it surfaces in Hebrew whenever an A-bar dependency terminating in a gap has to cross a dependency terminating in a resumptive pronoun. Thus for example the relative in (27a) is acceptable with or without a resumptive pronoun. As (27b) shows, however, extraction out of the relative is grammatical when the relative does not contain a resumptive, but blocked when it does

- 27. a. eyn lax tšuva še- efšar latet (ota) l-a-anašim ha-'ele

  NEG to-you answer that possible to-give (it) to these people

  'You don't have an answer that you can give to these people'
  - b. le eyze anašim eyn lax tšuva še- efšar latet (\*ota) to which people NEG to-you answer that possible to-give (\*it) 'To which people don't you have an answer that you can give?'

The blocking reflects a constraint against binding a resumptive pronoun in a domain which contains an unbound gap. Clearly it would be desirable to have an explanation for this effect; however since it is not specific to the BS construction—as shown by (27)—there is no reason at this point to assume that it is due to the BS being in an A-bar position.

As we have now seen, many of Landau's proposed subject tests cannot be used as diagnostics because they interact with restricting factors that are not discussed in his article. Two tests however remain. The first is the possibility of applying constituent negation to the subject. Landau (2009) cites two ungrammatical examples of constituent negation of a BS and concludes that the ungrammaticality is due to the BS actually being a left-dislocated phrase in an A-bar position. The unavailability of constituent negation for broad subjects would indeed be surprising under our analysis, but the reason Landau's examples in his (35) are ungrammatical is simply that Landau stressed the negative particle *lo* instead of the negated constituent itself. But it is the latter which should be stressed, because it is this constituent which is the focus of the construction, not the negative particle. In examples where stress is assigned correctly, the result is grammatical. Thus, in a context where (28a) was asserted, it is perfectly possible to respond as in (28b), a BS construction:

- 28. a. dani eyn lo sikuyim

  Dani NEG to-him chances

  'Dani doesn't have a chance.'
  - b. lo DANI eyn lo sikuyim, RUTI
    not Dani NEG to-him chances Ruti
    'It's not Dani who doesn't have a chance, it's Ruti.'

The final diagnostic is control (whether of or by the broad subject). Contrary to Landau's assertions, it is possible to construct examples in Hebrew where control by the BS is possible:

29. ruti<sub>1</sub> ha-nisu'im šela<sub>1</sub> nixšelu mibli PRO<sub>1</sub> la-tet le-acma<sub>1</sub> din-ve-xešbon
Ruti the-marriage hers failed without to-give to-herself account
'Ruti failed in her marriage without giving herself an account.' (Literally: Ruti, her marriage has failed without giving herself an account.)

Note that it is not the resumptive pronoun in possessor position which acts as the controller in (29), since it does not c-command the adjunct clause. (30) shows that a DP in that position cannot act as a controller:

30. \*ha-nisu'im šel-ruti<sub>1</sub> nixšelu mibli PRO<sub>1</sub> la-tet le-acma<sub>1</sub> din-ve-xešbon the marriage of-Ruti failed without to-give to-herself account 'Ruti's marriage failed without giving herself an account.'

<sup>&</sup>lt;sup>8</sup> As we have noted explicitly in our previous work, one significant difference between BS in Hebrew and Arabic on the one hand and Japanese on the other is that in the latter any resumptive element is typically null, and there are cases where it appears that the BS is not binding any—even null—pronoun.

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

Similarly, control of BS is possible as well. Landau's examples are ungrammatical because he only considers control into infinitival clauses, which do not allow BS for independent reasons to do with cases assignment, as discussed above. For example, the cases he gives in his (20) fail because you cannot get a NS, including an impersonal NS subject, in an infinitival clause; impersonal pro in Hebrew, unlike PRO, is only licensed in a tensed clause, and PRO itself does not have an impersonal interpretation.

However, control is possible in Hebrew in tensed (subjunctive) clauses (Landau (2004)); (31) is an example.

31. cipiti mi gil<sub>1</sub> še  $PRO_{1/^*2}$  yiftor et ha-ba'ayot šelo expected.1S from Gil that will-solve ACC the-problems his 'I expected Gil to solve his problems.'

The following is a subjunctive example with a controlled broad subject. There are no interpretive differences between the embedded subject here and that in (31), both are obligatorily controlled:

32. cipiti mi  $gil_1$  še  $PRO_{1/^*2}$  yihye  $lo_{1/^*2}$  omec expected. 1S from Gil that will-be-3MS to-him courage 'I expected Gil to have courage.'

PRO can act as a broad subject and a narrow subject simultaneously under coordination, as in the following example:

33. cipiti mi gil<sub>1</sub> še PRO<sub>1/\*2</sub> yihye lo omec ve yiftor expected.1S from Gil that will-be-3MS to-him courage and will-solve et ha-ba'ayot šelo

ACC the-problems his

'I expected Gil to be courageous and solve his problems.'

As Landau (2004) shows, controlled subjunctives, like infinitives, allow NPIs in the embedded clause. We reproduce his example (10b) as (34):

34. lo darašti mi gil<sub>1</sub> še PRO<sub>1</sub> yedaber im-af-exad not required.1S from Gil that will-speak-3MS with-anybody 'I didn't require from Gil that he speak with anybody.'

These long-distance NPIs are not licensed in examples which have anaphora rather than control:

35. \*lo darašti mi gil $_1$  še  $hu_{1/2}$  yedaber im-af-exad not required.1S from Gil that he will-speak-3MS with-anybody 'I didn't require from Gil that he speak with anybody.'

Observe now that they are licensed in examples such as (36) below, demonstrating that these indeed involve control of the BS rather than an anaphoric relation directly between *Gil* and *lo*:

36. lo darašti mi gil<sub>1</sub> še PRO<sub>1</sub> tihye lo<sub>1</sub> savlanut le-af-exad not required.1S from Gil that will-be-3MS to-him patience.F to anybody 'I didn't require from Gil to be patient with anybody.'

Without control such long distance licensing of NPIs is impossible; thus (37) is ungrammatical just as (35) is:

37. \*lo darašti mi gil $_1$  še dani $_2$  tihye lo $_2$  savlanut le-af-exad not required.1S from Gil that will-be-3MS to-him patience.F to anybody 'I didn't require from Gil that Dani be patient with anybody.'

We can now see minimal pairs where BS controls a NS, as in (38a), or a BS, as in the attested (38b). There is no contrast in grammaticality:

38. a. kol bayit<sub>1</sub> keday/racuy še PRO<sub>1</sub> yibane al yesodot tovim any house advisable/preferable that will-be-built on foundations good 'Any house should be built on good foundations.'

## ARTICLE IN PRESS

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

b. kol bayit<sub>1</sub> keday/racuy še PRO<sub>1</sub> tihye lo<sub>1</sub> mirpeset any house.M advisable/preferable that will-be.F to-it balcony.F 'Any house should have a balcony.'

In Arabic also, as we showed in our previous work, there is control of PRO acting as a BS:

39. qa:la muħammad<sub>i</sub>-un ?inna zayd<sub>j</sub>-an qad tajarra?a [Modern Standard Arabic] said Mohammad-nom that Zayd-Acc had dared ?an PRO<sub>j/\*i</sub> yuqa:bila-hu<sub>j/\*i</sub> l-muʕallim-u C<sub>SUBJUNCTIVE</sub> meet.subjunctive-him the teacher-nom 'Mohammad said that Zaid had dared to be met by the teacher.' (DH:(19))

PRO is indeed controlled here, since its controller must be local: Zayd and not Mohammad. If the relation was one of pronominal coreference directly with the clitic *him*, we would expect any antecedent to be available, or even deixis.

### 5. Conclusion, with a final remark on typological arguments

Finally, we would like to address the comment that Landau closes his paper with, namely that the conclusion that Hebrew patterns with Japanese in allowing broad subjects would be extremely puzzling from a "typological perspective" because Kuroda (1988) and Fukui (1995) have argued that the existence of these multiple subjects in Japanese "is not an isolated property of Japanese; rather, it clusters together with scrambling, possessor stacking and lack of overt *wh*-movement." (Landau, 2009:101) While we concur that there are indeed differences between what we have called broad subjects in Hebrew (and Arabic) and in Japanese, and have indeed mentioned these in our previous work (see for example footnote 8), we do not think that there is a genuine typological argument against the possibility that these languages might share this particular property.

Neither Kuroda nor Fukui actually provide any typological evidence, as normally understood, that the properties Landau mentions "cluster together." To do that it would be necessary to consider a range of languages and to show that there is an at least greater than chance "clustering" of the relevant properties across the sample. Kuroda and Fukui do not take this approach, but consider only English and Japanese. There are of course all sorts of syntactic and morphological properties that English has that Japanese lacks, and vice versa, but one would not want to claim on this basis that e.g. VO order, overt expletives, and the lack of a system of honorifics "cluster together." Kuroda's and Fukui's argument that the existence in Japanese of multiple subjects, scrambling, possessor stacking, and lack of overt wh-movement is no accident, but derives from a single parametric difference—the absence of agreement in Japanese—is made rather on the (typical theoretical) basis of elegance and parsimony. While some of their arguments may indeed be correct, it should be observed that there are very well-known departures from "the homogeneity of this typological picture" that Landau claims to have restored with his rejection of our analysis of Hebrew. To cite just a few examples: apart from Japanese, probably the most-discussed case of a language robustly exhibiting scrambling is German, which does not exhibit any of the other putatively related properties (and exhibits considerably more agreement than English). Conversely, the modern Mainland Scandinavian languages have lost all agreement in the finite verb system but fail to exhibit scrambling, or any of the other properties attributed to the absence of agreement. Chinese shares with Japanese the lack of overt wh-movement but does not allow Japanese-type scrambling, and so on. Whether or not we turn out to be correct that the broad subject construction in Hebrew (and the typologically and genetically related Arabic) has at the least features in common with the multiple subject construction of Japanese, we do not accept that considerations of typology rule out this possibility. On the other hand, Landau's proposal that all the examples that we discuss in Hebrew are instances of left dislocation is puzzling in its own way, as it leads to a very nonhomogeneous characterization of left dislocation, with Hebrew now an outlier with respect to all the criteria discussed in our earlier work and summarised in section 3. Of course, perhaps one could argue for a special type of left dislocation in Hebrew—but in order for such an argument to be contentful it would need to be shown that this was not just a relabelling of what we have called Broad Subjects.

#### References

Alexiadou, A., 2006. Left dislocation. In: van Riemsdijk, H., Everaert, M. (Eds.), The Blackwell Companion to Syntax, vol. II.Blackwell, Oxford, pp. 668–699

Alexopoulou, T., Doron, E., Heycock, C., 2004. Broad subjects and clitic left dislocation. In: Adger, D., De Cat, C., Tsoulas, G. (Eds.), Peripheries: Syntactic Edges and Their Effects, Studies in Natural Language and Linguistic Theory, vol. 59.Kluwer, Dordrecht, pp. 329–358 (chapter 14). Baltin, M., 1982. A landing site theory of movement rules. Linguistic Inquiry 13, 1–38.

Cardinaletti, A., 1997. Subjects and clause structure. In: Haegeman, L. (Ed.), The New Comparative Syntax. Longman.

Cinque, G., 1990. Types of A'-Dependencies. Linguistic Inquiry Monographs, vol. 17. MIT Press, Cambridge, MA.

Please cite this article in press as: Doron, E., Heycock, C., In support of broad subjects in Hebrew. Lingua (2010), doi:10.1016/j.lingua.2009.12.002

<sup>&</sup>lt;sup>9</sup> On the other hand German is, like Japanese, an OV language; it is quite possible that this property is related to the existence in both languages of scrambling.

E. Doron, C. Heycock/Lingua xxx (2009) xxx-xxx

Doron, E., 1995. Predication by resumptive pronouns in Arabic. In: Mittwoch, A., Hovav, M. (Eds.), IATL 2: Proceedings of the Tenth Annual Conference of the Israel Association for Theoretical Linguistics. pp. 1-21.

Doron, E., 1996. The predicate in Arabic. In: Lecarme, J., Lowenstamm, J., Shlonsky, U. (Eds.), Studies in Afroasiatic Grammar. Holland Academic Graphics, The Hague, pp. 77-87.

Doron, E., 2003. Bare singular reference to kinds. In: Proceedings of Semantics and Linguistic Theory XIII. pp. 73-90.

Doron, E., Heycock, C., 1999. Filling and licensing multiple specifiers. In: Adger, D., Pintzuk, S., Plunkett, B., Tsoulas, G. (Eds.), Specifiers: Minimalist Approaches. Oxford University Press, Oxford, pp. 69-89.

Emonds, J., 1970. Root and structure-preserving transformations. Doctoral dissertation, MIT.

Fukui, N., 1986. A theory of category projection and its applications. Doctoral dissertation, MIT.

Fukui, N., 1995. Theory of Projection in Syntax. Korosi/CSLI Publications, Tokyo/Stanford.

Gundel, J., 1975. Left dislocation and the role of topic-comment structure in linguistic theory. In: Working Papers in Linguistics, vol. 18, Ohio State University.

Heycock, C., 1993. Syntactic predication in Japanese. Journal of East Asian Linguistics 2, 167–211. Heycock, C., Doron, E., 2003. Categorical subjects. Gengo Kenkyu 123, 95–135.

Katada, F., 1991. The LF representation of anaphors. Linguistic Inquiry 22 (2), 287-313.

Kuroda, S.-Y., 1988. Whether we agree or not: a comparative syntax of English and Japanese. Linguisticae Investigationes 12, 1-47.

Landau, I., 2004. The scale of finiteness and the calculus of control. Natural Language and Linguistic Theory 22, 811-877.

Landau, I., 2009. Against broad subjects in Hebrew. Lingua 119, 89-101.

Postal, P., 1971. Crossover Phenomena. Holt, Rinehart and Winston, New York.

Prince, E., 1997. On the functions of left-dislocation in English discourse. In: Kamio, A. (Ed.), Directions in Functional Linguistics. Benjamins, Amsterdam/ Philadelphia, pp. 281-337.

Ross, J., 1967. Constraints on variables in syntax. Doctoral dissertation, MIT.

Saito, M. 1982. Case marking in Japanese: a preliminary study. Ms., MIT.

Shlonsky, U., 1987. Null and displaced subjects. Doctoral dissertation, MIT.

Shlonsky, U., Doron, E., 1991. Verb Second in Hebrew. In: Bates, D. (Ed.), Proceedings of the Tenth West Coast Conference on Formal Linguistics. pp. 431–445.