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## The Predicate in Arabic

Édit Doron

## 1 Introduction

Traditional Arabic grammars analyse all topic-comment sentences as a unified category, the category of "nominal sentences", regardless of whether the topic is the subject (as in (1a)), the object (as in (1b)), or even does not have a grammatical function in the clause following it, but in one of its constituents (as in (1c)):

- (1) a. *ṭaf-ṭulla:b -u yuqa:bi:l-u:na hi:nd-an*  
the students-NOM meet-3MP Hind-ACC  
'The students are meeting Hind.'  
literally: 'The students, they are meeting Hind.'
- b. *hi:nd-un yuqa:bi:l-u:ha ṭ-ṭulla:b -u*  
Hind-NOM meet-3M-her the students-NOM  
'The students are meeting Hind.'  
literally: 'Hind, the students are meeting her.'
- c. *ṭaf-bayt -u ṭalwa:n-u -hu za:hiyat-un*  
the house-NOM colours-NOM of it bright -NOM  
'The house is of bright colours.'  
literally: 'The house, its colours are bright.'

This paper investigates the nature of the relation between the topic (traditionally called *mubtada* 'what you begin with') and the comment (called *xabar* 'what is announced'). Is this nexus intra or extra sentential? Is the *mubtada* a subject or a dislocated topic? In other words, the question is whether the position of the *mubtada* is an argument position (A-position) internal to the clause, or is it a dislocated position external to the clause (an A-bar position).

The *mubtada* of sentences (1b-c) does not correspond to the thematic subject of the *xabar*. Therefore, it may seem at first sight that the *mubtada* in these examples

work of Williams on predication (1980, 1994, and many articles in between). The *xabar* in the nominal clause is a predicate in Williams' sense, the sentence dislocated from its topic is not.

## 2 The predicative nature of the *xabar*

The first argument against the left dislocation analysis of the nominal sentence has to do with the conjunction of predicates. The sentence following a left dislocated topic cannot be conjoined with a simple predicate, but a sentential *xabar* can, as seen in (3):

- (3) a. \* My car, its colours are bright and is a convertible  
 b. *sayya:rat-i ʔalwa:n-u -ha za:hiyat-un wa- mafu:bat-un min*  
 car -my colours-NOM of-it bright-NOM and open-NOM from  
*al-aʕla*  
 above  
 'My car is of bright colours and a convertible.'

In (3a), as is to be expected, the sentence *its colours are bright*, which is not a predicate, cannot be conjoined with something which is a predicate: *is a convertible*. But in Arabic, the clausal *xabar ʔalwa:n-u -ha za:hiyat-un* is a predicate, and as such can be conjoined with another predicate: *mafu:bat-un min al-aʕla* (the latter, being a predicate nominal, is undoubtedly a predicate and not a sentence with a null subject, since predicate nominals do not license *pro*-drop).

The second argument in favour of viewing the *mubtada* - *xabar* nexus in the nominal sentence as clause-internal, is that it can be brought under the scope of tense and aspect operators. In English, it is impossible to modify the tense or aspect of a dislocated sentence independently of that of the simple sentence, as shown in (4b). But in Arabic this is possible, as in (4c). The Arabic examples therefore do not involve left dislocation.

- (4) a. The house, its colours have been bright  
 b. \* The house has its colours been bright  
 c. *ka:na l-bayt -u ʔalwa:n-u -hu za:hiyat-un*  
 was-3M the house-NOM colours-NOM of-it bright-NOM  
 'The house was of bright colours.'

The third argument has to do with the fact that dislocated sentences, unlike subject-predicate sentences, cannot be embedded under ECM verbs or undergo raising

- (5) a. The house, I believe its colours to be bright  
 b. \* I believe the house its colours to be bright  
 c. The house, its colours are believed to be bright  
 d. \* The house is believed its colours to be bright

whereas nominal sentences can, as in (6), which indicates they are not left-dislocations.

could not possibly be a subject, but should be analysed as a dislocated topic. Even for (1a), it might be tempting to argue that the *mubtada* is not the subject but a topic, since subjects in Arabic typically follow the verb (in the so called 'verbal sentences', e.g. *yūqa:biḥu t-ḥulla:b-u hind-an* 'The students are meeting Hind').

Nevertheless, for all nominal sentences, for (1b-c) as well as for (1a), I will demonstrate that the clausal *xabar* is a predicate which is predicated of the *mubtada*. In other words, the nominal sentences in (1) are simple subject-predicate sentences, not left-dislocations. I will show in particular that the structure of the nominal sentences in (1) is different from the left-dislocation structure characteristic of the corresponding English sentences in (2):

- (2) a. The students, they are meeting Hind  
 b. Hind, the students are meeting her  
 c. The house, its colours are bright

My analysis conforms with traditional Arabic grammar, which views the *mubtada* as the subject (*musnad ʔilayhi*) and the *xabar*, including the sentential *xabar*, as a predicate (*musnad*). Contemporary linguists, on the other hand, usually treat (1) and (2) on a par, certainly for (1b-c). Opinions vary about (1a). The *mubtada* in (1a) is often assumed to be the thematic subject (for example by Benmamoun 1992; Mohamad 1989, 1990; Ouhalla 1991, 1994). But even (1a) is sometimes considered a left dislocation, for example by Demirdache (1989), Kamel (1991) and to some extent by Fassi (1993).

It should be emphasized that I view the difference between (1) and (2) as syntactic. Yet, it is not a difference in constituency. Both the *xabar* and the sentence dislocated from its topic constitute a full clause. Both the *mubtada* and the dislocated topic are topics in that they combine with full clauses. The difference is in the nature of the topic-clause nexus in the two cases. In the case of left-dislocation, I believe that it is an extra-sentential, discourse nexus. In the case of nominal sentences, it is a sentence-internal, syntactic nexus. I believe that this distinction is necessary to account for the fact that a left-dislocated topic has a fixed discourse function, but a *mubtada* does not. A left-dislocated topic is always 'given' in the sense of discourse information structure. It never functions as focus, as is evidenced by its never carrying focal intonation. The *mubtada*, on the other hand, and a subject in general, may be either 'given' or 'new' - it may function as focus and carry focal intonation.

Semantically, both a *xabar* and a sentence dislocated from its topic denote a property. But the application of this property to the topic is carried out by different mechanisms in the two cases: by the syntax for nominal sentences, and by discourse for left-dislocation. One way of formulating this difference is in thematic terms. The application of a property in the syntax is called 'predication' and involves thematic role assignment. The application of a property in discourse does not involve thematic role assignment. Accordingly, the *mubtada* is assigned a thematic role by the *xabar* in the nominal sentence, but a dislocated topic is not the argument of any predicate, and is therefore not assigned a thematic role.

The term 'predicate' is not used here interchangeably with 'property'. It is used to denote a maximal projection which assigns a thematic role, as is familiar from the

- (6) a. *ðana:n -tu l-bayt -a ʔalwa:n-u -hu za:hiyat-un*  
thought-1S the house-ACC colours-NOM of-it bright -NOM  
'I believed the house to be of bright colours.'
- b. *ðunna l-bayt -u ʔalwa:n-u -hu za:hiyat-un*  
was-thought-3M the house-NOM colours-NOM of-it bright-NOM  
'The house was believed to be of bright colours.'

The fourth argument is that a quantifier (e.g. universal, generic) cannot be left dislocated, but can serve as a *mubtada*:

- (7) a. \* Every man, his mother loves him  
b. \* A man, his ornament is his intelligence  
c. *kull -u rajul-in tuħibbu-hu ʔumm -u -hu*  
every-NOM man-GEN love-3F him mother-NOM his  
'Every man's mother loves him.' literally = 7a  
d. *ʔal-ʔinsa:n-u zi:naat -u -hu ʔaql -u -hu*  
the man-NOM ornament-NOM his intelligence-NOM his  
'A man's ornament is his intelligence.' literally = 7b

The fifth argument is that a sentential *xabar* can be used not only predicatively, but also attributively (in the construction called the *naʔt sabab-i* 'indirect attribute'). Consider the sentential *xabar* in (8a), *ʔibnat-u-hu jami:lat-un*. This same phrase is used attributively in (8b), *jami:la bnat-u-hu*, to modify the noun *ʔar-rajul*:

- (8) a. *ʔar-rajul-u bnat -u -hu jami:lat-un*  
the man-NOM daughter-NOM-his pretty-NOM  
'The man, his daughter is pretty.'
- b. *qa:bal-tu r-rajul-a l-jami:lat-a bnat -u -hu*  
met-1S the man-ACC the pretty-ACC daughter-NOM-his  
'I met the man whose daughter is pretty.'

The sentential *xabar* is treated here just like simple adjectival phrases, which are typically used both predicatively and attributively:

- (9) a. *ʔar-rajul-u faxu:r-un bi-bnat -i -hi*  
the man-NOM proud-NOM of daughter-GEN-his  
'The man is proud of his daughter.'
- b. *qa:bal-tu r-rajul-a l-faxu:r-a bi-bnat -i -hi*  
met-1S the man-ACC the proud-ACC of daughter-GEN-his  
'I met the man (who is) proud of his daughter.'

The *naʔt sabab-i* is not a relative clause but a regular adjectival modifier. Its head agrees in Case and definiteness with the noun it modifies. In (8b), the adjective *jami:la* is definite and accusative, just like the noun *rajul* which it modifies. There is of course no such agreement between a head noun and parts of a relative clause.

Examples of attributive uses of sentential predicates can also be given from the so called impersonal passive. *mawθu:k-un bi-ha* is predicative in (10a) and attributive in (10b).

- (10) a. *ʔal-ijja:n -u mawθu:k -un bi-ha*  
the committees-NOM it-is-relied-NOM on-them  
'The committees are reliable.'
- b. *ʔaqaða ija:n -an mawθu:k -an bi-ha*  
summoned-3M committees-ACC it-is-relied-ACC on-them  
'He summoned reliable committees.'

The sixth argument is that a clausal *xabar* behaves with respect to control exactly like a simple predicate. Consider for example a verb of obligatory control such as *tajarraʔa* 'dared' in sentence (11):

- (11) *qa:la muħammad-un ʔinna zayd-an qad tajarraʔa ʔan yuqa:bila l-*  
said-3M Mohammad-NOM that Zayd-ACC had dared-3MS to meet-3MS the  
*muʕallim-a*  
teacher-ACC  
'Mohammad said that Zayd dared to meet the teacher.'

According to (11) it is Zayd who is to meet the teacher, not Mohammad. This locality requirement on the anaphoric link in (11) 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-muʕallim-a* is a predicate. The same holds of predicates abstracted on the object, as shown in (12):

- (12) *qa:la muħammad-un ʔinna zayd-an qad tajarraʔa ʔan yuqa:bila-hu*  
said-3M Mohammad-NOM that Zayd-ACC had dared-3MS to meet-3M him  
*l-muʕallim-u*  
the teacher-NOM  
'Mohammad said that Zayd dared to be met by the teacher.'

In (12), 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-muʕallim-u* is a predicate.

The same thing is shown in (13), where the sentential predicates are nominalized. Control into these nominalizations turns out to be local, as is to be expected for obligatory control, i.e. the nominalizations are interpreted as predicates:

- (13) a. *qa:la muħammad-un ʔinna zayd-an qad tajarraʔa*  
said-3M Mohammad-NOM that Zayd-ACC had dared-3MS  
*li-muqa:balat-i l-muʕallim-i*  
to meeting-GEN the teacher-GEN  
'Mohammad said that Zayd dared to meet the teacher.'
- b. *qa:la muħammad-un ʔinna zayd-an qad tajarraʔa*  
said-3M Mohammad-NOM that Zayd-ACC had dared-3MS  
*li-muqa:balat-i l-muʕallim-i la-hu*  
to meeting-GEN the teacher-GEN to-him  
'Mohammad said that Zayd dared to be met by the teacher.'

3 The *mubtada* as heading an A-chain

In the last section, it was established that the *mubtada* in each one of the nominal sentences (1), repeated below as (14), is clause-internal rather than dislocated. In other words, the *mubtada* is an A-position. I take this position to be Spec,TP:

(14) a. [TP *paʔ-tulla:b-ʔ-u* [<sub>T</sub> *yuqa:bi-l-u:na* *t<sub>j</sub> hind-an* ]]  
 the students-NOM meet-3MP Hind-ACC

'The students are meeting Hind.'  
 literally: 'The students, they are meeting Hind.'

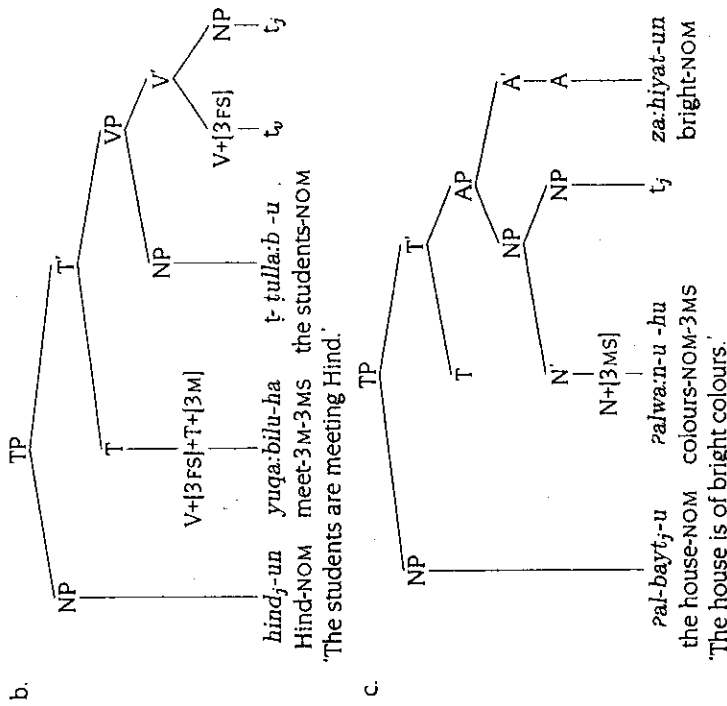
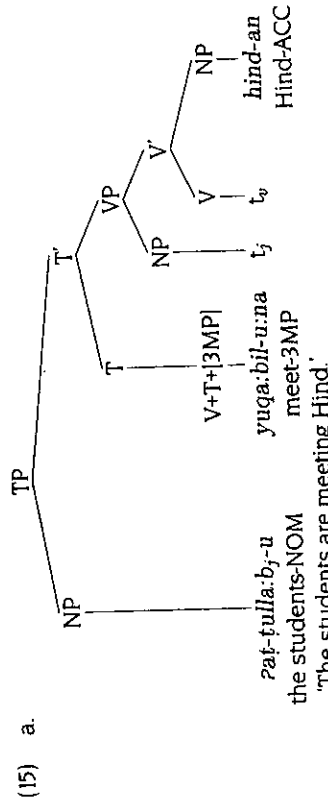
b. [TP *hind-ʔ-un* [<sub>T</sub> *yuqa:bi-lu-ha* *t-tulla:b -u* *t<sub>j</sub>* ]]  
 Hind-NOM meet-3M-her the students-NOM

'The students are meeting Hind.'  
 literally: 'Hind, the students are meeting her.'

c. [TP *paʔ-bayt-ʔ-u* [<sub>T</sub> *paʔwa:n-u -hu* *t<sub>j</sub> za:hiyat-un* ]]  
 the house-NOM colours-NOM of-it bright-NOM

'The house is of bright colours.'  
 literally: 'The house, its colours are bright.'

Since the *mubtada* is an A-position, the question presents itself of how it assigned a thematic role by the *xabar*. Notice that within each *xabar* in (14) there is a missing argument in a thematic position: the post-verbal subject in (14a), the object in (14b) and the possessor in (14c). In accordance with the Projection Principle, each such thematic position is occupied by an empty category. I will assume that this empty category transmits its thematic role to the *mubtada*. In other words, the *mubtada* and the empty category together form a chain for the purpose of thematic role assignment. The structure of the examples in (14) is shown in (15):



In each example in (15), the chain (*mubtada<sub>j</sub>*, *t<sub>j</sub>*) is assigned a thematic role. In (15a), it is assigned the thematic role of the subject, since the empty category *t* in (15a) is the thematic subject, Spec,VP. In (15b) it is assigned the thematic role of the object, since *t* is the complement of V. In (15c) it is assigned the thematic role of possessor, as *t* is Spec,NP.

In each case, the head which governs *t* (T in (15a), V in (15b) and N in (15c)) is fixed with agreement features which crucially include number: [3MP] realized as *-u:na* in (15a), [3FS] realized as *-ha* in (15b) and [3MS] realized as *-hu* in (15c). I will assume that such an agreement suffix prevents the head governing *t* from assigning Case to it. Accordingly, the only Case assigned to the chain (*mubtada<sub>j</sub>*, *t<sub>j</sub>*) is nominative, assigned by T to the *mubtada*.

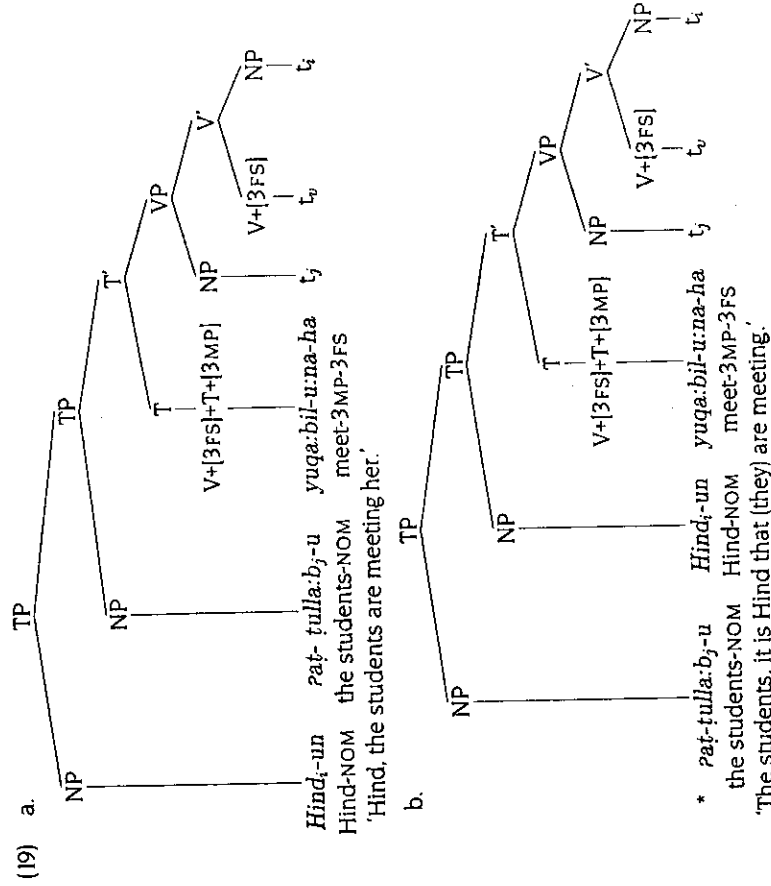
4 The formation of A-chains

The present analysis treats each chain in (15) as an A-chain. Nominative Case is assigned to the head of the chain, and a thematic role is assigned to the foot of the chain. The question to be addressed now is that of the nature of the mechanism which constructs the chains (*mubtada<sub>j</sub>*, *t<sub>j</sub>*). I will argue that different mechanisms are involved depending on whether the *mubtada* corresponds to a thematic subject, as in (15a), or not, as in (15b-c). In particular, I will argue that the chain (*mubtada<sub>j</sub>*, *t<sub>j</sub>*) is constructed by movement in (15a) but is base-generated in (15b-c).

A third argument concerns examples with an iterated *mubtada*. Notice the following contrast between the possible orders of iteration:

- (18) a. *hind-un* *ʔat-ʔulla:b-u* *yuqa:bi:l-u:na-ha*  
 Hind-NOM the students-NOM meet-3MP-her  
 'The students are meeting her.'  
 literally: 'Hind, the students are meeting her.'  
 b. \* *ʔat-ʔulla:b-u* *hind-un* *yuqa:bi:l-u:na-ha*  
 the students-NOM Hind-NOM meet-3MP-her  
 'The students are meeting Hind.'  
 literally: '\* The students, it is Hind that are meeting.'

As (18) shows, the object *mubtada* must precede the subject *mubtada*. The structures of (18a-b) are (19a-b) respectively. I follow Chomsky 1995 in allowing the iteration of specifiers:



The assumption that only a subject *mubtada* is moved from its base position explains the contrast between (19a) and (19b). In (19a), the chain (*mubtada\_j*, *t\_j*) derived by movement is local – it involves movement from Spec,VP to the lower Spec,TP. In (19b), the same chain (*mubtada\_j*, *t\_j*) derived by movement is not local, as it involves

The first argument is theory internal. A-movement is impossible in (15b-c), since it is not local: in (15b) locality is violated by the intervening Spec,VP, in (15c) by the barrierhood of the NP which dominates *t*. In (15a), on the other hand, not only is A-movement to Spec,TP possible, but it is in fact obligatory if we assume that number agreement is a strong feature in Arabic which requires checking in the syntax. The second argument relies on scope differences. A *mubtada* moved from subject position can be construed under the scope of a quantifier in the *xabar*, whereas a base-generated *mubtada* always has scope over a quantifier in the *xabar*. The relevant examples are shown in (16):

- (16) a. *fata:t-un* *ʔawi:lat-un* *raqašat* *maša* *kull-i* *ša: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* *ʔawi:lat-un* *šarraftu-ha* *bi-kull-i* *ša:bb-in*  
 girl-NOM tall-NOM introduced-1s-her every-GEN boy-GEN  
 'I introduced all the boys to a (specific) tall girl.'

If the *tall girl* is base-generated within the *xabar* in (16a) and moved to the *mubtada* position, it is predicted to have either scope relative to the *xabar*. This contrasts with the two possible readings of (16a): the *tall girl* may be interpreted as having either wide or narrow scope relative to every boy. In (16b), on the other hand, if the NP *tall girl* is base-generated as a *mubtada*, it is predicted to have wide scope over the *xabar*. This corresponds to the only interpretation of (16b), where the *tall girl* must have wide scope over every boy.

Data from Classical Arabic relevant to this argument appear in Fassi (1993). The examples in (17a-b) are Fassi's (31a) and (35a) (of Chapter 2) respectively:

- (17) a. *baqarat-un* *takallamat*  
 cow-NOM spoke-3FS  
 'A cow has spoken.'  
 b. \* *baqarat-un* *šabahtu-ha*  
 cow-NOM slaughtered-1s-her  
 'I slaughtered a cow.'  
 literally: '\* A cow, I slaughtered it.'

A non-specific indefinite such as a cow (17) introduces a variable to LF which must be bound by existential closure, according to Heim 1982. The scope of existential closure, so-called *nuclear scope*, corresponds according to Diesing 1992 to that part of clause structure which we here call *xabar*. Accordingly, only NPs generated in the *xabar* may be interpreted as existentially bound. This distinction suffices to account for Fassi's data in (17). The subject *mubtada* in (17a) is generated in the *xabar* and is therefore in the nuclear scope, where it is bound by existential closure. The object *mubtada* in (17b) is base-generated outside the nuclear scope, and is therefore outside the scope of existential closure, hence not interpreted existentially. But since the scope of existential closure cannot be interpreted as specific in Arabic, the *mubtada* in (17b)

A non-subject *mubtada* is base-generated, and the chain it heads is therefore not subject to locality restrictions. The chain (*mubtada*,  $t_i$ ) which involves an object *mubtada* in (19a) is non-local, yet (19a) is a grammatical sentence.

It should be noted that the contrast in (19) is indeed due to a requirement on the locality of movement, and not to a prohibition against the crossing of chains. Crossing chains do not in general cause ungrammaticality, as is witnessed by both sentences in (20) being acceptable to the same extent:

- (20) a. ? *Hind-un* *ʔaʔ-ʔulla-b* -u *ʕarraʔ -tu-hum* *bi-ha*  
 Hind-NOM the students-NOM introduced-1s-them her  
 'Hind, it was to the students that I introduced her.'  
 b. ? *ʔaʔ-ʔulla-b* -u *Hind-un* *ʕarraʔ -tu-hum* *bi-ha*  
 the students-NOM Hind-NOM introduced-1s-them her  
 'The students, it was Hind that I introduced to them.'

#### 5 Conclusion

As in English, Spec,TP in Arabic is the target of raising of the thematic subject of the clause, which is base-generated in Spec,VP.

Unlike English, a topic may be base-generated in Spec,TP in Arabic. Thematic role is assigned to the topic through an A-chain, whose foot is a base-generated NP-trace. From the perspective of binding theory, such a trace is a long-distance anaphor.

As a result, Arabic is much richer than English in the kind of complex properties which count as predicates, i.e. which are clausal in structure yet assign a thematic role to their subjects. English derives such properties by abstracting on the subject position only. Arabic derives them by abstracting on any position.

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