

Pro & related Issues in Arabic : towards a realistic account

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This is an attempt to account for the so-called pro, the null pronominal element, with respect to Arabic. The main purpose here is to show whether the theory of pro, as sketched in the existing Generative Grammar is compatible and consistent with Arabic Data, or some kind of readjustments are required. It is crucial to point out that in the existing Generative studies, there are more than one version dealing with this issue. We can mention here among others, Chomsky's (1982) account which departs from Rizzi's (1978) version (published later in Rizzi (1982)).

Chomsky's account remains undoubtedly the most accurate. He was the first to mention the existence of another empty category that he called Small "Pro". He argues in his book entitled "Some Concepts & Consequences of the Theory of Government & Binding", that the small pro occurs in languages in which the subject may be dropped. He notices that in some romance languages -Italian type languages- the appearance of the subject is optional in finite

clauses, unlike other languages -English type languages- which need a phonetically realized subject; otherwise, the result will be an ungrammatical sentence.

Pro-drop languages, he explains, exhibit a rich inflection that the subject can be recovered; whereas the inflection in non pro-drop languages is not rich enough to allow the recoverability of the dropped subject in finite clauses.

This means that the licencer of Pro in null subject languages is the rich agreement incorporated in the verb. Let us illustrate this by the following examples (taken from several languages):

- 1- a- Giacomo ha parlato (Italian)
Giacomo has spoken
-b- Pro ha parlato
* has spoken
- 2- a- Io parlo (Italian)
I speak
-b- Pro parlo
* speak
-c- Noi parliamo
we speak

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- d- Pro parliamo
* speak
- 3- a- Nosotros vimos a Juan (Spanish)
we see Juan
- b- Pro vimos a Juan
*see Juan
- c- Ella Baila bien
She dances well
- d- Pro Baila bien
(He/She) *dances well
- e- Nosotros Estamos cansadisimos
we are very tired
- f- Pro Estamos cansadisimos
- 4- a- Ani axalti et hatapuax (Hebrew)
I ate acc the apple
- b- Pro axalti et hatapuax

It is easy to see that among these examples, the subject has not been overtly expressed. However, each sentence cited above must have a subject that must be respected in natural languages, i.e. the extended projection principle proposed by Chomsky (1982), and which has been largely adopted in subsequent generative literature. This principle is defined by the following rule.

- 5- "Each clause must have a subject"

We deduce from this principle that Clauses in natural languages can't dispense with the notion of subject in any way. This implies that although the subject isn't

phonetically realized, it must be present in a non overt form. Any empty category, other than Small pro, is rejected and considered as inappropriate in the empty subject position in sentences cited above.

Chomsky claims that the classification of NPs rests on two features [$\pm$ pronominal] and [$\pm$ anaphoric]. Let's deal here, only, with the empty categories for convenience. The big PRO is a [+ pronominal] [+ anaphoric] and it is, conventionally, ungoverned because it occurs in a non governed position, but the subject position in the sentences (1(b), 2(b), 2(c), 3(b), 3(d), 3(f) and 4(b)) above are obviously governed, hence big PRO isn't suitable for such position. It is also hard to assimilate the empty element in such sentences with the trace of either NP or wh-movement for the reason that such traces require to be A-bound to an operator (in the case of wh-movement) or A-bound to an argument position (in the case of NP-trace). It is obvious that small pro doesn't fulfill such conditions. Hence it must be taken to be a null pronominal. This means that it shares the same syntactic properties of the overt subject pronoun, except that it lacks phonetic matrix.

Other properties of pro-drop languages

Let's point out that other properties are assumed to be exhibited by the null subject languages. Those properties are the following:

- 6- Free inversion of subject.

- 7- The apparent violation of the that-trace filter.

According to the former property, the subject in such languages may be freely inverted in the clause. In other words, it may be adjoined to the VP projection, which is, by convention, the appropriate landing site for adjunction, i. e. the VP is not an argument position, hence, the adjunction to this position will be reasonable, unlike IP (Classical S) or CP (Classical S') where such procedure can't take place.

In order to make this issue more clear, we have to mention that before the accomplishment of the subject adjunction rule, it is supposed that the subject occupies its original position at d-structure, which is the spec of I(nflection), and once the adjunction rule takes place, it moves the subject to its surface non-argument position i. e. the VP adjoined one, leaving a null pleonastic pronominal element in the original position. The following schemata illustrate well such phenomenon:

- 8- D - structure.

[(NP) Infl (V.....)]

IP I' VP

- 9- S - structure

[(Proi). Infl ((V.....) NPi))]

IP I' VP' VP

We can deduce from this analysis that it is based on the largely adopted standard

view that concerns the basic word order of the clause. According to such view the subject is supposed to be generated at d-structure, in the initial position as the Spec of (Inflection). Such view was supported by many linguists, and was generalized to all natural languages, including the VSO languages. We will deal with this question in the following section in the light of Arabic Data, so as to show that it is not consistent with such language.

The structure of the Clause in Arabic

Let's deal with the following examples:

- 10- a - Ja : ? -a- r- rija : l-u-

Came 3.s.m the men -nom-

The men came

- b- Ja: ? -u: -

Came 3.pl.m

They came

- c- r-rija:l-u- ja: ?-u: -

the men -nom- came 3.pl.m

The men came

- d- * Ja: ?-u:- r-rija:l-u -

came 3.pl.m the men -nom-

- 11- a -Ja :?-ati- n-niswat-u -

Came 3.s.f The -women -nom-

The women came

- b- Ji? -na -

Came 3.pl.f

They came

- c- n-niswat-u- ji ?-na-

the women -nom- came 3.pl.f

The women came

d- *ji ?-na- n-niswat-u-

came 3.pl.f the women -nom-

Recall that the existing theory of G. Grammar states that the deep structure of the clause takes the following form (Irrelevant details are omitted):

12- [Spec Comp [NP Infl [V...]]]
CP C' IP I' VP

This entails that the original position of the subject is, and must be, preverbal in the clause, and that any surface word order variation must be transformationally derived from the underlying basic order. Such account will lead us to take the example 10-a above, repeated here for convenience.

13- Ja: ? a rrija:lu

to be subject to a transformational rule, let's call it "the inversion of subject", or "the adjunction subject to the VP". In the light of such hypothesis, the d- structure of this sentence would have somewhat the following form.

14- *rrija:l-u- ja: ? -a-
the men -nom- came 3.s.m.

But such form would never occur in Arabic, for the reason that the agreement system in Arabic seems somewhat to be specific. i.e. the nominative NP occurring in a preverbal position imposes full agreement with the verb i.e. the agreement involves Gender, Number, and Person unlike the

inverted word order where Agreement applies just for Gender. Any violation of such constraints yields ungrammatical forms. Hence the ill-formedness of 10-d and 11-d repeated here:

15- *Ja :?u: rrija : lu

16- * Ji ?na nnisa :?u

This evidence ensures that the second property assumed to be exhibited by the pro-drop languages (which concerns the free inversion of subject) isn't available in Arabic, and that there must be another alternative account to solve this problem.

Let's now see the following examples:

17- a- r-rija:l-u- hal Ja: ?-u:-
the-men -nom- question particle Came 3.pl.m

Did the men come?

b- Mohammadun in ja: ?a- kallamt-u-hu
Mohammad-nom If came -3.s.m.
speak-I- him-

If Mohammad Come I will speak to him.

c- n-nissa: ?-u- hal kadim-na-
the -women -nom question particle
came 3 pl.f.

Did the women come?

The initial nominative NP_s in 17 have been followed by a complementizer, hal in 17-a, in in 17-b, and hal in 17-c, such comp_s function as blocking categories i.e. barriers in Chomsky's (1986) term. The same idea has been sketched by Arab Grammarians,

Sibawaihi, for instance, claims that Complementizers (Aladawa:tu sudu:ru, including the question particles hamza, hal, and wh-phrases...) block any potential Government relation that may hold between the elements they precede and those they follow. To lighten straightforwardly this assumption, let's deal with the following ungrammatical examples:

- 18- a- * Zayd-an- hal Ra ? -ay- ta -
 Zayd-acc quest. part. saw -you
 b* t-tuffahat- a- a akal-ta
 The apple -acc quest. part. ate-you

The ungrammaticality of these examples comes from the fact that the governee of the verb: Zaydan in 18-a and ttuffa:hata in 18-b have been moved across a barrier node i.e. CP node where the head (complementizer) is overt. The accusative case is, conventionally, assigned by the verb to its object, hence the Government structure in that level must be observed i.e. no intervening blocking . node is allowed to occur between the verb and its governee. In the examples cited under 18 there has been clear violation of such condition, Hence the sentences would not keep their grammaticality.

Let's turn now to the examples cited under 17. The preverbal NP_s have been assigned nominative case, but it's hard to consider them subjects of the clauses under 17. Recall that GB theory states that the

subject is governed by the Inflection, namely by AGR. If such hypothesis is correct, then the preverbal NP_s in 17 have nothing to do with the subject, this is due to the fact that overt complementizers intervene in each clause cited under 17 between the preverbal NP and the inflected verb, and would block any potential Government between the Inflection and the initial NP. Recall that CP projection may function as inherent barrier if it is not L-marked by a lexical θ assigner head.

There are some crucial arguments supporting the non-availability of the SVO word order as a basic order in Arabic. We are now able to assume that the nominative preverbal position is a topic position base-generated at D-structure and subject to some pragmatic requirements, such as the definiteness, and strong referentiality.... This is not the case for subject obligatorily originating in the post-verbal position, i.e. its canonical position in the clause.

Let's point out that topic in Arabic is assigned its relevant nominative case by default, Arab grammarians used to call it "al a:mil lma nawi:".

In the light of such view, the nominative NPs in sentences cited under 17 above are topics base generated at D-structure, and assigned their relevant case by default, not by an actualized head governor.

Let's sum up the main ideas sketched in this section:

- 1- Arabic is a VSO language
- 2- The canonical position of subject is post-verbal.
- 3- The nominative NP occurring in the initial position is a topic element base generated and it is assigned its relevant case by default.

Pro in Arabic:

We intend now to give a realistic approach to the so-called Pro in Arabic. In order to achieve such task, we have to provide plausible answers to the following matters:

- 1- What is the nature of Pro in Arabic i.e. What are the licencing requirements for such element.
- 2- Is the pro syntactically identical with the overt pronoun, or does it impose a complementary distribution on it?
- 3- Do the agreement elements incorporated in the verb function just as agreement markers and hence require the identification of Pro, or do they function as subjects, and consequently no need to assume the existence of another subject taking the form of Pro?

Let's deal with the following examples:

- 19- a- Ja:? -a-
came -3. s.m.
b- Ja:?-a: -

came -dual

- c- Ja:? u:
came -3. pl. m.
d- Ji?na
came -3. pl. f.

The standard approach of the pro-drop parameter will lead us to take the examples under 19 as having dropped subjects interpreted as small Pro's. Having argued that VSO word order is the relevant basic order in Arabic, sentences cited under 19 would have, at first sight, the following representations:

- 20 - a- Ja:? a (pro)
b- Ja: ?a: (pro)
c- Ja: ?u: (pro)
d- Ji?na (pro)

Recall that the pro-drop parameter takes the empty pronominal to be syntactically identical with the overt pronoun. This is due to the fact that the empty pronoun may be replaced by an overt one, as in the following Italian examples:

- 21- a- Io mangia
b- (Pro) mangia
22- a- Noi mangiamo
b- (Pro) mangiamo

But, such view seems somewhat problematic with regard to Arabic. Let's check the following examples:

- 23- a- Ja: ? a huwa
Came 3.s.m He
b- Ja: ?a: huma:

Came dual	they -dual
c- ja:ʔu:	hum
Came 3.pl.m	they -mas.
d- Jiʔna	hunna
came 3.pl.f	they - fem.

The separate pronouns in 23 are not the syntactic subjects. They are, indeed, emphasis elements, which accentuate the subject taking respectively the form of a null element in 23 a, and the form of "Alif" indicating duality in 23-b, and the form of "waw" denoting male plurality in 23-c and the form of "nun" denoting female plurality in 23-d.

Ibn Malik in his *Alfia* claims that "once the use of the connected pronoun is possible, the separate one must be rejected". Ibn Malik's suggestion apply not only to nominative pronouns but also to accusative ones, as in the following examples:

24 -a-raʔ ay-tu-hu

Saw - I - him-acc.(connected pronoun)

I saw him

b- *raʔ ay-tu- iyya:hu

saw - I him -acc. (separate pronoun)

The example 24-b does not observe the constraint mentioned by Ibn Malik, hence it must be ill formed.

Let's see the following ungrammatical examples:

25 - a- Ja: ʔ-a-	huma
came 3.s.m.	they dual (sep. pron.)
b- *Ja:ʔ-a	hum
came 3.s.m.	they mas. (sep. pron.)
c- *Ja: ʔ-at-	hunna
came 3.s.f.	they fem. (sep. pron.)

We can explain the ungrammaticality of the examples under 25 by saying that they violate Ibn Malik's constraints on connectedness...

We are now able to state that the Pro in Arabic is an abstract element which cannot be actualized in any way, and that it occurs precisely with verbs indicating third singular person, and with some special patterns: Af alu, taf alu, if al, naf alu.

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