

Pro-sensitive complementisers, case, and the EPP in Egyptian Arabic*

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Caveat

- This is an in-progress draft document, last compiled on April 8, 2009. Until this paper is published, the most current version will always be found at
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- Any data labelled *Unconfirmed!* has not been checked with a native speaker and should not be cited.
- This early version makes very few references to existing literature. This will change in later versions.
- Comments are most welcome, including pointers to existing literature.

1 Insensitive and *pro*-sensitive complementisers

The complementisers of Egyptian Arabic (EA), defined loosely to also include matrix clause elocution particles, can be divided into two types, which we can call “insensitive” and “*pro*-sensitive”. The insensitive type, such as *'iza* ‘if’, is not sensitive to the presence, properties or position of the subject.¹ This complementiser can be followed by either a lexical DP or referential *pro*_{ref}, as shown in (1), as well as by other elements such as an independent pronoun or expletive *pro*_{exp}.

- (1) a. *'iza* Muna ġannit
if Mona sang:3FP
'if Mona sings'

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¹ Examples from Egyptian Arabic are my own unless cited. In the examples, Demirdache (1988) will be cited as “DemCIstr”. The orthography in all cited examples has been modified.

- b. 'iza *pro*_{ref} ġannit
 if sang:3FP
 'if she sings'

In contrast, the *pro*-sensitive type is sensitive to these things. Specifically, if we assume that the preverbal subject position is filled with a silent *pro* (except perhaps when filled by PRO), we can say that it is allergic to referential (i.e., non-expletive) *pro*_{ref}. The factive complementiser '*inn*' shown in (2) and (3) is one such *pro*-sensitive complementiser. Note that both (2b) and (3) have a preverbal *pro*, arguably in the specifier of IP, yet only one of these sentences is grammatical. A sentence in which a *pro*-sensitive complementiser is followed by expletive *pro*_{exp} is grammatical, while '*inn*' followed by a referential *pro*_{ref} is ungrammatical (Demirdache 1988).

- (2) a. 'Ult- ilak 'inn Layla ġannit.
 say:1S- to.you that Layla sang:3FP
 'I told you that Layla sang.'
 b. * 'Ult- ilak 'inn *pro*_{ref} ġannit.
 say:1S- to.you that sang:3FP
 intended: 'I told you that she sang.'
- (3) 'Ult- ilak 'inn *pro*_{exp} ma-fii-š filuus.
 told:1S- to.you that NEG-there.is-NEG money
 'I told you that there isn't any money.'

In this paper, two different analyses of this phenomenon will be explored. The first will be based on case assignment, exploiting the arguable idea that a complementiser like '*inn*' assigns accusative case, and stipulating that referential *pro*_{ref} is always nominative in Egyptian Arabic. Evaluation of this analysis will require a systematic investigation of the distribution of the various types of DPs with respect to case in EA. The second analysis will depend on endowing *pro*-sensitive complementisers with a weak EPP feature which cannot be satisfied by *pro*_{ref}. Both analyses will be shown to be problematic, because each of them contradicts independently derived facts concerning the case features of some type of DP in the language.

As we proceed to a discussion of the complementisers, it is perhaps useful to first state some very basic facts about Egyptian Arabic, especially for those who may be familiar with Classical Arabic. EA is a predominantly SVO language. The VS order characteristic of Classical Arabic is very restricted. Also unlike Classical Arabic, EA has no morphological case and no weak agreement (failure of the verb to agree in number with a following subject). But like Classical Arabic, EA is a *pro*-drop language, as illustrated in (4):

- (4) (Hiyya) ġannit.
 she sang:3FP
 'She sang.'

EA has singular and plural number in all inflected parts of speech, while dual number is limited to non-human nouns. EA verbs, pronouns, and pronominal clitics show gender distinctions only in the singular. Plural forms are thus gender-neutral. Non-human

singular nouns normally control feminine singular agreement, while plural agreement is also possible.

In the discussion that follows, it will be assumed that the specifier of IP (the preverbal subject position) is always filled, either by an overt DP or silent category such as *pro*. An alternative to this view will be considered in the context of the EPP analysis.

2 The syntax of *pro*-sensitive complementisers

Here we will examine the core syntactic properties of *pro*-sensitive heads in the complementiser field, dividing these heads into two groups: subordinating complementisers and elocutionary particles. This paper will concern itself mainly with the subordinating complementisers, because with this group the central problem of accounting for the sensitivity between the two kinds of *pro*'s can be easily isolated. The elocutionary particles bring with them additional problems.

2.1 *Pro*-sensitive subordinate complementisers

The primary *pro*-sensitive complementisers are *'inn* 'that' and *wi* 'while', which differ syntactically in that only the former can host a pronominal clitic. To *'inn* can be added at least some of its derivatives, including *li'in*n 'because'. Following the Arabic grammatical tradition, these can be called "*'inn* and her sisters". The only sister of *'inn* tested was *li'in*n 'because', and the properties of these two sisters was found to be identical, as expected. That being the case, examples using *'inn* and *li'in*n will be used interchangeably to demonstrate the syntactic properties of this entire class, which will be sometimes loosely referred to simply as *'inn*. It is likely that *ka'in*n/'*akinn* 'as if' and any other sisters of *'inn* display the same syntactic properties as *'inn*, but they were not tested.

The properties of these *pro*-sensitive complementisers can be summarised as follows:

- (5) ✓ They may be followed by either lexical noun or independent pronoun.
 ✓ They may be followed by verb or non-verbal predicate which has *expletive pro_{exp}* as subject.
 * They may *not* followed by a verb or non-verbal predicate which has *referential pro_{ref}* as its subject.

These properties will first be demonstrated for *'inn* and her sisters.

'Inn and her sisters. Sentence (6a) shows that *li'in*n can be followed by a lexical noun, while (6b) shows that it can be followed by an independent pronoun.

- (6) a. Ma-git-š li'in n Muna 'ayyaana. (*lexical noun*)
 NEG-came:1S-NEG because Mona sick:F
 'I didn't come because Mona is sick.'
 b. B-aħibb-aha li'in n hiyya šaṭra. (*pronoun*)
 PRES-like:1S-her because she intelligent:F
 'I like her because she's smart.'

But now compare the *pro*-drop equivalent of (6b) in (7). This sentence is ungrammatical, demonstrating that *'inn* cannot be followed by *pro*_{ref}. Sentence (8), in which the predicate with the *pro*_{ref} subject is a verb, shows that this property is true regardless of whether the predicate is verbal or non-verbal.

- (7) * B-aḥibb Muna li'inn *pro*_{ref} šaṭra.
 PRES-like:1S Muna because intelligent:F
 intended: 'Ik like Mona because she's smart.'
- (8) * Muna 'alit-li 'inn *pro*_{ref} ma-šaraḥt-iš il-mawḍuu' kwayyis.
 Mona said:3FS-to.me that NEG-explain:1S-NEG the-matter goed
 intended: 'Mona told me that I didn't explain the matter well.'

Now let's consider expletive *pro*_{exp}. A variety of contexts will be considered in which *pro*_{exp} can appear. In all of these contexts, *pro*_{exp} can be successfully embedded under *'inn*. First, in (9), we have *'inn* followed by the impersonal finite verb *biyithayya* 'seems'. Note that the verb appears in its default, third person masculine singular form. This verb corresponds to a raising verb in English, whose subject *it* is standardly assumed to be expletive rather than referential.

- (9) Muna 'alit-li 'inn *pro*_{exp} b-yithayya'-laha 'inn
 Mona said:3FS-to.me that PRES-seem:3SM-to.her that
 'Mona told me that it seems to her that....'

Second, the sentences (10) uses the existential non-verbal predicate *fi*. Example (10b) shows that when the tense is manipulated by use of the finite auxiliary verb *kaan*, the verb is also in its third person masculine form. If the verb were to agree with the non-human plural theme *mašaakil* 'problems', it would bear feminine singular agreement. Regardless of whether the finite auxiliary verb is present, embedding this impersonal expression, whose subject is arguably expletive *pro*_{exp}, results in grammaticality.

- (10) a. ... li'inn *pro*_{exp} ma-fii-š mašaakil.
 because NEG-there.is-NEG problems
 '...because there aren't any problems.'
- b. ... li'inn *pro*_{exp} ma-kan-š fi mašaakil.
 because NEG-was:3SM-NEG there.is problems
 '...because there weren't any problems.'

Next in (11) we have a construction in which an indefinite logical subject appears postverbally. The verb appears in default masculine singular form rather than in the feminine singular form which would be required if *gawabaat* 'letters' controlled its agreement.

- (11) ... 'inn *pro*_{exp} bi-ygi-lha gawabaat kitiir.
 because PRES-come:3MS-to.her letters many
 '...that she receives a lot of letters.'

Finally, (12) shows one of a number of predicate types which is grammatically impersonal, even though intuitively it has a subject, which in fact commonly appears as an initial topic, as shown in (12b). The fact that this is an impersonal expression, and thus for

our purposes one with a *pro_{exp}* subject, is demonstrated by the fact that any auxiliary verb preceding it must be in masculine singular form as in (12b), rather than in the form agreeing with the intuitive subject as in the ungrammatical (12c).

- (12) a. ... li'inn *pro_{exp}* 'and-aha mawaahib.
 because at-her talents
 '...because she has talents.'
- b. Muna *pro_{exp}* kaan 'and-aha mawaahib.
 Mona was.3MS at-her talents
 'Mona had talents.'
- c. * Muna kaanit 'and-aha mawaahib.
 Mona was.3FS at-her talents

We see thus on the basis of four different contexts, that a predicate with an existential *pro_{exp}* subject, whether verbal or non-verbal, can be freely embedded under *'inn* and her sisters, while a predicate with a referential *pro_{ref}* subject cannot. This starkly contrasts with the ungrammaticality observed in (2b), (7) and (8), where *'inn* was followed by referential *pro_{ref}*.

As a final observation, an embedded factive clause with a referential *pro_{ref}* subject becomes grammatical if *'inn* is dropped, as in (13).

- (13) a. * Iftakarit inn *pro_{ref}* kaanit katabit gawaab. (DemClStr (4c))
 thought:3FS that was:3FS wrote:3FS letter
 'She thought that she had written a letter.'
- b. 'Iftakarit *pro_{ref}* kaanit katabit gawaab. (DemClStr (8c))

Wi 'while'. We now turn to the complementiser *wi* 'while', first taking care of some of its less german properties. This complementiser is homophonous with the conjunction *wi* 'and', shown in (14), which can also be used to conjoin clauses. When used as a conjunction, *wi* can precede *pro_{ref}*, as in (14b), which is not the case with complementiser *wi*, as we shall soon see.

- (14) a. 'alam wi waraq
 pen and paper
 'pen and paper'
- b. 'Ana b-aštaḡal wi b-al'ab.
 I PRES-work:1S and PRES-play:1S
 'I work and play'

One way to unambiguously show complementiser *wi* is to prepose the clause which it heads, as has been done in (15b).

- (15) a. 'Ana sḡayyar.
 I little
 'I am young.'
- b. W-ana sḡayyar, ma-kunt-iš b-aḡibb aštaḡal.
 while-I little NEG-was:1S-NEG PRES-like:1S work:1S
 'When I was young, I didn't like to work.'

Another difference between a clause headed by complementiser *wi* and a clause conjoined with *wi*, is that the former must be in the present tense. This is shown in (16). In (16a), the verb following *wi* is in the present tense, and *wi* can be interpreted as either a complementiser or a conjunction. In contrast, if the verb following *wi* is in the past tense, as in (16b), only the conjunct interpretation is available.

- (16) a. 'Ana štağalt w-inta b-til'ab.
 I worked:1S and/while-you PRES-play:2M
 'I worked while you played.' (OR 'I worked and you are playing.')
- b. 'Ana štağalt w-inta l'ibt.
 I worked:1S and-you played:2M
 'I worked and you played.'

We will now see that complementiser *wi* suffers from the same sensitivity to *pro* as did *'inn*. Sentences (17a) and (17b) show that *wi* can be followed by either a lexical DP or an independent pronoun. Sentence (17a) shows that it cannot be followed by referential *pro_{ref}*. Sentence (18) shows, in contrast, that *wi* can be followed by expletive *pro_{exp}*. *Wi* is thus sensitive to the two types of *pro* in precisely the same way that *'inn* was.

- (17) a. Wi Maahir b- yištağal, bi- yħibb yšaffar.
 while Maher PRES- work:3S PRES- like:3S whistle:3S
 'Maher likes to whistle while he works.'
- b. Wi huwwa b- yištağal, bi- yħibb yšaffar.
 while he PRES- work:3S PRES- like:3S whistle:3S
 'He likes to whistle while he works.'
- c. * Wi *pro_{ref}* b- yištağal, bi- yħibb yšaffar.
 while PRES- work:3S PRES- like:3S whistle:3S
 intended: 'He likes to whistle while he works.'
- (18) Ma-b-aħibb-iš aštağal wi *pro_{exp}* fi ħadd fi l-beet.
 NEG-PRES-like:1S-NEG work:1S while there.is someone in the-house
 'I don't like to work while someone is in the house.'

We will now consider two syntactic differences between *'inn* and *wi*, one synchronic and one historical.

Pronominal clitics. Like all varieties of Arabic, EA has a series of pronominal enclitics. Typical environments in which these clitics occur are suffixed to the verb as in (19b), in which case they are interpreted as objects, and as the object of a preposition.

- (19) a. B-aħibb il-maħši.
 PRES-like:1S the-stuffed.vegetables
 'I like stuffed vegetables.'
- b. B-aħibb-u.
 PRES-like:1S-him
 'I like it.'

'Inn and *wi* differ with respect to these clitics. While *'inn* may host such as clitic, as shown in (20b), *wi* may not, as in (21b).²

² Check this.

- (20) a. B-aḥibb-aha li'inn hiyya šaṭra. (*pronoun*)
 PRES-like:1S-her because she intelligent:F
 'I like her because she's smart.'
- b. B-aḥibb-aha li'inn-aha šaṭra. (*clitic*)
 PRES-like:1S-her because-her intelligent:F
 'I like her because she's smart.'
- (21) a. wi hiyya b-tištaḡal
 while she PRES-work:3F
 'while she works'
- b. * w-aha b-tištaḡal
 while-she PRES-work:3F

Disregarding allomorphy regulated by the phonological properties of the host, in both CA and EA, any given clitic has the same form regardless of syntactic position except for first person singular, which in EG is *-ni* as a verbal clitic as in (22a) and *-i/-ya* elsewhere, such as when it is the object of a preposition, as in (22b). Sentence (22c) shows that it is the *-i* variant which attaches to *'inn*. In CA, either variant can be used after *'anna*.

- (22) a. Šafit-ni.
 saw:3F-me
 'She saw me.'
- b. Kaan 'aa'id 'uddaam-i / waraa-ya.
 was:3M sitting:M in.front-me behind-me
 'He was sitting in front of me/behind.'
- c. 'Ult-ilu inn-i maaši.
 said:1S-to.him that-me leaving:M
 'I told him that I was leaving.'

This pattern in EA could be due to either a morphological idiosyncrasy or, say, to a difference in case (genitive for (22a) and (22b), accusative for (22c)), but it is not likely to simply be a phonological reduction of /'inn+-ni/, because the same process does not occur in EA with the first person plural clitic, as shown in (23).

- (23) 'Ult-ilu inn-ina mašyiin.
 said:1S-to.him that-me leaving:P
 'I told him that we were leaving.'

The third person masculine clitic *-u* (which also has other allomorphs) can either be referential, as in (19b), or expletive, as in (24b).

- (24) a. Muna 'alit-li 'inn *pro_{exp}* ma-fii-š filuus.
 Mona said:3F-to.me that NEG-there.is-NEG money
- b. Muna 'alit-li 'inn-u ma-fii-š filuus. (*clitic*)
- c. *Muna 'alit-li 'inn huwwa ma-fii-š filuus. (*pronoun*)
 'Mona told me that there isn't any money.'

The expletive thus stands in free variation with *pro_{exp}* after *'inn*, although *pro_{exp}* is greatly preferred. The ungrammatical example in (24c) shows that this expletive clitic does not have an independent pronoun counterpart.

The historical case properties of *'inn* and *wi*. *'Inn* and *li'inn* are the modern reflexes of a class of complementisers in Classical Arabic that assign accusative case. This is illustrated with an SVO clause in (25). In (25a), where the clause is not headed by a complementiser, the subject is nominative, as expected, but once the clause is embedded under *'anna*, the precursor to Egyptian *'inn*, the subject must be accusative, as in (25b).

- (25) a. 'Al-bint-*u* katabat xiṭaab-an. (CA)
 the-girl-NOM wrote:3SF letter-ACC
 'The girl wrote a letter.'
- b. ... *'anna* l-bint-*a* katabat xiṭaab-an.
 that the-girl-ACC wrote:3SF letter-ACC
 '...that the girl wrote a letter.'

This phenomenon is not dependent on surface adjacency between the subject and the complementiser. Sentence (26a) shows an existential construction, in which the indefinite theme follows the locative predicate and appears in nominative form. When this clause is embedded under *'anna*, however, the theme appears in the accusative.

- (26) a. Fi l-bayt-i rajul-un. (CA)
 in the-house-GEN man-NOM
 'There's a man in the house.'
- b. ... *'anna* fi l-bayt-i rajul-an.
 that in the-house-GEN man-ACC
 '...that there's a man in the house.'

These facts will serve as inspiration for the case-based analysis developed below.

The EG complementiser *wi* finds its ancestor in the CA complementiser *wa*. CA *wa* does not share *'anna*'s peculiarity. The subject following *wa* appears in nominative case, just like its unembedded counterpart, as illustrated in (27).

- (27) a. 'Awlaad-*u*-haa yal'abuuna. (CA)
 children-NOM-her play:3MP
 'Her children are playing.'
- b. 'Al-'ummu katabat xiṭaab-an wa 'awlaad-*u*-haa yal'abuuna.
 the-mother:NOM wrote:3FS letter:ACC while children-NOM-her play:3MP
 'The mother wrote a letter while her children played.'

Thus, *'anna* and *wa* cannot be taken to belong to the same class of complementisers in CA. The situation is much less clear in Egyptian Arabic. Because Egyptian Arabic does not have morphological case, it is difficult to establish whether or not an element following *'inn* has a different case as one following *wi*.

In traditional Arabic grammar, *'anna* and *wa* are said to take a particular clause type as their complement: a *jumla 'ismiyya* 'nominal clause'. This clause type includes both those with an initial DP (including a pronominal clitic), as in (25), and inverted on-verbal clauses like (26). The nominal clause stands in contrast with the *jumla fi'liyya* 'verbal clause', which begins with a verb, whether or not the verb is followed by an overt subject. A verbal clause cannot be embedded under these complementisers.

Aux Sbj V. Our last observation has to do with partial raising of the subject. As mentioned earlier, the canonical word order in EA is subject-initial. However, with compound tenses the subject may (infrequently) appear between the auxiliary and the lexical verb (Demirdache 1988), as in (28b).³

- (28) a. Layla kaanit katabit gawaab. (DemClStr (6a))
 Layla was:3FS wrote:3FS letter
- b. Kaanit Layla katabit gawaab. (DemClStr (2b), modified)
 was:3FS Layla wrote:3FS letter
 'Layla had written a letter.'
- c. *pro*_{ref} kaanit katabit gawaab. (DemClStr (6b), modified)
 'She had written a letter.'

Interestingly, in (29b) we see that this type of inversion may not be embedded under *'inn*:

- (29) a. 'Iftakarit inn Layla kaanit katabit gawaab. (DemClStr (4a))
 thought:3FS that Layla was:3FS wrote:3FS letter
 'She thought that Layla had written a letter.'
- b. * Iftakarit inn kaanit Layla katabit gawaab. (DemClStr (4b))
- c. * Iftakarit inn *pro*_{ref} kaanit katabit gawaab. (DemClStr (4c))

Sentence (29c) shows that a *pro*_{ref} subject cannot be used if such a compound tense is embedded under *'inn*, even though its unembedded counterpart in (28c) is grammatical.

This concludes our survey of *pro*-sensitive subordinate complementisers. We will now precede to the elocutionary force particles.

2.2 *Pro*-sensitive elocutionary force particles

Egyptian Arabic has three *pro*-sensitive elocutionary force particles: refutative *ma*, exclamative *da*, and interrogative *huwwa*. These elements indicate what type of sentence it heads. A sentence headed by *ma* or *da* is always declarative, while one headed by *huwwa* is always interrogative. These three particles share two additional properties. First, they are all matrix clause complementisers which cannot be embedded. And second, none of these elements can host a pronominal clitic.

Refutative *ma*. This particle is used to refute an implication made by another speaker in the preceding utterance. For example, the sentence in (30B) is used to refute the implication that the speaker isn't eating.

- (30) A: Miš bi-taakul lee?
 neg PRES-eat:2M why
 'Why aren't you eating?'
- B: Ma-na b-aakul ahú.
 REFUT-I PRES-eat:1S here.is:M

³ These inversions sound most natural when preceded by an adjunct clause like 'when I arrived'.

This element appears to be in the complementiser domain, because it precedes a lexical subject and cannot follow it, as shown in (31).

- (31) a. Ma Mḥammad bi-yiṣṭaḡal ahú.
REFUT Mohammed PRES-work:3M here.is:M
b. * Muḥammad ma-b-yiṣṭaḡal ahú.
Mohammed REFUT-PRES-work:3M here.is:M

Refutative *ma* is the only complementiser found to have a somewhat irregular paradigm when combining with pronouns. Observe how in (32) the independent pronouns *huwwa* ‘he’ and *hiyya* ‘she’ appear reduced as *-hu* and *-hi* and that they are phonologically incorporated with *ma* into a single word. These are not the same as the pronominal clitics we have been discussing, however. The pronominal clitic corresponding to *hiyya* ‘she’, for example, is *-(a)ha*, while the form observed in (32b) is *-hi*.

- (32) a. Ma-hu b-yiṣṭaḡal ahú.
REFUT-he PRES-work:3M here.is:M
‘He is working, see!’
b. Ma-hi b-tiṣṭaḡal ahí.
REFUT-he PRES-work:3M here.is:F
‘She is working, see!’

Just like the strongly *pro*-sensitive complementisers, *ma* cannot be followed by *pro*_{ref}, as seen in (33).

- (33) a. Ma-ḥna b-nikkallim bi-sur‘a.
REFUT-we PRES-speak:1P with-speed
‘We are speaking quickly!’
b. * Ma *pro*_{ref} b-nikkallim bi-sur‘a.
REFUT PRES-speak:1P with-speed

But in contrast with the strongly *pro*-sensitive complementisers, following *ma* with expletive *pro*_{exp} also yields a somewhat degraded result, as shown in the response in the exchange in (34).

- (34) A: Muna *pro*_{exp} miṣ baayin ‘alee-ha ta‘baana.
Mona not seem:M on-her tired:F
‘Mona doesn’t look tired.’
B: ? Ma *pro*_{exp} baayin ‘alee-ha w nuṣṣ!
REFUT seem:M on-her and half
‘She seems extremely tired!’

We have seen that the *pro*-sensitive subordinating complementisers were sensitive to the difference between referential and expletive *pro*. While *ma* also sensitive in this way, it is additionally somewhat allergic to all *pro*’s in general. Thus, while ungrammaticality is observed when one of the elements is followed by referential *pro*_{ref}, some degree of degradedness is also observed when followed by *pro*_{exp}. The distinction between *pro*_{ref} and *pro*_{exp} is thus attenuated, and hence we can describe *ma* as ‘weakly *pro*-sensitive’, while the subordinating complementisers are ‘strongly *pro*-sensitive’.

Exclamative *da*. The particle *da* (masc.)/*di* (fem.)/*dool* (pl.), exemplified in (35), lends a declarative sentence an exclamative force:

- (35) Di l-mayya b-tiġli! (Salib 1981, p. 289)
 EXCLAM:F the-water PRES-boil:3F
 ‘The water is boiling!’

The three forms of the particle are homophonous with the demonstratives, which can be used either as modifiers or as pronouns, as seen in (36).

- (36) a. Dool riggaala.
 those men
 ‘These/those are men.’
 b. ’Ir-riggaala dool maṣriyyiin.
 the-men those Egyptian:P
 ‘These/those men are Egyptian.’

When a lexical DP follows exclamative *da*, the latter usually agrees with it in gender or number. Thus, in (35), *’il-mayya* is feminine, and the exclamative particle appears in its feminine form *di*. When followed by a first or second person pronoun, the particle is invariably *da*. Thus in (37), although the subject pronoun *’ihna* is plural, the particle preceding it has the masculine (singular) form *da*.

- (37) Da-ħna kalna kitiir xaaliṣ!
 EXCLAM:M-we ate:1P much extremely
 ‘We ate a lot!’

First and second person pronouns are all vowel-initial, and following *da* they all contract to form a single, phonologically reduced word.⁴

If the intended subject is a third person pronoun, that pronoun is simply dropped after *da* (Salib 1981, p. 291). This is most easily seen by comparing a third person subject with a first or second person subject, as is done in (38).

- (38) a. Da-nta ’aruuba!
 EXCLAM:M-you genius
 ‘You’re a genius!’
 b. Da/di ’aruuba!
 EXCLAM:M/F genius
 ‘He’s/she’s a genius!’

However, we should not necessarily assume that a *pro_{ref}* intervenes between *da* and the predicate in such cases, because examination of first and second person subjects shows that in these cases *pro_{ref}* is ungrammatical, as in (39).

- (39) a. Da-na kalt kitiir xaaliṣ fi l-ħafla.
 EXCLAM:M-I at:1S much extremely in the-party
 ‘I ate a lot at the party.’

⁴ It is not necessarily possible to draw any syntactic conclusions from this fact. The same thing happens when *wi* (either as a complementiser or as a conjunction) combines with a first or second person pronoun.

- b. * Da *pro_{ref}* kalt kitiir xaaliş fi l-ḥafla.
EXCLAM:M at:1S much extremely in the-party

The fact that *da* cannot be followed by a *pro_{ref}* with first or second person features as in (39b) is what identifies it as a *pro*-sensitive element.

The fact that any third person pronoun is normally dropped after this particle makes it difficult to determine with complete certainty whether *da* is sensitive to the two types of *pro*'s. Testing *da* on a variety of clause types with expletive *pro_{exp}* subjects yields a mixed bag of judgements. With an existential clause or a predicate like 'seem', use of *da* results in perfect grammaticality, as seen in (40) and (41), but with a possessive predicate, as in (42), the result is highly degraded. Use of *da* with an indefinite VS inversion the result is outright ungrammaticality, as in (43).

- (40) Da fii milyuun gineeh fi š-šanṭa di!
EXCLAM.M there.is million pound in the-bag this:F
'There's a million pounds in this bag!'

- (41) Da yizhar 'inn Muna ḡaḍbaana 'awi!
EXCLAM.M seem:3M that Mona angry:F very
'It seems like Mona is very angry!'

- (42) ?? Da 'and-i muškila kbiira!
EXCLAM.M at-me problem big:F
'I've got a big problem!'

- (43) * Da gaa-li miit ḍeef imbaarih!
EXCLAM.M came:3M-to.me hundred guest yesterday
'I had a hundred guests yesterday!'

Further investigation is necessary to pin down the precise distribution of *da* with respect to expletive *pro_{exp}*. One might try to explain the contrast between the degraded possessive clause in (42) and the grammatical existential clause in (40) by saying that possessive phrases have an inherent possessor topic, represented in syntax by *pro_{ref}*, but then we would need to explain why no such topic is necessary after 'inn. Besides that problem, the sharp contrast between the ungrammaticality of the indefinite inversion construction in (43) and the two grammatical sentences is particularly puzzling, especially since all three types of clauses pattern identically when embedded under 'inn.

Interrogative *huwwa*. Used in both polarity and *wh* questions, the question particle *huwwa* (masc.)/*hiyya* (fem.)/*humma* (pl.) has an agreement pattern similar to that of *da* just discussed (Woidich 2006, p. 361-362). The particle can be optionally used in monoclausal questions, as shown in (44) and (45). When optional, its use often corresponds to an expression of doubt or sarcasm on the part of the speaker, or alternatively can often be translated as 'by the way'.

- (44) a. ('Inta) ḥa-truuḥ?
you:M FUT-go:2M
b. Huwwa-nta ḥa-truuḥ?
Q-you:M FUT-go:2M
'Will you go?!'

- (45) a. ('Inta) ḥa-truuḥ feen?
 you:M FUT-go:2M where
 b. Huwwa-nta ḥa-truuḥ feen?
 Q-you:M FUT-go:2M where
 'Where will you go?!

Wahba (1984) analyses the way *huwwa* is used in multiclausal questions to license *in situ wh* questions in embedded clauses, as in (46).

- (46) Hiyya Muna ftakarit 'Ali raah feen? (Wahba 1984, p. 120)
 she Mona thought:3F Ali went:3M where
 'Where_i did Mona think that Ali *t_i* went?'

Wahba suggests that *huwwa* is obligatory in this context.

Huwwa may be followed by a lexical noun or a pronoun, but not by *pro_{ref}*, as shown in (47).

- (47) a. Huwwa-ḥna bi-nikkallim bi-sur'a?
 he-we PRES-speak:1P with-speed
 'Are we speaking quickly?'
 b. ?/* Huwwa *pro_{ref}* bi-nikkallim bi-sur'a?
 he PRES-speak:1P with-speed

However, as (48b) shows, *huwwa* is also a bit allergic to *pro_{exp}*, just as *ma* was:

- (48) a. Huwwa *pro_{exp}* fii fluus fi l-xazna dilwa'ti?
 he there.is money in the-safe now
 'Is there any money in the safe now?! (sarcastic)'
 b. ? Huwwa *pro_{exp}* 'and-ina fluus dilwa'ti?
 he at-us money now?

The degraded nature of (48b) with a possessive predicate in contrast with the perfect grammaticality of the existential predicate in (48a) mirrors the sharper contrast seen with exclamative *da* in (40) and (42). Further testing is needed to determine how robust this pattern is.

Huwwa also seems to be grammatical if an adverb intervenes between it and the following verb. This is not the case with *'inn*. The contrast is illustrated in (49).

- (49) a. Huwwa dilwa'ti b-nikkallim bi-sur'ra?!
 he now PRES-speak:1P with-speed
 'Are we speaking quickly now?!'
 b. * ... li'inn dilwa'ti miš gayya.
 because now not come:part:f
 '...because now she's not coming.'

3 Case in Egyptian Arabic

Having had an overview of both the range of *pro*-sensitive elements in the complementiser domain and their syntactic properties, we can now begin to address the central question of how to account for the different behaviour of these complementisers towards *pro_{ref}* and *pro_{exp}*. We will begin by limiting ourselves to *'inn* and her sisters, assuming that they assign accusative case.⁵ We saw that there is a historical precedent for assuming that *'inn* assigns accusative case, so this seems like a good point of departure. A rough analysis based on case assignment is sketched in Demirdache (1988). The most important elements of that analysis (either stated explicitly or merely suggested) are the following:⁶

- (50)
- a. Expletive *pro_{exp}* comes in all three cases (nominative, genitive and accusative).
 - b. Referential *pro_{ref}* is always nominative in Egyptian Arabic.
 - c. The clitics are the corresponding accusative and genitive forms of *pro_{ref}*.
 - d. The (referential) clitics and *pro_{ref}* are therefore in complementary distribution. (Demirdache (1988) is not aware of the expletive clitic.)
 - e. *'Inn* assigns accusative case (or perhaps genitive case) via lexical government.

Let's briefly work through one case each of the two types of *pro* to see how such an analysis would work. We begin with expletive *pro_{exp}* in (51).

- (51) ... *'inn pro_{exp}* kaan fii fluus.
 that was:3M there.is money
 '...that there was some money.'

'Inn must assign accusative case by government, and *pro_{exp}* is governed by *'inn*. *Pro_{exp}* can have any of the three cases which overt DPs can appear in, including accusative, so the clause is grammatical. Alas, as we already know, the clause with a *pro_{ref}* subject in (52) will not enjoy the same good fortune.

- (52) * ... *'inn pro_{ref}* katabt gawaab.
 that wrote:1S letter
 intended: '...that I wrote a letter.'

Again, this *pro* subject is governed by *'inn*, which, as always, must assign accusative case. But *pro_{exp}* only comes in nominative case, and the derivation crashes.

There is an obvious problem with the analysis which may have already sprung to the reader's mind, namely, that the *pro* subjects in (51) and (52) are standardly assumed to get *nominative* case from finite tense, just like any other subject in the specifier of a finite verb. Taking both this assumption and the accusative-assignment idea of the analysis under question, the subject seems to be receiving two distinct cases. Note that this is also a problem with the CA examples discussed in (25) and (26), where accusative case on the subject is directly observed. Let's call this the 'double case problem' and set it aside until the next section, concentrating for now on two other aspects of the analysis:

⁵ For our purposes, there is no relevant difference between case assignment via government and the checking of case features via a mechanism such as Agree. The discussion is cast in terms of case assignment merely for ease of exposition.

⁶ The claims made in Demirdache (1988) concerning the case properties of *pro* and the clitics are not backed up by strong argumentation. The arguments made here are largely my own.

- The assumption that *pro_{ref}* is always nominative in EA.
- The prediction that the element following *'inn* is always accusative.

We can evaluate these two elements of the analysis by examining the distribution of five different types of DP in the language: lexical DPs, independent pronouns, pronominal clitics, *pro_{ref}*, and *pro_{exp}*. We will do this by considering constructions in which it is clear what the case properties are of an element in a particular position and then seeing what types of DP can occur in that position. The findings of this investigation are summarised in section 3.2 on page 23.

Here we will follow the assumption that EA, like its CA ancestor, has three cases: nominative, genitive, and accusative. There is no way to directly observe a distinction between genitive and accusative in EA (except perhaps by the form of the first person singular clitic), and thus it might make more sense empirically to speak only of nominative and non-nominative case in EA. The traditional three-case system has been retained here because it is more intuitive and familiar and because it in no way effects the analysis.

3.1 Case positions in EA

Nominative positions. There are two clear-cut nominative positions. The first is the preverbal subject position (a term which we will also use to designate the prepredicative subject position when the predicate lacks a verb), whenever the clause is not headed by one of the *pro*-sensitive complementisers in question. And the second is the post-auxiliary position with the Aux S V word order.

Both a lexical DP and an independent pronoun are shown in the preverbal subject position in (53).

- (53) Muna/hiyya b-tiṣṭaḡal.
 Mona/she PRES-work:3F
 ‘Mona/she is working.’

Besides being the obvious assumption to make on the basis both of our knowledge of the world’s languages and of theoretical considerations, lexical DPs in this position in Classical Arabic appear with morphologically marked nominative case.

No cases could be found in which a clitic can appear in this nominative position. Finding a potential case requires finding a suitable host for the enclitic. Two potential hosts are the conjunction *wi* ‘and’ in a conjunct clause and an insensitive complementiser such as *'iza*, first encountered in (1a). As shown in (54) and (55), neither of these elements can actually host the clitic.

- (54) * Muna ṣṭaḡalit w-aha starayyaḡit.
 Mona worked:3F and-her rested:3F
 intended: ‘Mona worked and she rested.’
- (55) * Muna ḡa-tifraḡ 'izaa-ha xallaṣit badri.
 Mona FUT-rejoice:3F if-her finished:3F early
 ‘Mona will be happy if she finished early.’

Unfortunately for our purposes, the ungrammaticality of these examples could be accounted for in two different ways. While it could be claimed that clitics do not come in the nominative case required by this position, it could just as easily be said that conjunction *wi* and the insensitive complementisers are simply lexically specified against hosting a clitic. There is, however, one argument against the lexical specification account. This argument involves *‘ašaan*, which performs double duty as a preposition meaning ‘for’ and an insensitive complementiser meaning ‘because’ (and also ‘in order to’ or ‘so that’ when heading a non-finite clause). We see in (56) that the preposition *‘ašaan* can host a pronominal clitic. This contrasts strikingly with the complementiser *‘ašaan*, which cannot host a clitic, as shown in (57b)

- (56) *‘ašaan* as preposition ‘for’
 ‘Amalt il-ḥagaat di ‘ašan-ha. (*clitic*)
 made:1S the-things these for-her
 ‘I made these things for her.’
- (57) a. *‘ašaan* as complementiser ‘because’
 ‘Ana mabsuut ‘ašaan hiyya bi-tḡanni. (*pronoun*)
 I happy:M because she PRES-sing:3F
 ‘I am happy because she is singing.’
 b. *‘Ana mabsuut ‘ašan-ha bi-tḡanni. (*clitic*)
 c. ‘Ana mabsuut ‘ašaan *pro*_{ref} bi-tḡanni.

The fact that complementiser *‘ašaan* can be freely followed by referential *pro*_{ref}, as in (57c), shows that this complementiser is insensitive. The following subject is therefore assumed to be nominative, for it is only after a *pro*-sensitive complementiser that hypothesising otherwise is motivated. It is thus defensible to claim that (57b) is ungrammatical because the subject must be nominative, but that pronominal clitics do not have nominative forms.

Of course, one could resort to lexical properties here as well, claiming that the preposition *‘ašaan* is lexically specified as a host, while complementiser *‘ašaan* is not. However, the most likely historical trajectory of this word makes such an arbitrary account somewhat dubious. *‘Ašaan* is historically *‘alaa ša’n*... ‘on the matter of...’, with the noun *ša’n* ‘matter’ constituting the first term of a construct (a noun+noun constituent) of which the following DP constitutes the second term. This phrase is more likely to have been used before DPs, developing into a true preposition, before coming to be used to introduce clauses. The ability of *ša’n* to host a clitic would thus have been firmly established before it came to be used as a complementiser. Loss of such a property seems hard to motivate on purely morphological grounds. The reason that the complementiser *ša’n* cannot host is thus more likely to be syntactic, and a plausible syntactic reason is case: the preposition *ša’n* assigns genitive case to its complement, while the complementiser *ša’n* has simply no case assigning properties. If this much is correct, then the ungrammaticality of (57b) lends some support to the assumption that clitics are never nominative.

This takes care of all three types of overt DPs, but what about our two types of *pro*? The simple fact that both *pro*_{ref} and *pro*_{exp} can served as subjects in matrix clauses, as in (58) and (59), shows that both can appear in nominative case.

- (58) *pro*_{ref} Katabt gawaab.
 wrote:1S letter
 ‘I wrote a letter.’
- (59) *pro*_{exp} Kaan fii fluus.
 was:3M there.is money
 ‘There was some money.’

The second nominative position is the post-auxiliary position. The sentences in (60) shows that while a lexical DP and an independent pronoun may appear in this position, a referential clitic may not. Furthermore, (61) shows that an expletive clitic may not appear in the post-auxiliary position, either.

- (60) a. Kaanit Layla katabit gawaab.
 was:3F Layla wrote:FS letter
 ‘Layla had written a letter.’
 b. Kaanit hiyya katabit gawaab. (*pronoun*)
 c. *Kaanit-ha katabit gawaab. (*clitic*)
- (61) a. Kaan fii filuus.
 was:3M there.is money
 ‘There was some money.’
 b. *Kaan-u_{exp} fii filuus. (*clitic*)

Unlike the situation with the preverbal position, there is no issue of finding a suitable host for the clitic, for we know that clitics (or at least the referential ones) can attach to verbs. The fact that such a clitic cannot attach to the verb in (60) is very strong evidence that pronominal clitics are never nominative, corroborating the weaker arguments already made with respect to the preverbal position. It thus appears that all types of DPs can appear in nominative case, except pronominal clitics.

Genitive positions. The two constructions we will consider which have genitive positions are the prepositional phrase and the construct. Both the complement of a preposition and the second term of a construct are marked for genitive case in Classical Arabic. The prepositional phrase is exemplified by ‘*ala* and its complement in (62), while the construct in (63) consists of *kitaab* and the possessor which follows it.

- (62) a. B-akkallim ‘ala Muna.
 PRES-speak:1S on Mona
 ‘I’m talking about Mona.’
 b. B-akkallim ‘alee-ha. (*clitic*)
 c. * B-akkallim ‘ala hiyya. (*pronoun*)
- (63) a. Šuft [kitaab Muna.]
 saw:1S book Mona
 ‘I saw Mona’s book.’
 b. Šuft [kitab-ha.] (*clitic*)

- c. *Šuft [kitaab hiyya.] (*pronoun*)

As will be observed, both a lexical DP and a pronominal clitic may appear in these positions, but an independent pronoun may not. This leads us to conclude that lexical DPs and pronominal clitics can be genitive, but that independent pronouns cannot.

The ungrammatical sentences in (64b) and (65b) show that referential pro_{ref} cannot appear in these genitive positions, leading us to the conclusion that it does not have a genitive form.

- (64) a. Bi-yikkallimu ‘ann-u. (*clitic*)
 PRES-speak:3P about-him
 ‘They’re talking about him.’
 b. * Bi-yikkallimu ‘an pro_{ref} .
- (65) a. La’eet kitaab-u. (*clitic*)
 found:1S book-him
 ‘I found his book.’
 b. *La’eet kitaab pro_{ref} .
 (Grammatical on the reading ‘I found a book.’)

It is difficult to rule out the possibility that expletive pro_{exp} can also appear in such a position, because no configuration could be found in which a clause lacking a complementiser could conceivably be either the complement of a preposition or the second term of a construct.

Accusative positions. We will now consider two accusative positions: the postverbal object position and the ECM position.

As shown in (66), a lexical DP may appear in postverbal object position, but an independent pronoun may not.

- (66) a. Šufnaa-k. (*clitic*)
 saw:1P-you
 ‘I saw you.’
 b. *Šuf-na ’inta. (*pronoun*)

Furthermore, we see in (67) that a pronoun clitic may appear in object position, while pro_{ref} may not.

- (67) a. Feen ‘arabiyit-i? Bi’t-aha. (*clitic*)
 where car-me sold:1S-her
 ‘Where is my car? I sold it.’
 b. * Feen ‘arabiyit-i? Bi’t pro_{ref} .

Unfortunately, as in the case of the genitive positions, it is hard to find a potential case where existential pro_{exp} could appear in this position. So, we now turn to the ECM construction, which is more telling.

EA has a construction in which the thematic subject of the lower clause behaves in some respects as the object of the active particle ‘*aayiz* (or ‘*aawiz*) ‘want’. Such a

construction is known as an ECM (Exceptional Case Marking) construction, because an element in or from the lower clause “exceptionally” receives accusative case from the verb in the higher clause. Like its English equivalent *want*, ‘*aayiz* can take a simple DP object, appear in a control construction, or behave like an ECM verb, as illustrated in (68a) through (68c). In an additional construction, shown in (68d), which perhaps resembles the English construction with *want for* suggested in the translation, ‘*aayiz* is followed by a clause headed by ‘*inn*.⁷

- (68) a. ‘Aayiz ‘arabiyya.
 want:PART:M car
 ‘I want a car.’
- b. ‘Aayiz aštiri ‘arabiyya.
 want:PART:M buy:1S car
 ‘I want to buy a car.’
- c. ‘Aayiz baaba yištirii-li ‘arabiyya.
 want:PART:M father buy:3M-to.me car
 ‘I want Dad to buy me a car.’
- d. ‘Aayiz inn baaba yištirii-li ‘arabiyya.
 want:PART:M that father buy:3M-to.me car
 ‘I want (for) Dad to buy me a car.’

In the discussion that follows, we will refer to the position following ‘*aayiz* in the ECM construction simply as “the ECM position”.

Before proceeding to the distribution of DPs with respect to the ECM position, we need to establish that it is indeed an accusative position. There are at least four arguments to this effect, of which two are straightforward. First, on the basis of their inability to appear in preverbal subject position, we have established that clitics are never nominative in EA. Therefore, the fact that a clitic can attach to ‘*aayiz* as in (69), seems to confirm the intuitive assumption that the element following ‘*aayiz* is accusative.

- (69) ‘Ana ‘awz-ak timši. (*clitic*) (DemClStr (16b), modified)
 I want:M-you walk:2MS
 ‘I want you to leave.’

A second argument that the element in the ECM position is accusative is that the form of the first person singular clitic in the ECM position is *-ni*, the same form it takes as the object of a verb, as shown in (70), rather than the forms *-i/-ya* shown earlier in (22b) which are used elsewhere.

⁷ The ‘*inn* in these arguably subjunctive clauses is *pro*-sensitive just as in an indefinite clause, as shown in (i).

- i. 1. ‘Ana ‘aawiz inn-ak timši. (*clitic*) (DemClStr (15), modified)
 I want:M that-you walk:2MS
 ‘I want you to leave.’
2. * ‘Ana ‘aawiz inn *pro*_{ref} timši.

focused in the way a lexical noun phrase can. This is most easily shown by modification with *bass* ‘only’, as in (76) and (77). (Brackets here indicate the relevant scope of *bass*, not necessarily syntactic constituency. In some cases, sentences marked as ungrammatical are actually grammatical with the irrelevant scope whereby *bass* modifies the entire verb phrase.)

- (76) Šufna [Muna *bass*.]
 saw:1P Mona only
 ‘We saw only Mona.’
- (77) a. Šufnaa-ha [hiyya *bass*.]
 saw:1P-her she only
 ‘We saw only her.’
 b. *Šufnaa-[ha *bass*.]
 saw:1P-her only

To focus the argument expressed by the clitic, it is “doubled” by an independent pronoun, as has been done in (77a). This can be done in the accusative postverbal object position, as in (77b), as well as in the genitive prepositional object position, as in (78):

- (78) B-akkallim ‘an-ha [hiyya *bass*.]
 PRES-speak:1S about-her she only
 ‘I’m talking only about her.’

However, modification with *bass* is ungrammatical or degraded in the preverbal subject position, as shown in (79a).⁸ The sentence can be repaired by turning it into a cleft, with addition of the relative pronoun *illi*, as in (79b).

- (79) a. *Muna *bass* ḥa-tǧanni.
 Mona only FUT-sing:3F
 intended: ‘Only Mona will sing.’
 b. Muna *bass* illi ḥa-tǧanni.
 Mona only which FUT-sing:3F
 ‘It’s only Mona who will sing.’

Sentence (80) further shows that *bass* cannot be used to modify an independent pronoun doubling a clitic after *’inn*.

- (80) *’Ult-ilak inn-aha [hiyya *bass*] ḥa-tǧanni.
 said:1S-to.you that-her she only FUT-sing:3F
 intended: ‘I told you that only she would sing.’

⁸ A subject can be modified by *bass* in the Aux S V order:

- a. Kaanit hiyya *bass* katabit gawaab.
 was:3F she only wrote:3F letter
 ‘Only she had written a letter.’

Having established that this pronominal doubling is a non-subject behaviour, we can now test the ECM position. Unfortunately, the results are somewhat inconclusive. While (81) was judged as only slightly degraded, the structurally similar sentence in (82) was judged ungrammatical.

- (81) ? ‘Ayzin-ha [hiyya bass] tğanni.
 want:P-her Mona only sing:3F
 ‘We want only Mona to sing.’
- (82) * Muna ‘ayzaa-n [ana bass] aħill il-muškila.
 Mona want:F-me I only solve:1S the-problem
 intended: ‘Mona wants only me to solve the problem.’

Such mixed results can be interpreted in two different ways. The fact that the sentences are either degraded or ungrammatical could be interpreted as showing that the clitic is behaving as a subject. More dubiously, the fact that such sentences are sometimes only somewhat degraded could be said to support the hypothesis that the ECM is an object position.⁹ Sentence (83) shows that a lexical DP can be modified in the ECM position.

- (83) ‘Ayziin [Muna bass] tğanni.
 want:P Mona only sing:3F
 ‘We want only Mona to sing.’

Taken with the fact that such modification was ungrammatical in the unambiguous subject position in (79a), this lends support to the claim that the ECM position is an object position.

Tentatively concluding on the basis of at least the first three arguments that an element in the ECM position is accusative, making the resulting construction a true ECM construction, we can now turn to the question of what elements can appear in this position. It can be seen from above in (68c) and (69c) that both lexical DPs and pronominal clitics can appear in the ECM position. However, an independent pronoun may not, as shown in (84b).

- (84) a. Muna ‘ayzaa-na niigi bukra. (*clitic*)
 Mona want:F-us come:1P tomorrow
 ‘Mona wants us to come tomorrow.’
- b. *Mona ‘ayza ’iħna niigi bukra. (*pronoun*)

We conclude then that independent pronouns are never accusative.

In contrast with referential *pro*_{ref} (as above in example (7b)), expletive *pro*_{exp} may appear in the ECM construction, as shown with two different types of impersonal predicates in (85) and (86).

- (85) a. *pro*_{exp} Kaan liyya ’ašħaab.
 was:3M to.me friends
 ‘I had some friends.’

⁹ The outcome, regardless of what it ultimately is, will need to be reconciled with a fact discussed by Wahba concerning questioning the DP in subject position. This is possible with the subject *miin* ‘who’ but not with the subject ‘*ee(h)*’ ‘what’. Give that *wh* questioning and ‘only’ both involve focus, it is strange that one should be grammatical and the other ungrammatical in the same position.

- b. ‘Aayiz *pro*_{exp} yikuun liyya ’aşḥaab. (Google)
 want:M is:3M to.me friends
 ‘I want to have some friends.’

- (86) ‘Aayiz *pro*_{exp} yiḏhar ’inn ’Amriika bi-tsaā’id il-’arab. (Google)
 want:M seem:3M that America PRES-help:3F the-Arabs
 ‘He wants it to seem that America is helping the Arabs.’

A remark must be made in relation to expletive clitics. Recall that *’inn*, when introducing a clause with an expletive subject, can be followed either by *pro*_{exp} or a third person masculine clitic. This fact is shown again in (87), repeated from (24).

- (87) a. Muna ’alit-li ’inn *pro*_{exp} ma-fii-š filuus.
 Mona said:3F-to.me that NEG-there.is-NEG money
 b. Muna ’alit-li ’inn-u ma-fii-š filuus. (*clitic*)
 ‘Mona told me that there isn’t any money.’

It is thus curious that the ECM position can be filled by *pro*_{exp} but not by its clitic counterpart, as seen in (88)

- (88) a. Muna ‘ayza *pro*_{exp} ygi-lha ḏyuuf.
 Mona want:F come:3M-to.her guests
 b. *Muna ‘ayzaa-/h/ ygi-lha ḏyuuf. (*clitic*)
 ‘Mona would like to have some guests.’

This fact will remain an unresolved issue.

3.2 The case properties of DPs in EA

Having methodically considered the distribution of all types of DPs in five different case position, we are now able to draw up a case profile for each type of DP.

Lexical DPs. These may appear in all of the positions considered. A lexical DP may thus bear any of the three cases: nominative, genitive, and accusative.

Independent pronouns. These appear neither in the two genitive positions nor in the two accusative positions, but they do appear in both nominative positions. It thus appears that independent pronouns are always nominative. This would mean that pronouns used to double a genitive or accusative clitic are also nominative, which could be said to be a default case.

An alternative view of independent pronouns is conceivable (Demirdache, p.c.) in which an independent pronoun can appear in any case, but it must double something (either a clitic or *pro*_{ref}. However, this view is problematic for at least two reasons. The first is that pronouns can be coordinated with lexical DPs (and indeed also with other pronouns), as in (89).

- (89) [’Ana w Muna] mišiina badri. *Unconfirmed!*
 I and Mona left:1P early
 ‘Mona and I left early.’

This calls into question what the pronoun is doubling. When the coordinated structure is in subject position, as in (89), then we must stipulate that it doubles a *pro*_{ref} subject in spec-IP. But that *pro*_{ref} must have first person plural features, while *'ana* is singular.

Second, the doubling requirement seems rather unconstrained, in that the doubling does not necessarily come about by movement. Furthermore, the doubling condition is a constraint on the binding requirements of the c-commanding element rather than on the c-commanded element. Both of these facts are evident in (90).

- (90) *'Ana bint-i ḥ-titxarrag is-sanaa-di. Unconfirmed!*
 I daughter-me FUT-graduate:3F the-year-this:F
 '(Me,) my daughter will graduate this year.'

Here *'ana* is a topic, but what it doubles is the clitic *-i* embedded inside the DP *binti* in subject position, making it difficult to derive by movement of the pronoun to topic position. Since this topic c-commands the clitic, the doubling constraint is imposing a binding restriction on a c-commanding element, making the pronoun a sort of reverse anaphor.

Referential pronominal clitics. These appear freely in both of the genitive positions and in both of the accusative positions. So, it is clear that these clitics may bear genitive and accusative case. However, they may not appear in the nominative positions, Demirdache's claim in (50c) that clitics are never nominative appears to be correct.

Expletive pronominal clitic. No context was found in which this clitic could be tested for genitive case. Similarly, no configuration could be found to test whether this clitic could appear in the accusative postverbal object position. However, the ECM position was amenable to testing, and it turned out that the clitic could not appear in this position. The clitic cannot attach to an insensitive complementiser in the nominal preverbal position, and neither can it attach to the auxiliary in a compound tense. We thus find ourselves in the unfortunate situation that the expletive pronominal clitic does not appear in any of the test positions. It seems to appear exclusively after *'inn*, whose case properties we are trying to establish. So, the case properties of this element will depend entirely on the analysis of *'inn*.

Referential *pro*_{ref}. *Pro*_{ref} can appear in the preverbal nominative position, but not in any of the genitive or accusative positions. Since *pro* cannot be directly observed, we cannot see whether it precedes the auxiliary verb or follows it in a compound tense, making it impossible to test our second nominative position. It therefore seems to always be nominative. This result confirms Demirdache's claim in (50b).

Expletive *pro*_{exp}. *Pro*_{exp} may be nominative, because it may appear in the preverbal nominative position. As was the case with the referential clitics, no configuration could be found in which to test with the two genitive positions or the postverbal object accusative position. However, *pro*_{exp} freely occurs in the ECM position, which was established to be an accusative position on the basis of four different arguments. Since the status of genitive case is moot, these findings essentially confirm Demirdache's claim in (50a) that *pro*_{exp} can appear in any case.

Complementary distribution. Pro_{ref} was found to be exclusively nominative, while the referential pronominal clitics are always either genitive or accusative. Therefore, Demirdache’s suggestion that pro_{ref} and the (referential) clitics are in complementary distribution seems to be confirmed. Note, however, that the independent pronouns are also exclusively nominative. So, they also stand in complementary distribution with pronominal clitics.

4 Case or EPP?

In the previous section, the case properties of the various types of DPs in EA were subjected to rigorous scrutiny. We are now prepared to further develop a case-based analysis of the pro -sensitive complementisers. In doing so, we will address the double case problem, which may need to be addressed under other analyses, as well. But other problems will remain, leading us to develop of an alternative analysis based on a weak EPP feature. Both analyses will be shown to have problems, some of them case-related, which it makes it difficult to choose between them.

4.1 Analysis 1: Case

The first four of the elements of Demirdache’s analysis listed in (50) were confirmed in the previous section. The two most important of these elements are the ideas that pro_{exp} can be accusative while pro_{ref} can’t. The last element in (50), namely that $'inn$ assigns accusative case, now needs to be examined in light of the complete picture we now have of the distribution of DPs in Egyptian Arabic with respect to case.

To briefly review the basic idea of the analysis sketched, consider again the following two configurations, one grammatical and the other not:

- (91) a. $'inn\ pro_{exp}\ \dots$
 b. * $'inn\ pro_{ref}\ \dots$

$'Inn$ must assign accusative case by government. In both configurations, the pro is in a position where it is governed by $'inn$ and hence should be assigned accusative case by government. Configuration (91a) is grammatical, because pro_{exp} can bear the accusative case which $'inn$ assigns it. The grammaticality of DPs, clitics, and the expletive clitic after $'inn$ will be accounted for in precisely the same way, because all these elements can bear accusative case. Configuration (91b) is ungrammatical, because pro_{ref} can only be nominative, making it incompatible with the accusative case it should get from $'inn$.

The double case problem. We will now address the double case problem alluded to earlier. Consider a clause with an overt subject, embedded under $'inn$, as in (92). We will assume that the preverbal subject is in spec-IP.

- (92) $'inn\ [IP\ Layla_{[nom,acc]} [I' katabit\ gawaab\]]$
 that Layla wrote:3F letter
 ‘that Layla wrote a letter’

It is standardly assumed that the subject in spec-IP receives nominative case from finite tense, that is, from the finite I^0 head. Under this assumption, *Layla* is nominative in (92). But in the analysis under question, the DP following *'inn* (which is structurally also governed by it) receives accusative case from *'inn*. This leads to the contradiction that *Layla* in (92) is both nominative and accusative.

This problem might seem sufficient cause to dismiss the hypothesis immediately that *'inn* assigns accusative case. However, a similar problem crops up if we examine the ECM construction more closely. Consider the sentences in (93).

- (93) a. 'Ana 'aayiz 'inn Maahir yimši.
 I want:M that Maher walk:3M
 b. 'Ana 'aayiz Maahir yimši.
 I want:M Maher walk:3M
 'I want Maher to leave.'

If the verb *yimši* in the embedded clause in (93) does not assign nominative case, then there is no double case problem under the case analysis. On the basis of extraction data, Wahba (1984) argues that unmarked imperfect verbs (in the embedded environments she discusses) are non-finite, which might lead us to assume that the verb is some type of agreeing infinitive which cannot assign nominative case. Furthermore, if it assumed that this putatively infinitival verb assigns null case, that case can only be borne by PRO, so the lexical DP *Maahir* will not receive that case either. It could thus be assumed that *Maahir* only gets accusative case from *'inn* in (93a) and from *'aayiz* in (93b). However, whatever the tense properties of a verb like *yimši*, there does not seem to be any independent reason to believe that its case properties are any different from that of an indisputably tensed indicative verb, as will now be shown.

A verb form such as *yimši* is known as an “unmarked imperfect”. Prefixing either *bi-* (present) or *ħa-* (future) to such a form yields an indicative tensed form, which we can call a “marked perfect”. The modal contrast between the marked and unmarked imperfect is shown in (94), where *'ašaan* before an unmarked form is translated as ‘so that’, while before an indicative it is translated as ‘because’.

- (94) a. 'Ana 'aa'id saakit 'ašaan Layla tğanni.
 I sitting:M being.quiet:M because Layla sing:3F
 'I'm sitting quietly so that Layla can/will sing.'
 b. 'Ana 'aa'id saakit 'ašaan Layla bi-tğanni.
 I sitting:M being.quiet:M because Layla PRES-sing:3F
 'I'm sitting quietly so that Layla's singing.'
 c. 'Ana 'aa'id saakit 'ašaan Layla ħa-tğanni.
 I sitting:M being.quiet:M because Layla PRES-sing:3F
 'I'm sitting quietly so that Layla's going to sing.'

There are several reasons to think that an unmarked imperfect verb is a subjunctive, able to assign nominative case. We will here consider only embedding under the auxiliary verb *kaan*. Observe in (95) that three indisputably tensed forms (perfect, present, and future) can appear either alone or embedded under a form of the auxiliary verb *kaan*.

- (95) a. ('Ana) (kunt) 'a'adt 'ala k-kanaba.
 I was:1S sat:1S on the-sofa
 'I (had) sat on the sofa.'
- b. ('Ana) (kunt) b-a'ud 'ala k-kanaba.
 I was:1S PRES-sit:1S on the-sofa
 'I sit(/sat) (habitually) on the sofa.'
- c. ('Ana) (kunt) ḥ-a'ud 'ala k-kanaba.
 I was:1S FUT-sit:1S on the-sofa
 'I am(/was) going to sit on the sofa.'

Now note that the unmarked imperfect has the same properties, as shown in (96).

- (96) ('Ana) (kunt) a'ud feen?
 I was:1S sit:1S where
 'Where am(/was) I supposed to sit?'

Whatever the case properties of any of these verbs are in (95) and (96), there is simply no evidence that they are different for the marked and unmarked imperfect. In all cases, they can be embedded under *kaan*, and the subject may be included or omitted, even in the absence of *kaan*. Other arguments could be developed by establishing similarities between the unmarked imperfect in EA and the subjunctive in better understood languages, such as Spanish.

If unmarked imperfect verbs are indeed subjunctives, then the double case problem rears its ugly head again in the ECM construction. Consider (97).

- (97) a. 'Ana 'aayiz 'inn Maahir_[nom,acc] yimši.
 I want:M that Maher walk:3M
 b. 'Ana 'aayiz Maahir_[nom,acc] yimši.
 I want:M Maher walk:3M
 'I want Maher to leave.'

Maahir now gets nominative case from the verb *yimši*, while it also gets accusative case from the ECM predicate *'aayiz*. The case-based analysis of *'inn* can therefore not be dismissed merely on the basis of the double case problem.

Let us attempt a solution to the double case problem, tentatively assuming that spec-IP is filled with *pro* and that a lexical “subject” is either an adjunct to IP or that it occupies the specifier of a slightly higher projection.¹⁰ Then, *pro* can get nominative case from I⁰, while the lexical “subject” gets its case exclusively from some other element, such as the ECM verb in (98) or (by hypothesis) *'inn* in (99).

- (98) 'Aayiz Maahir_[acc] *pro*_[nom] yimši.
 want:M Maher want:3M
 'I want Maher to leave.'
- (99) ... 'inn Layla_[acc] *pro*_[nom] katabit ...
 that Layla wrote:3F
 '...that Layla wrote....'

¹⁰ *References?*

Such a solution may be independently motivated by certain predicates that take expletive subjects. Consider (100) and (101). Neither the first person singular clitic nor a coindexed *pro* can be in the specifier of IP, because that verb agrees not with any first person singular element but with expletive *pro*_{exp}.

(100) ... 'inn-i_[acc,1s] *pro*_{exp[nom,3m]} kaan 'and-i filuus.
 that-me was:3M at-me money
 '...that I had money.'

(101) Muna 'ayzaa-ni_[acc,1s] *pro*_{exp[nom,3m]} ykuun 'and-i fluus kitiir.
 Mona want:F-me is:3M at-me money much
 'Mona wants me to have a lot of money.'

Assuming the element governed by 'inn or by the ECM verb to be independent of the element occupying spec-IP thus takes care only of the case properties we needed for predicates like *yimši* 'walk', but also of the agreement pattern observed.

ECM constructions with an expletive *pro*_{exp} structural subject constitute an additional problem for the view not espoused here that independent pronouns can appear in any case but are instead subject to a doubling requirement. Consider the variant of (101) in (102).

(102) * Muna 'ayzaa 'ana ykuun 'and-i fluus kitiir (fi geeb-i).
 Mona want:F I is:3M at-me money much in pocket-me
 intended: 'Mona wants me to have a lot of money (in my pocket).' *Unconfirmed!*

Here there are two first person clitics that 'ana could be said to be doubling, and yet the sentence is ungrammatical. This ungrammaticality seems best explained by the pronoun's limited case repertoire.

While it is not the intention here to develop a full-fledged analysis of 'doubled' *pro* subjects, it will be noted that such an analysis would need to constrain the coindexation possibilities between a *pro* and its higher doubler. A partial range of possibilities is shown in (103). As shown in (103e) and (103g), that a referential *pro*_{ref} structural subject may not occur if the higher element is an expletive clitic or *pro*_{exp}.

- (103) a. 'inn Muna_{ref}/hiyya_{ref} [IP *pro*_{ref} V ... (*lex. DP/pronoun*)
 b. 'inn Muna_{ref}/hiyya_{ref} [IP *pro*_{exp} V ... (*lex. DP/pronoun*)
 c. 'inn-aha_{ref} [IP *pro*_{ref} V ... (*referential clitic*)
 d. 'inn-aha_{ref} [IP *pro*_{exp} V ... (*referential clitic*)
 e. * 'inn-**u**_{exp} [IP ***pro***_{ref} V ... (*expletive clitic*)
 f. 'inn-**u**_{exp} [IP *pro*_{exp} V ... (*expletive clitic*)
 g. * 'inn ***pro***_{exp} [IP ***pro***_{ref} V ...
 h. 'inn *pro*_{exp} [IP *pro*_{exp} V ...
 i. * 'inn ***pro***_{ref} [IP ***pro***_{ref} V ...
 j. 'inn *pro*_{ref} [IP *pro*_{exp} V ...

It is necessary to somehow block (103e), (103g), and (103i) to prevent any of the three configurations in (104).

- (104) a. * ... inn- u_{exp} pro_{ref} ġannit.
 ... that-him sang:3F
 intended: ‘...that she sang.’
 b. * inn pro_{exp} pro_{ref} ġannit.
 c. * inn pro_{ref} pro_{ref} ġannit.

It is not clear whether (103j) should be ruled in or out, because if the lower *pro* is expletive, it is impossible to demonstrate independently of case properties whether the higher *pro* doubling it is expletive as in (105b) or referential as in (105c).

- (105) a. ... inn Muna pro_{exp} kaan ‘and-aha fluus.
 that Mona was:3M at-her money
 ‘...that Mona had some money.’
 b. ... inn pro_{ref} pro_{exp} ‘and-aha fluus.
 c. ... inn pro_{exp} pro_{exp} ‘and-aha fluus.

Under the case analysis, the ungrammaticality of both configurations in which the higher *pro* is referential (that is (103i) and (103j)) is accounted for by virtue of the nominative nature of pro_{ref} .

Given that doubling of a *pro* subject is needed sometimes, we leave open the question of whether it is always the case that a lexical “subject” actually doubles a structural *pro* subject, as has been claimed for some other languages (e.g., Kim (2006) for Spanish).

We have now either solved the double case problem or at least shown that it is not restricted to a particular analysis of *pro*-sensitive complementisers. We can now turn our attention to another problem which is specific to the case-based analysis of the complementisers.

Independent pronouns. In section 3.1, it was shown that independent pronouns can only be nominative, unless we adopt the problematic view that a pronoun may appear in any case but must obligatorily double something. However, both *pro*-sensitive complementisers *’inn* can be followed by such a pronoun, as shown in (106).

- (106) B-aħibb-aha li’inn hiyya šaṭra. (*pronoun*)
 PRES-like:1S-her because she intelligent:F
 ‘I like her because she’s smart.’

This is very problematic if *’inn* assigns accusative case, considering that the exclusively nominative nature of the pronouns was based on very strong evidence, namely, their inability to appear in any genitive or accusative positions.

There is no way to patch this problem by manipulating the *pro*-doubling solution proposed for the double case problem. The two possible doubling configurations for (106) are given in (107).

- (107) a. ... li’inn hiyya $_{[\text{acc}]}$ $pro_{\text{ref}[\text{nom}]}$ šaṭra.
 b. ... li’inn $pro_{\text{ref}[\text{acc}]}$ hiyya $_{[\text{nom}]}$ šaṭra.

The structure in (107a) cannot be correct, because *hiyya* gets accusative case from *li'inn*, while as an independent pronoun it must be nominative. But similarly, (107b) cannot be correct, because on the basis of the ECM construction it was shown that *pro_{ref}* cannot be accusative.

We thus see that what was the most obvious problem for the case analysis, the double case problem, is a more general problem in EA. However, two analysis-specific issues remained, including the rather serious problem involving the case of independent pronouns. Let us therefore develop a second analysis which does not rely on case assignment and see if it fares any better.

4.2 Analysis 2: EPP

The starting point for an alternative analysis is the intuitive idea that *'inn* must be followed by some sort of DP, but that something goes wrong if that DP is referential *pro_{ref}*. An element's need for a DP is commonly called an EPP feature. An EPP feature is generally used to explain a head's need for something to occupy its specifier, thereby preceding that head. Since the DP in the case of *'inn* does not raise to its specifier (at least not overtly), let's then assume that *'inn* is endowed with a weak EPP feature. Let's work through an example with an independent pronoun subject as in (108).

- (108) ... inn hiyya_[nom] katabit gawaab.
 that she wrote:3S letter
 '...that she wrote a letter.'

Hiyya in (108) gets nominative case from finite I^0 . *'Inn* does not have any case-assigning features. So, the double case problem does not come up; *hiyya* receives only one case, and that is nominative case from I^0 . *Hiyya* has a [D] (nominal) feature, by virtue of being a DP. Since categorial features are assumed to be interpretable, these features remain available throughout the derivation. *'Inn* has an EPP feature which must be checked, say, through government. This feature can be checked by *hiyya*, which *'inn* governs, and the derivation converges. A clause with a lexical DP or expletive *pro_{exp}* subject converges in the same way. All three types of DPs can bear nominative case, and this is the only case they are assigned.

Let's now turn to the two situations where embedding a clause under *'inn* results in ungrammaticality. First, in (109b), the overt subject *Layla* has not raised all the way to spec-IP.

- (109) a. [_{IP} Kaanit Layla katabit gawaab.] (DemClStr (2b), modified)
 was:3FS Layla wrote:3FS letter
 'Layla had written a letter.'
- b. * ... inn [_{IP} kaanit Layla katabit gawaab.] (DemClStr (4b), modified)
 that was:3FS Layla wrote:3FS letter

The ungrammaticality of (109b) is explained by the fact that *'inn* cannot satisfy its EPP feature under government; *Layla* is simply too far down in the structure for *'inn* to access it.

Let's now extend this explanation to the second case of ungrammaticality with *'inn*, clauses with a referential *pro_{ref}* subject, by assuming that *pro_{ref}* does not move to spec-IP, as in (110).

- (110) a. [_{IP} Kaanit *pro*_{ref} katabit gawaab.] (_{DemClStr} (6b), modified)
 was:3FS wrote:3FS letter
 ‘She had written a letter.’
 b. * ... inn [_{IP} kaanit *pro*_{ref} katabit gawaab.] (_{DemClStr} (4c), modified)

We know that DPs do not always move to spec-IP, because we see exactly that in (109a). However, an EPP analysis forces us to stipulate that *pro*_{ref} *never* moves there, because letting it do so would allow ‘*inn*’ to satisfy its EPP feature.

The EPP analysis accounts for lexical DPs, independent pronouns, the expletive clitic (whose case properties are entirely dependent on the analysis of ‘*inn*’ and both types of *pro*). However, a problem arises with referential pronominal clitics. It was shown that referential pronominal clitics are never nominative. Now consider the clause in (111).

- (111) a. ... inn-aha_[acc] bi-tǧanni.
 that-her PRES-sing:3F
 ‘...that she’s singing.’
 b. ... inn-aha_[acc] bi-tǧanni *pro*_{ref[nom]}.

‘*Inn*’ is followed by a referential clitic *-aha*, and the clause is grammatical. The clitic must be accusative (or perhaps genitive), but where could the clitic get this case from? If there is no *pro* in the structure, as in (111a), then the only case the clitic receives is nominative, from finite I⁰. Conversely, if the clitic doubles a *pro*_{ref} as in (111b), then finite tense is able to assign its nominative case to the *pro*_{ref}, but there is still no source for the accusative case of the clitic, unless one wants to make the dubious assumption that accusative is the default case in EA, unlike CA in which the default case was nominative.

4.3 Choosing between the analyses

Two analyses have been developed to explain the distribution of DPs under ‘*inn*’. Both of them directly contradict a well-grounded finding of our survey of case properties in EA. The case analysis contradicts the finding that independent pronouns are nominative, while the EPP analysis contradicts the finding that referential pronominal clitics are never nominative. This makes it very difficult to choose between the two analyses.

We have seen that the expletive clitic can attach to ‘*inn*’ while it cannot appear in the ECM position, as shown again in (112).

- (112) a. Muna ‘alit-li ‘inn-**u**_{acc} ma-fii-š filuus. (*clitic*)
 Mona said:3F-to.me that-him NEG-there.is-NEG money
 ‘Mona told me that there isn’t any money.’
 b. * Muna ‘ayzaa-/**h**/_{acc} yigi-lha dyuuf. (*clitic*)
 Mona want:F-him come:3M-to.her guests
 ‘Mona would like to have some guests.’

One goal of the analysis should be to account for this difference, but this cannot be done on the basis of case, nor on the basis of an EPP feature. This remains an unsolved problem which also fails to help us decide between the two analyses.

5 Conclusion

In this paper we have examined the syntactic properties of a variety of *pro*-sensitive heads in the complementiser field. A case-based analysis suggested itself, and in order to evaluate such an analysis, the distribution of DPs was systematically examined with respect to known case positions. The case-based analysis of the complementisers was found to contradict a well-grounded finding of this case survey, and a second analysis was developed on the basis of the idea that *pro*-sensitive complementisers have a weak EPP feature and that referential *pro*_{ref} does not raise to spec-IP. This analysis also contradicted a case generalisation: the finding that referential pronominal clitics are never nominative. Unless the case analysis can be salvaged by the reanalysis of independent pronouns, as suggested, it is thus difficult to choose between the analyses, while it is at the same difficult to imagine a third possible line of analysis.

Apart from the question of which analysis is chosen, or whether a third one is found, the fact that EA makes such a clear syntactic distinction between two different case-bearing empty categories, *pro*_{ref} and *pro*_{exp} is interesting in its own right. Additional questions remain for further research. It is not clear how the either of the analyses presented can be related to the CA construction in which there is predicate-subject inversion, as in (26b). The double case problem should be more rigorously treated, as should the ECM construction. We still have not provided an account of why/how the elocutionary particles can be completely allergic to *pro*_{ref}, but still slightly allergic to *pro*_{exp}. All of these questions, as well as the agreeing properties of exclamative *da* and interrogative *huwwa* must be left for further research.

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