# Splitting Neg: Sentential Negation Patterns in Cairene Egyptian Arabic Revisited

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#### Negation

 Cairene Egyptian Arabic (CEA), like several other Arabic dialects, exhibits a two-pattern negation system: the discontinuous maa...š pattern and the independent miš pattern.

- 1a. maa-saafir-t-i-š

  NEG-traveled-1sG-EV-NEG

  'I did not travel.'
- b. Aħmad miš doktoor أحمد مش دكتور. Aħmad neg doctor

  'Ahmad is not a doctor.'

## Main questions on the morphosyntax of sentential negation

- The generative literature on the morphosyntax of sentential negation in Arabic dialects (e.g., Eid 1993, Shlonsky 1997, Benmamoun 2000, Ouhalla 2002, Aoun et al 2010, among others) has typically focused on three main issues:
- (i) The conditions regulating the distribution of the two negation patterns;
- (ii) The position of negation in clause structure (higher or lower than T); and
- (iii) The grammatical status of the -*š* segment of the negation marker in both patterns.

#### Previous answers and a new proposal

- In the relevant generative literature, it has been generally suggested that negation patterns are the result of syntactic head movement, that Neg is lower than T, and that the -š is either a Spec of NegP or part of a discontinuous Neg head.
- In this paper, I empirically question these assumptions.
- Instead, I argue that negation patterns are better dealt with as the result of morphological head movement, that Neg is higher than T on the clausal hierarchy, and that -š is a distinct 'formally negative' head that can be deleted under certain conditions.

#### Distribution of negation patterns in CEA

 The main challenge to a syntactic analysis of negation patterns in CEA is that the distribution of negation patterns within the same dialect does not follow a verbal-nonverbal contrast, or a perfective-imperfective distinction. Rather, the contexts in which each pattern occurs do not constitute a homogenous set.

## Contexts of the maa... š pattern

• In addition to its occurrence with perfective verb forms (1a), the discontinuous negation can also be hosted by the present tense aspectual imperfective (2a), pronominals (2b), the existential expletive *fii(h)* (2c), and PPs whose complement is a pronominal (2d).

## Contexts of the maa... š pattern

```
2a.
     maa-ba-saafir-š
                                kətiir
                                                        ما باسافرش كتير.
     NEG-ASP-travel.1sg-NEG
                                much
     'I don't travel much'
                                       doktoor
 b. maa-huu-š/maa-huwwa-a-š
                                                  ماهوش/ماهوّاش دكتور.
     NEG-3SG-NEG/NEG-3SG-EV-NEG
                                       doctor
     'He is not a doctor.'
     maa-fii-š
                     ħad
                                hinaa
                                                         مافیش حد هنا.
     NEG-in.it-NEG someone
                                here
     'There is nobody here.'
     maa-ʕand-ii-š
                      Sarabiyyah
                                                       ما عنديش عربية.
     NEG-at-me-NEG
                      car
     'I don't have a car.'
```

## Contexts of the miš pattern

• Similarly, in addition to copular structures (1b), the independent *miš* pattern occurs optionally with the present tense aspectual imperfective (3a), obligatorily with future verb forms (3b), and less preferably with copular structures with predicate PPs (3c).

## Contexts of the *miš* pattern

```
3a. miš ba-saafir kətiir مش باسافر كتير.
NEG ASP-travel.1sG much 'I do not travel much.'
b. miš ħa-saafir مش هاسافر.
NEG FUT-travel.1sG 'I will not travel.'
c. ? miš Sand-ii Sarabiyyah ? مش عندي عربية.
NEG at-me car 'I don't have a car.'
```

#### Variation in hosting categories

- On the other hand, cross-dialectally, certain categories are able to host negation in some dialects, but not in others.
- For example, while nominals and adjectives in CEA cannot host negation, they can do so in Moroccan Arabic (MA) and Southern Egyptian Arabic (SEA) (cf. Benamoun 2000 and Khalafallah 1969, respectively).

## Egyptian vs. Moroccan

4a.	*Aħmad	maa-doktoor-š	EA	*أحمد ما دكتورش
b.		NEG-doctor-NEG maa-taʕbaan-š	EA	*أحمد ما تعبانش
4a.		NEG-tired-NEG naa-fəllaħ-š	MA	هو ما فلاحش.
		EG-farmer-NEG a farmer.'		
b.	huwa n	naa-Twil-š	MA	هو ما طويلش.
	he N	EG-tall-NEG		
	'He is not tall.'			

### Adjacency

 Notice also that in the presence of multiple potential hosts for negation, merger is always with the closest one.

maa-fii-š 5a. had hinaa مافیش حد هنا NEG-in.it-NEG someone here 'There is nobody here.' b. maa-had-i-š hinaa \*فیه ماحدش هنا. \*fii-h in-it here NEG-someone-NEG

#### Morphological factors in negation

- It seems, then, that the key factors relevant to the distribution of negation patterns are related to affixality of the negative head, the hosting-ability of certain categories but not others, and adjacency.
- These are more easily accommodated into a morphological analysis than into a syntactic analysis.

#### Head movement in the grammar

 The status of head movement in the grammar has been subject to debate, with some proposing to treat it as an operation of the morphological component (Chomsky 2001, Boeckx and Stjepanović 2001).

#### Conclusion #1

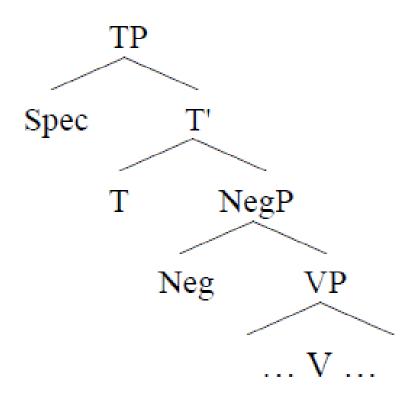
 I conclude, then, that a morphological analysis in terms of the affixal properties of functional heads, the hosting-ability (or lack thereof) of different syntactic categories, and adjacency, is to be preferred on both empirical and conceptual grounds.

#### Where is Neg on the clausal hierarchy?

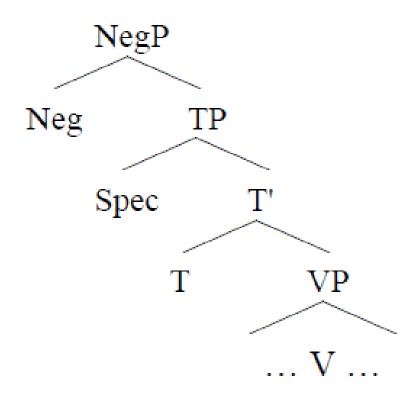
- There have been two proposals regarding the placement of the head hosting negation on the clausal hierarchy in Arabic dialects:
  - **The low-Neg analysis**, where Neg is lower than T in the syntactic tree (Benmamoun 2000; Ouhalla 2002; Aoun et al 2010).
  - The high-Neg analysis, where Neg is higher than T in the syntactic tree (Diesing and Jelinek 1995;
     Soltan 2007).

#### Where is Neg on the clausal hierarchy?

#### Low-Neg analysis



#### High-Neg analysis



### A challenge to the low-Neg analysis

- A serious challenge to the low-Neg analysis comes from the fact that the miš pattern may indeed occur with perfective verb forms.
- This happens in two contexts: in some subdialects of Egyptian Arabic (Soltan 2007), and in the speech of Egyptian children (Omar 1967).

## $mi\check{s}$ + the perfective

 The following pattern is common in the speech of Egyptians from the Sharqeyyah governorate as well as children in the early stage of language acquisition:

6. Panaa miš ləʕib-t I NEG played.1sG Sharqeyyah Egyptian Arabic 'I did not play.'

## miš + the perfective

- But it may actually be less localized. From Facebook in post-revolution Egypt:
  - "ساعات بندم انى مش كنت عايش فى القاهرة عشان اعيش اللحظات الحلوه دى بس الحمد لله مصر فيها رجاله فى كل حتة تحيا مصر اللهم ارزقنى الشهادة يارب."
- "المجلس العسكري حاول اكتر من مرة ان يجهض الثورة ومش قدر."
  - "انتو غلطانين يا ادمن لانه الناس طردته من المؤتمر مش حصل مشادات ولا بتاع."

### A challenge to the low-Neg analysis

- Under the low-Neg analysis, there is no way to derive the sentence in (6) without V skipping over Neg on its way to T, followed by Neg moving over the T complex, to generate the right word order.
- Both movements would violate the *Head Movement Constraint* (HMC); skipping heads is
   not allowed (Travis 1984).
- These negation patters are thus underivable under standard assumptions, if Neg were indeed below T.

#### The high-Neg analysis

 By contrast, if Neg is higher than T, all we need to assume is that in this dialect (as well at the relevant stage of children's acquisition of Arabic), Neg is not required to merge morphologically with a T specified for past tense, thereby giving rise to the *miš*-pattern instead.

#### Conclusion #2

 There is strong empirical evidence from negation patterns in Sharqeyyah Egyptian Arabic as well as negative utterances by Egyptian children in the early stages of language acquisition that Neg has to be higher than T in CEA clause structure, and presumably in all other Arabic dialects as well.

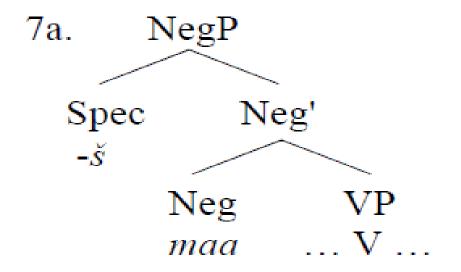
#### The grammatical status of $-\check{s}$

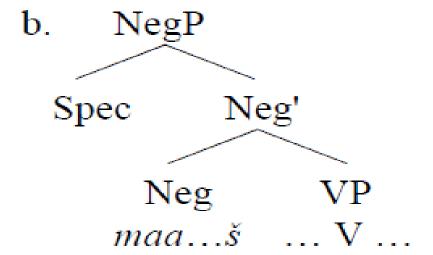
- The -*š* segment appears in both negation patterns in CEA:
  - as a suffix in the discontinuous negation pattern *maa...š*, and
  - as a subpart of the negation marker *miš* in the independent negation pattern.

#### The grammatical status of $-\check{s}$

- There have been two analyses for the status of  $-\check{s}$ :
  - (i) -šas a Spec of NegP (along the lines suggested for pas in French French; cf. Pollock 1989, Ouhalla 1990, and Moritz and Valois 1994)
  - (ii) -šas a subpart of a discontinuous negative head (Bahloul 1996; Benmamoun 2000; Aoun et al 2010).

## The grammatical status of $-\check{s}$





#### -š in NPIs contexts in MA

- Empirical facts from Negative Polarity Item (NPI) contexts in MA seems to favor the SpecNeg analysis of -š.
- In the presence of an NPI in the sentence, the -š obligatorily disappears (Benmamoun 2006).

#### -š in NPIs contexts in MA

```
ma-qrit(*-š)
                           kitab
                                              ما قریت حتی کتاب.
8a.
                    ħətta
                          book
    NEG-came.3sgm even
    'I didn't read any book.'
    ma-ža(*-š) hətta wahəd
                                                ما جا حتى و احد.
b.
    NEG-came.3sgm even one
    'No one came.'
    hətta wahəd ma-ža(*-š)
                                                حتى واحد ما جا.
                  NEG-came.3sgM
         one
    even
    'No one came.'
    Nadya Səmmər-ha
                                             نادية عمر ها ما جت.
d.
                          ma-žat(*-š)
    Nadya ever-her NEG-came.3sgF
    'Nadya never came.'
    Omar baqi ma-ža(*-š)
                                                عمر باقي ما جا.
e.
    Omar yet NEG-came.3sgM
    'Omar hasn't come yet.'
```

#### -š in NPIs contexts in MA

- Notice that the discontinuous head analysis for -š does not have a straightforward explanation for this Neg-NPI interaction fact.
- It has to assume a rule at the sub-morphemic level that can only target -*š*, but not the negative marker *maa*.

#### -š in NPIs contexts in CEA

- That said, the SpecNeg analysis of -š does not work for CEA, since this dialect does not exhibit the same Neg-NPI interaction facts.
- In particular, of all the NPIs that CEA has, only *Sumr* (='ever'; literally="life/age") induces -*š* disappearance, and only when the NPI is in pre-Neg position.
- In all other contexts and with all other NPIs, -š obligatorily surfaces. Compare, for example, *Sumr* (= 'ever') and *lissah* (= 'yet').

## Sumr (= 'ever') vs. lissah (= 'yet')

```
maa-saafir-t(*-š)
      Sumr-ii
                                             Masr
                                                           عمري ما سافرت مصر .
9a.
                 NEG-traveled-1sg-(*NEG)
                                             Egypt
      'I have never travelled to Egypt.'
                                                          ما سافرتش مصر عمري.
      maa-saafir-t*(-š)
 b.
                                           Sumr-ii
                                  Masr
      NEG-traveled-1sg-*(NEG) Egypt
                                           ever-my
      'I have never travelled to Egypt.'
                 lissah maa-saafir-it-*(š)
                                                              منى لسه ما سافرتش.
10a. Mona
                 yet NEG-traveled-3sgf-*(NEG)
      Mona
      'Mona has not travelled yet.'
     Mona
                 maa-saafir-it-*(š)
                                             lissah
 b.
                                                             منى ما سافريش لسه
                 NEG-traveled-3sgf-*(NEG)
      Mona
                                             vet
      'Mona has not travelled yet.'
```

## ?ayy (= 'any') and xaaliş (= 'at all')

• - $\check{s}$  is obligatory in sentences with 2ayy (= 'any') and xaali; (= 'at all').

```
أنا ما شفتش أي حاجة.
11a. ?anaa maa-šuf-t-i-*(š)
                                                   haagah
                                         ?ayy
                                                   thing
             NEG-see.PERF-1SG-EV-NEG
                                          any
      'I didn't see anything.'
                                                              أنا ما شفتش حاجة خالص.
  b. ?anaa maa-šuf-t-i-*(š)
                                         haagah
                                                   xaalis
             NEG-see.PERF-1SG-EV-NEG
                                         thing
                                                   at all
      'I didn't see anything at all.'
```

#### Conclusion #3

- Evidence from  $\dot{s}$ -NPI interactions indicates that treating  $-\dot{s}$  as Spec of NegP runs into an empirical problem in CEA .
- Since the discontinuous negative head analysis is similarly problematic, we are left with the need for a new analysis.

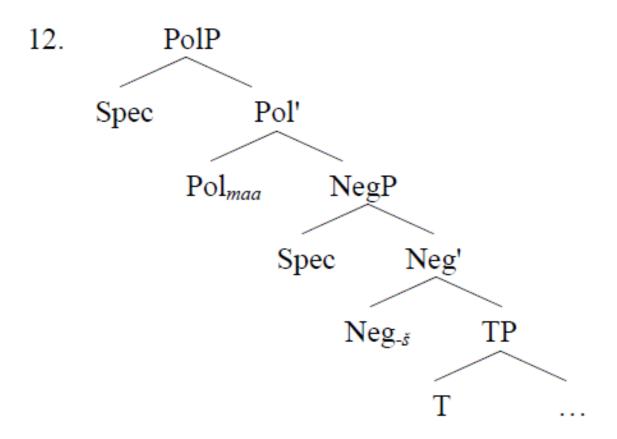
#### Interim summary

- Inter- and intra-dialectal variation in negation patterns favors an analysis in terms of morphological, rather than syntactic, head movement.
- Attested negation patterns in some subdialects of Egyptian Arabic as well as in Egyptian children's speech provides strong evidence that Neg is higher than T in the clausal hierarchy.
- Third, the morphosyntax of NPI contexts in CEA is incompatible with treating -š as SpecNegP or as a subpart of a composite head, hence the need for an alternative analysis. I propose this next.

## Splitting Neg

- To account for the negation facts discussed in this paper, I propose to split Neg into two heads: maa and -š are separate heads (called Pol and Neg, respectively); see Zeijlstra (2004, 2008) for a split-Neg proposal as well.
- Neg and Pol are located higher than T, but only *maa* is specified for semantic negation, while -*š* is only formally negative, a property it probably acquired diachronically, and which requires licensing by *maa* in the syntax (via selection or Chomsky's 2001 *Agree*).

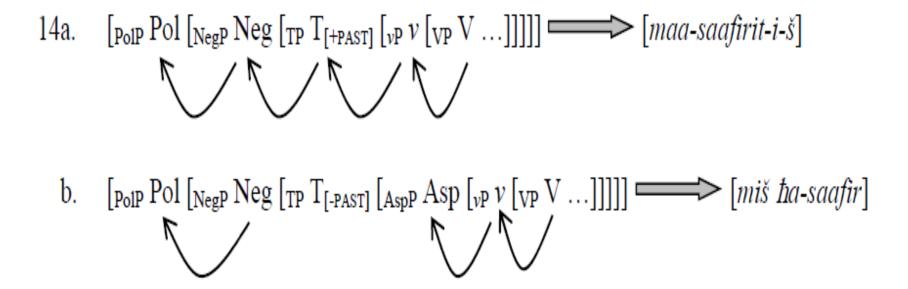
## A Split-Neg structure



### Deriving negation patterns in CEA

- To account for the distribution of the two negation patterns, a head movement algorithm applies in the mapping from the syntax to the morphology, along the following lines:
- 13a. In contexts where Neg is adjacent to a hosting head *H, H* moves to Neg and then to Pol, and the circumfixal *maa-H-š* pattern arises.
  - Otherwise, Neg incorporates into Pol, giving rise to the miš-pattern.

## Deriving negation patterns in CEA



### Parameterization

- Under this analysis, the locus of parametric variation is in the hosting-ability of heads/phrases adjacent to Neg and Pol.
- In CEA, T<sub>[+PAST]</sub> obligatorily moves to host negation, but not so in Sharqeyyah EA.
- Similarly, while nouns and adjectives can serve as hosting heads for negation in both MA and SEA, that's not the case in CEA.

### The *Sumr* (= 'ever') vs. *lissah* (= 'yet') puzzle

- Why does *fumr* induce deletion of  $-\check{s}$ , but *lissah* (= 'yet') does not.
- An answer is possible if we compare the grammatical properties of both NPIs.
- In particular, it turns out that the two items differ as to whether or not they have a (formally) negative feature.
- Two diagnostics show this.

### Occurrence in nonnegative environments

• First, *Sumr* may occur in nonnegative environments such as interrogatives or the protasis of a conditional, but *lissah* cannot.

### Occurrence in nonnegative environments

```
انت عمر ك سافر ت مصر ؟
     ?inta ?umr-ak saafir-it
                                       Masr?
15a.
           ever-you travel.PERF.2SGM Egypt
     vou
     'Have you ever traveled to Egypt?'
 b law
           Sumr-ak saafir-it
                                       Masr laazim
                                                                          ?aswaan
                                                          tə-zuur
            ever-you travel.PERF.2SGM Egypt must.PTCP IPFV.visit.2SGM Aswan
     لو عمرك سافرت مصر لازم تزور اسوان. ''If you ever travel to Egypt, you must visit Aswan.'
                                                                      أحمد جه *(ولا) لسه؟
                               *(wallaa) lissah?
     Ahmad gih
16a.
     Ahmad come.perf.3sgm or.not
                                          vet
     'Has Ahmad come or not yet?'
 b. *law Ahmad gih
                                      lissah ...
                                                                      *لو احمد جه لسه ...
            Ahmad come.perf.3sgm yet
     "If Ahmad arrived yet, ..."
```

## Occurrence as fragment answers

• Second, *lissah* may occur as a fragment answer, while *Sumr* cannot.

## Occurrence as fragment answers

17a. Question: ?inta saafir-t kidah? Masr ?abl انت سافر ت مصر قبل كده؟ travel.PERF-1SGM Egypt before this 'Have you traveled to Egypt before?' \*عمري. \*fumr-ii b. Answer: ever-my 'Never.' 18a. Question: huwwa Mona wasal-it? هو ۱ منی و صلت؟ Mona arrive.PERF.3SGF 'Has Mona arrived?' b. Answer: lissah yet 'Not yet.'

## The negativity of $-\check{s}$

• As it turns out, the  $-\check{s}$  segment shares the property of formal negativity with *lissah*, as opposed to *sumr*, given its inability to occur in nonnegative contexts.

## The negativity of $-\check{s}$

```
# *šuft-i-š Aħmad ?il-nahaar-dah? *شفتش احمد النهار ده؟ *see.PERF.2sgm-EV-NEG Ahmad the-day-this Intended reading: 'Did you see Ahmad today?'

b. *law šuft-i-š Aħmad ?il-nahaar-dah ... *full part of the see.PERF.2sgm-EV-NEG Ahmad the-day-this Intended reading: 'If you saw Ahmad today, ...'
```

## The negative diachrony of $-\check{s}$

Notice also that -š is generally assumed to be a phonological reduction of Classical Arabic šay?
 (literally = 'a thing') in its accusative adverbial NPI function (cf. Lucas 2010), as in the Qur'anic verse in (20) below, hence its origin is also negative.

## The negative diachrony of $-\check{s}$

20. ?inna ?allah-a laa ya-zlim-u ?al-naas-a šay?-an

COMP Allah-ACC NEG IPFV-be.unjust-IND the-people-ACC thing-ACC
wa-lakinna ?al-naas-a ?anfus-a-hum ya-zlim-uun

and-but the-people-ACC selves-ACC-their IPFV-be.unjust-IND (*Qur'an* 10:44)
'Allah is not unjust to people one bit; it is they who are unjust to themselves.'

"إِنَّ اللَّهَ لَا يَظْلِمُ النَّاسَ شَيْئًا وَلَكِنَّ النَّاسَ أَنْفُسَهُمْ يَظْلِمُونَ"

## A taxonomy for negativity: nonnegative, formally negative, and semantically negative

• Given these facts, we can conclude that while the NPI *Sumr* is formally nonnegative, the NPI *lissah* and the -*š* segment of the negation morpheme are both formally negative. The negation marker *maa*, by contrast, is the locus of semantic negation. A summary is given in the table (21).

# A taxonomy for negativity: nonnegative, formally negative, and semantically negative

21.	-š	lissah	Sumr	maa
Diachronic origin	Noun used as	Probably from a	Noun meaning	Negative
	an NPI: šay 2-an	negative marker	'age/life': <i>Sumr</i>	morpheme: maa
Compatibility with	No	No	Yes	
nonnegative contexts	NO	NO	168	
Occurrence as a	N/A	Yes	No	
fragment answer	IV/A	168	110	
Negativity status	Formal	Formal	Nonnegative	Semantic

## Restating the -š puzzle

- Given Table (21), the puzzle of -š disappearance in CEA may be restated in the form of the descriptive generalization in (22).
- 22. Within a local domain, -š is not spelled-out in the presence of an NPI that is formally nonnegative; otherwise it is phonologically realized.
- I will not attempt to derive (22) in a principled manner here, but see Soltan (to appear) for an implementation.

### Conclusions

- In this paper, I have argued for the following:
- 1. An analysis of the distribution of negation patterns in CEA, whereby the key notions are morphological: affixality, hosting heads, and adjacency.
- 2. Placing Neg above T in the clausal hierarchy allows us to account for attested patterns of negation that are problematic under a low-Neg analysis.
- 3. Finally, by splitting Neg into Pol and Neg, we are able to formulate a rule to target -š for deletion in certain NPI contexts, but not in others.

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## شكراً لحسن استماعكم

### **THANK YOU**