ON NEGATIVE CONCORD IN EGYPTIAN AND MOROCCAN ARABIC

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Arabic Linguistics Symposium 25
University of Arizona, Tucson, Arizona
March 4-6, 2011

Goals

- □ **First**, describe the facts of Negative Concord (NC) in both Egyptian and Moroccan Arabic, showing in what ways the two dialects are similar, and in what ways they differ.
- □ **Second**, discuss previous analyses of NC and how each can account for the NC facts in Egyptian and Moroccan Arabic.
- Third, propose a hybrid analysis that treats NC as an instance of syntactic agreement between the negative head and the negative concord item, and where the parametric variation between Egyptian and Moroccan Arabic lies in the lexical properties of the negative concord items in each dialect.

Negative Concord

- □ NC refers to grammatical contexts in which the occurrence of multiple negative elements in the structure is still associated with a single negation interpretation.
- NC is widely documented in many languages and language families (e.g., Greek, Hungarian, Slavic, Romance, African American English, Japanese).
- Among Arabic dialects, NC is discussed in Levantine Arabic (Hoyt 2005, 2010), and has been also discussed in the context of negative polarity in Moroccan Arabic in Benmamoun (1997, 2006).

NC in Egyptian and Moroccan Arabic: *walaa* and *ħətta*

 \square NC is illustrated in EA and MA by sentences that include the terms *walaa* and $\hbar atta$, respectively.

1a. maa-šuf-t-i-š walaa waaħid EA
NEG-saw-1SG-EV-NEG no one
'I didn't see anyone.'

1b. ma -šəf-t hətta wahəd MA

NEG-saw-1SG not-even one
I didn't see anyone.'

NC in Egyptian and Moroccan Arabic: walaa and ħətta

□ As we should expect, neither *walaa* and *ħətta* may occur in affirmative contexts.

2a. *šuf-t walaa waaħid EA saw-1SG no one 'I didn't see anyone.'

2b. *šəf-t hətta wahəd MA saw-1SG not-even one I didn't see anyone.'

walaa and ħətta as NCIs

- □ That both *walaa*-phrases and *ħətta*-phrases are negative concord items (NCIs, henceforward), and not negative polarity items (NPIs) of the *any*-type, comes from two main pieces of empirical evidence:
 - (i) They both can occur as a fragment answer.
 - (ii) They both can occur in preverbal position.

walaa and ħətta in fragment answers

Question: Answer: ?inta šuf-t miin? 3a. walaa waahid EAyou saw-2SGM who no one 'Who did you see?' 'Nobody.' Question: Answer: škun šəf-ti? 3b. hətta wahəd MAwho saw-2SG not-even one 'Who did you see?' 'Nobody.'

walaa and ħətta in preverbal position

4a. walaa waahid gih *EA*no one came.3SGM
'Nobody came.'

4b. ħətta waħəd ma-ʒa *MA* not-even one NEG-came.3SGM 'Nobody came.'

NPIs cannot occur as fragment answers

□ NPIs, by contrast, cannot occur in either context. Payy-phrases cannot function as fragment answers in EA or MA.

Question: 5a. Answer: *?ayy waaħid Pinta šuf-t miin? EGyou saw-2SGM who any one 'Who did you see?' '*Anybody.' 5b. Question: Answer: *?ayy waħəd škun šəf-ti? MAwho saw-2SG any one '*Anybody.' 'Who did you see?'

NPIs cannot occur in preverbal position

□ Similarly, an *Payy*-phrase cannot occur in preverbal position in either dialect.

```
6a. *Payy waaħid gih EA any one came.3SGM '*Anybody came.'
```

6b. *?ayy waħəd ʒa *MA* any one came.3SGM '*Anybody came.'

Syntactic distribution of NCIs in EA and MA

□ In addition to their occurrence with clausemate sentential negation, both *walaa* and *hətta* can also occur in other *antiveridical* contexts, in the sense of Giannakidou (1998), such as *without* and nonfactual *before*.

EA walaa in without- and before-clauses

- 7a. $\begin{subarray}{lll} Γ alii & mišii & min-yeir & maa \\ Ali & left.3SGM & without & COMP \\ yi-tkallim & ma^{\Gamma}a & walaa & waaħid \\ IPFV-talk.3SGM & with & no & one \\ `Ali & left & without talking to anyone.' \\ \end{subarray}$
- 7b. ?abuu-haa maat ?abl maa yi-šoof father-her died.3SGM before COMP see.3SGM walaa waaħid min ?aħfaad-u-h no one from grandchildren-EV-his 'Her father died without seeing any of his grandchildren.'

MA hatta in without- and before-clauses

- 8a. mša Sali bla ma y-tkəlləm left.3SGM Ali without COMP IPFV-talk.3SGM maSa hətta wahəd with no-even one 'Ali left without talking to anyone.'
- 8b. bba-ha maat qbəl ma y-šuuf father-her died.3SGM before COMP IPFV-see.3SGM hətta wahəd mən wlad wlad-u not-even one from sons sons -his 'Her father died before seeing any of his grandchildren.'

NCI-licensing is local in both EA and MA

□ For *walaa* and *ħətta* to be licensed, the negation (or antiveridical) operator has to be clausemate. Long-distance licensing of NCIs is not permitted.

NCI-licensing is local in both EA and MA

```
*Aħmad maa-?aal-š
                                ?in
9a.
                                     Mona
                                                  EA
      Ahmad NEG-said.3SGM-NEG COMP
                                           Mona
      fihm-it
                        walaa haagah
      understood-3SGF
                               thing
                        no
      'Ahmad didn't say that Mona understood anything.'
                       Pali bəlli Mona
9b.
      *ma-gaal-š
                                                  MA
      NEG-said.3SGM-NEG Ali COMP Mona
                        ħətta
                                 ħaʒa
      fəhm-at
      understood-3SGM not-even thing
      'Ali didn't say that Mona understood anything.'
```

How is NC different in EA and MA?

- Despite being NC languages, EA and MA are not identical in their NC behavior. They differ in two respects:
 - (i) Whether negation is required to license NCIs in all contexts.
 - (ii) Whether an NCI can license another NCI in the sentence.
- □ We illustrate each in turn.

Presence of negation with preverbal NCIs (or lack thereof)

- □ The first difference between EA and MA NC structures has to do with the presence of negation (or lack thereof) in NC structures.
- □ A ħətta-phrase requires the presence of sentential negation, regardless of its position in the sentence without giving rise to double negation.
- □ A walaa-phrase, by contrast, requires sentential negation only when it occurs in postverbal position; the occurrence of negation with preverbal walaa gives rise to a double negation reading.

Presence of negation with preverbal NCIs (or lack thereof)

10a. Walaa waahid gih EAcame.3SGM one no 'Nobody came.' walaa waahid 10b. maa-gaa-š EANEG-came.3SGM-NEG no one #'Nobody came' 'Nobody didn't come.' wahəd ma 11a. ħətta MA**3**a NEG came.3SGM not-even one 'Nobody came.' (cannot have a double negation reading) 11b. *ħətta waħəd 3a MAcame.3SGM not-even one 'Nobody came.'

Availability of Negative Spread (or lack thereof)

□ The second difference between EA and MA has to do with the availability (or lack thereof) of so-called *negative spread* (NS) structures, where two NCIs co-occur in the absence of negation.

Availability of negative spread (or lack thereof)

- □ While EA allows NS (12a), MA does not (12b):
- 12a. walaa Taalib gaawib Salaa walaa su?aal no student answered.3SGM on no question 'No student answered any question.'
- 12b. *hətta Taalib ʒawəb Sla hətta su?aal not-even student answered.3SGM on not-even question 'No student answered any question.'

EA and MA in the typology of NC in human languages

- □ In the relevant literature on NC, a typological distinction within NC languages is often made between two types of NC languages (Giannakidou 1998).
- □ Languages like MA, which require the presence of negation in all NC contexts, are referred to as *strict NC languages* (e.g., Greek, Japanese, Slavic languages).
- □ Languages like EA, which require the presence of negation only when the NCI is in postverbal position, are referred to as *nonstrict NC languages* (e.g., Italian and Spanish).

Two questions

□ There are two questions posed by NC to linguistic analysis:

Question A:

How is it that multiple occurrences of negative elements in NC structures such as those in (1) lead to a single, rather than a double, negation reading? This is the so-called *compositionality question*.

Question B:

Why do NC languages like EA and MA differ when it comes to (i) the presence (or lack thereof) of negation in NC structures, and (ii) the availability (or lack thereof) of NS? Let's call this the *parametric question*.

Previous analyses of NC

- There have been multiple analyses of NC to answer the compositionality and parametric questions. We discuss four here:
 - (i) The NPI-analysis
 - (ii) The Negative Quantifier analysis
 - (iii) The Lexical Ambiguity analysis
 - (iv) The Syntactic Agreement analysis
- We discuss each in turn.

The NPI-analysis of NC (Laka 1990; Ladusaw 1992)

- Under this analysis, NCIs are like NPIs; they are indefinites, and they are nonnegative (hence no compositionality problem).
- Unlike regular indefinites, however, they come with a roofing requirement (Ladusaw 1992). They have to be bound by a semantically appropriate operator.
- That explains why they require negation for licensing, and why they behave like NPIs with regard to interpretation.

- First, NCIs do not require (in fact, they prohibit)
 negation when in preverbal position in EA.
- Also, if NCIs are nonnegative, then how does the negative reading arise with preverbal NCIs in EA?
- \square Answer: When an NCI is in preverbal position, there is an invisible Neg operator, heading a Σ P (Laka 1990).
- 13. $[_{CP} [_{\Sigma P} walaa-phrase Neg [_{TP} ...]]]$
- □ Through Spec-head agreement with Σ , the NCI acquires its negative interpretation.

However, this covert Neg analysis leads to another problem: How do we account for the earlier mentioned cases of double negation in EA, repeated below as (14a).

```
14a. walaa waaħid maa-gaa-š

no one NEG-came.3SGM-NEG

'Nobody didn't come.' (i.e., Everyone came.)
```

- We have to stipulate that a covert Neg operator does not give rise to a double negation reading, but an overt Neg operator does, quite an undesirable situation.
- Similarly, how do we account for ungrammatical cases such as (11b) repeated below as (14b), under the covert Neg analysis?
- 14b. *hətta wahəd za MA not-even one came.3SGM 'Nobody came.'

□ A second problem for the NPI-analysis is that it fails to explain why indefinites are not subject to locality, but NCIs are, as mentioned earlier in (9), repeated below, as (15).
 15a. *Aħmad maa-ʔaal-š ʔin Mona EA ahmad NEG-said.3SGM-NEG COMP Mona fihm-it walaa ħaagah

understood-3SGF no thing 'Ahmad didn't say that Mona understood anything.'

15b. *ma-gaal-š ?ali bəlli Mona MA

NEG-said.3SGM-NEG ali COMP Mona

fəhm-at hətta haza

understood-3SGF no not-even thing

'Ali didn't say that Mona understood anything.'

We conclude, then, that while it has its advantages, the NPI-analysis still faces some problems accounting for certain NC empirical facts.

The NQ-analysis of NC:

(Zanuttini 1991; Haegeman 1995; and Haegeman & Zanuttini 1996)

- Under this analysis, NCIs are negative quantifiers (NQs).
- This would explain why they can express negation by themselves in preverbal position without the need to posit a covert Neg, and why they can function as fragment answers.

Main problem: Now we predict that a walaa-phrase or a hatta-phrase can also express negation by itself in postverbal position, which is obviously not the case.

```
16a. *šuf-t walaa waaħid EA
saw-1SG no one
'I didn't see anyone.'

16b. *šəf-t ħətta waħəd MA
saw-1SG not-even one
'I didn't see anyone.'
```

As for the compositionality question, the NQ analysis assumes a special grammatical operation, whereby NCIs, as NQs, undergo absorption, thereby deriving a single negation reading from a NC structure with multiple NQs.

17.
$$[\forall x \neg] [\forall y \neg] [\forall z \neg] \rightarrow [\forall xyz] \neg$$

It is not clear, however, what absorption follows from. It, therefore, makes NC an "anomalous" phenomenon (Giannakidou 2009).

 We conclude, then, that the NQ-analysis, while it has its advantages, also faces problems accounting for NC empirical facts.

The lexical ambiguity (LA) analysis (Herburger 2000)

Under this analysis, NCIs in nonstrict NC languages are lexically ambiguous: Preverbal NCIs are NQs; postverbal NCIs are NPIs.

Obviously such an analysis will combine the strengths of the two previous approaches.

That said, it has been criticized as being a restatement of the puzzle, rather than a solution.

The syntactic agreement (SA) analysis (Zeijlstra 2004, 2008; Watanabe 2004; Kuno 2007)

- The SA-analysis assumes that NC involves an "agreement" relation between the Neg head and any NCI in the structure.
- One implementation is through the application of the operation Agree (Chomsky 2000, 2001), or some modified version of it.
- □ We discuss Zeijlstra's (2008) analysis here.

The syntactic agreement (SA) analysis (Zeijlstra 2008)

Under this analysis, NCIs have a formal negative feature [uNeg] that requires licensing through an Agree relation with a head that hosts an interpretable negative feature [iNeg].

Under this analysis, NCIs are negative, but only formally, hence the answer to the compositionality question.

The syntactic agreement (SA) analysis (Zeijlstra 2008)

- What is the answer to the parametric question, then?
- Under this analysis, languages differ as to where semantic negation is located.
- □ In strict NC languages, negation is expressed via an abstract operator $Op \neg$; in nonstrict NC languages, negation is expressed via the overt Neg marker itself:

Implications of Zeijlstra's analysis for EA and MA

- Zeijlstra provides three empirical arguments for the typological distinction between strict and nonstrict NC languages.
- The strongest of these arguments makes the wrong prediction for EA and MA, however.
- Zeijlstra claims that True Negative Imperatives (TNIs) will occur in strict NC languages, but Surrogate Negative Imperatives (SNIs) will occur in nonsrict NC languages.
- While this is true of Czech (strict) and Spanish (nonstrict),
 both EA and MA prohibit TNIs.

Positive and negative imperatives in EA and MA

	EA		MA
20a.	?il\ab	21a.	de?l
	play.IMP.2SGM		play.IMP.2SGM
	'Play!.'		Play!.'
20b.	*maa-?il\ab-\s	21b.	*ma-lʕəb-š
	NEG-play.IMP.2SGM-		NEG-play.IMP.2SGM-
NEG		NEG	
20c.	maa-ti-lʕab-š	21c.	ma-t-lŶəb-š
	NEG-IPFV-play.2SGM-		NEG-IPFV-play.2SGM-
NEG		NEG	
	'Don't play!'		Don't play!

Parameterization under Zeijlstra's SAanalysis

- Zeijlstra's analysis of NC typology, however, is also not straightforward.
- To account for NS, Zeijlstra has to assume that nonstrict
 NC languages also allow an abstract Neg operator:

22.
$$[Op_{[iNeg]}[NegP] NCI_{[uNeg]}[VP] ... NCI_{[uNeg]}...]]]$$

 But if this is the case, it is not clear then where the parametric difference is between both language types.

A Hybrid Analysis: SA + LA

- That said, we do believe that the syntactic agreement approach to NC is indeed on the right track and we choose to adopt it to account for the facts in EA and MA.
- We propose instead that the locus of parametric variation is in the lexical properties of NCIs themselves, not in the negation marker, along the lines of the ambiguity analysis.
- More specifically, we propose that the difference between hətta and walaa is that the former is always specified as [uNeg], whereas the latter may carry either a [uNeg] or an [iNeg] feature.

- □ Under this analysis, we predict that MA NC structures will always require an overt Neg operator to license h∂tta, whether it is in pre- or post-verbal position.
- 23. $[_{NegP} Neg_{[iNeg]} [_{TP} [_{vP} ... h \partial tta_{[uNeg]}]]]$
- 24. $[NegP h \partial tta_{[uNeg]} Neg_{[iNeg]} [TP [vP ...]]]$
- Similarly, lack of NS in MA follows, since neither NCI's [uNeg] feature will be licensed.
- 25. $*[_{FP} h \partial tta_{[uNeg]} [_{vP} ... h \partial tta_{[uNeg]}]]]$

 By contrast, in EA, walaa is ambiguous between [uNeg] and [iNeg].

- When in postverbal position, [uNeg] walaa can be licensed in the same way postverbal hətta is licensed.
- 26. [NegP Neg[Neg] [TP [VP ... walaa[Neg]]]]

- However, nothing prevents [iNeg] walaa from being selected in postverbal position, thereby predicting that (27) below is grammatical, contrary to fact.
- 27. *šuf-t walaa waaħid EA saw-1SG no one Intended: 'I saw nobody.'
- But (27) is probably ruled out independently, under the assumption that for negation to be semantically interpreted it needs to take scope over TP, as argued for in Zanuttini (1991) and Ladusaw (1992).

- What about preverbal walaa?
- If [iNeg] walaa is selected, then it takes scope over TP, and is, therefore, interpreted semantically without a problem.
- 28. $[_{FP} walaa_{[iNeq]} [_{TP} [_{vP} ...]]]$
- If an overt Neg is inserted, the result is a double negation reading, as desired.
- 29. [FP walaa[iNeg] [NegFP Neg[iNeg] [TP [vP ...]]]

Similarly, availability of NS in EA follows, since the preverbal NCI can license the [uNeg] feature of the postverbal NCI.

30. $[_{FP} walaa_{[iNeg]} [_{TP} [_{vP} ... walaa_{[uNeg]}]]]]$

- This analysis, however, faces an obvious problem: How do we make sure that [uNeg] walaa does not occur in preverbal position? In other words, why is (31) not a possible structure in EA?
- 31. $*[_{NegP} walaa_{[uNeg]} Neg_{[iNeg]} [_{TP} [_{vP} ...]]]$
- We do not have a straightforward answer to that, so we can only speculate.

Speculation 1

- One potential explanation is that a preverbal walaa-phrase in EA is base-generated in a leftperipheral position, and as such is never ccommanded by Neg at any point during the derivation.
- □ A h∂tta-phrase, by contrast, starts in the lexical domain, where it is c-commanded by Neg, and then moves to SpecNegP.

Speculation 2

- Another possibility is that a difference between EA and MA has to do with the mode of licensing the [uNeg] feature: While MA allows both Agree and Spec-head, EA only allows licensing under Agree.
- While a speculation, we hope to tie this to a robust dialectal difference between EA and MA in NC structures: the fact that the -š segment of sentential negation disappears in MA in NC structures, but not in EA.

The puzzle of -š disappearance

- 32a. maa-šuf-t-i*(-š) walaa waaħid EA NEG-saw-1SG-EV*(-NEG) no one 'I didn't see anyone.'
- 32b. ma šəf-t(*-š) hətta wahəd MA
 NEG saw-1SG(*-NEG) not-even one
 I didn't see anyone.'
- Obviously, we want to find further empirical evidence from the two dialects to support either speculation, but we leave for future research.

A final note on locality

- □ Notice, finally, that the locality constraint on NCI-licensing in both EA and MA follows directly from a SA approach, under the assumption that Agree is subject to the so-called Phase Impenetrability Condition (Chomsky 2001), which allows licensing through one phase down, but no further.
- NCIs in an embedded clause cannot be licensed by a matrix Neg, therefore, they are ruled out.

Conclusions

- An answer to the compositionality question follows from a hybrid analysis of NC: NC structures give rise to a single negation reading because NCIs are only formally, not semantically, negative in such contexts.
- The answer to the parametric variation question follows from the proposal that NCIs are either exclusively marked for formal negativity (as in MA), or are ambiguous between formal and semantic negativity (as in EA).
- Languages with ambiguous NCIs will allow NCIs to be semantically negative only when they scope over TP. Other independent conditions should also disallow formally negative NCIs from appearing in preverbal position, though, admittedly, we leave that for future research.

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Abbreviations in glosses

• The following abbreviations are used in the glosses of the Egyptian and Moroccan Arabic data in the paper: 1, 2, 3 for first, second, and third person, respectively; SG = singular; PL = plural; M = masculine; F = feminine; NEG = negation marker; FUT = future; COMP = complementizer; IPFV = imperfective; PTCP = participial; Q = question-particle; IMP = imperative; VOC = vocative particle; EV = epenthetic vowel.

THANK YOU!