

Semantic effects of head movement in negative auxiliary inversion constructions

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Abstract

Head movement occurs in the syntactic component of grammar and it has an effect on interpretation in negative auxiliary inversion, a construction available in varieties of English. The construction's unique subject restriction is a result of the movement obeying principles of scope economy.

1 A semantic effect of HM

Head movement must be available in the narrow syntax, in line with Lechner (2007), Roberts (2010), Hartman (2011), a.o., because it has semantic effects in negative auxiliary inversion constructions.

2 Negative aux. inversion

Constructions exhibiting NAI are declaratives and contain a clause-initial negated auxiliary followed by a quantificational subject.

- (1) Ain't everybody here yet.
'Not everybody's here yet.'

NAI is attested in African American English (Labov et al., 1968), Appalachian English (Wolfram & Christian, 1976), and West Texas English (Foreman, 1999).

Subject restriction

Subject restriction is unlike other known restrictions

- Definite subjects are not possible
(2) *Didn't **Jamie** go to the party.
- Weak quantifiers are possible
(3) Don't **many people** like you.
- Strong quantifiers are also possible
(4) Didn't **everybody** show up.
(5) Cain't **all o' ya** go at once.

Canonical subject position

The subjects of NAI are in canonical subject position

- (6) didn't [TP everybody show up]

- Tag questions target the NAI subject
(7) Didn't **everybody** show up, did **they**?

For more evidence for the subject being in canonical subject position, see Foreman (2001).

3 Movement analysis

The word order is derived by movement

- (8) didn't [TP everybody [T' didn't show up]]

- The negated auxiliary raises to a higher negative projection, Neg₂ (Foreman, 1999, 2001)
- It is in the CP layer above T but below C

Higher negative projection

- Negation is necessary to license negative auxiliary inversion, and it must be sentential negation morpheme *n't*.

- (9) **Won't** everybody go.
a.***Will** everybody go.
b.***Will** everybody **not** go.
c.***Will** **none of the students** go.

- Independent evidence for a higher negative projection; proposed for languages which exhibit negative concord (Zanuttini, 1991; Zeijlstra, 2004)

- All varieties which exhibit negative auxiliary inversion also exhibit negative concord

- (10) I **ain't** gonna do **nothin'** for **nobody**.
'I'm not gonna do anything for anybody'

4 Interpretations of NAI

Attested interpretations for NAI

- (11) Didn't everybody show up.

- Surface scope is possible ($\neg\forall$) while inverse scope is not possible ($*\forall\neg$)

Deriving surface scope

Subject is interpreted in canonical subject position

- Strong quantifiers, such as **every**, **all**, cannot reconstruct (Lasnik, 1999; Lechner, 2007)

Negation is interpreted above the subject

- If the subject is interpreted in canonical subject position, negation must be interpreted in its moved position

Negation gains scopal significance

Type-raising of negation

- (12) $\lambda N_{\langle\langle t,t \rangle, t \rangle} [\neg N(\lambda f_{t,f})]$

- Movement of logical negation does not have scopal significance at LF. Since it is of type $\langle t, t \rangle$ and its trace is of the same type, it obligatorily reconstructs

- Empirically, others have observed that negation does not reconstruct (Roberts, 2010; a.o.) and that head movement leaves behind a bound variable (Hartman, 2011)

- The type of negation in its moved position must be higher, its trace remains of type $\langle t, t \rangle$

Movement is restricted

Considering the non-inverted counterparts of negative auxiliary inversion constructions,

- Movement occurs when the subjects are quantifiers

- (13) All the students didn't show up.

- Surface scope is $\forall\neg$ and the movement can give rise to a new order of operators, $\neg\forall$.

- Movement does not occur when the subjects do not interact scopally, such as with definites

- (14) The teacher didn't show up.

- Surface scope is $\neg j$ and the movement cannot give rise to a new order of operators, $*j\neg$.

Availability of negative auxiliary inversion constructions is reminiscent of a known restriction on movement

- The Principle of Scope Economy (Fox, 2000)
 - allows covert movement (QR) if it gives rise to a new scopal relation
 - disallows movement if it is semantically vacuous

The principle can be extended to apply to the overt movement of negation to capture the subject restriction

Extending Principle of Scope Economy

Allow the Principle of Scope Economy to apply to overt movement that is optional.

- Optional movement is movement that is not feature-driven.
- Movement can occur to a projection that is available in the derivation but that does not itself trigger movement

Blocking inverse scope

Inverse scope is unattested but two ways in which could be derived

- Negation could reconstruct below the subject
(15) didn't [TP everybody [T' didn't show up]]

- The subject could QR above negation
(16) everybody [Neg2P didn't [TP everybody ...]]

Given multiple copies, Bobaljik & Wurmbrand (2012) provide a way to determine which copies are interpreted and which are pronounced

- Scope transparency is preferred; copies should be pronounced where they are interpreted

- ScoT holds for negative auxiliary inversion:

- (17) LF: didn't everybody didn't ...
PF: didn't everybody didn't ...

- Negation is both interpreted high and pronounced high

- Inverse scope is ruled out: whenever the subject is interpreted higher, it will surface higher. ScoT interacts with a constraint on canonical word order.

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