

# Quantificational force of Hungarian NPis: evidence from adverbial scope

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## Introduction

**Goal:** to test Giannakidou's (2001) quantifier-based approach to NPI-typology in Hungarian:

- $\exists$ -type NPis scope below negation:  $\neg \gg \exists$
- $\forall$ -type NPis scope above negation:  $\forall \gg \neg$

**Previous approaches:**

- Surányi (2006): Hungarian NPis are ambiguous between  $\forall$  and  $\exists$
- Szabolcsi (2018): Hungarian NPis are in fact  $\exists$

**Current study:** I use a test inspired by Shimoyama's (2011) to answer the same question in a more systematic way

- determine the quantificational force of NPis based on the relative scope of adverb, NPI, and negation
- Shimoyama (2011) used this test to show that Japanese NPis are  $\forall$

## Tested situations

Informants were shown the following situations:

	Monday	Wednesday	Friday
Anna	yes		
Balázs		yes	
Csaba			yes

(a) Situation A

	Monday	Wednesday	Friday
Anna	yes		
Balázs	yes		
Csaba	yes		

(b) Situation B

Table 1: Subject NPI

	Monday	Wednesday	Friday
English	yes		
Math		yes	
Hungarian			yes

(a) Situation A

	Monday	Wednesday	Friday
English	yes		
Math	yes		
Hungarian	yes		

(b) Situation B

Table 2: Object NPI

## General methodology and design

- Informants were 7 linguistically trained native Hungarian speakers, recruited through LinguistList
- Questions were asked through a series of e-mail exchanges
- Independent variables:
  - adverb  $\gg \neg$  **OR**  $\neg \gg$  adverb
  - subject NPI **OR** object NPI
- Dependent variable:
  - Situation “A” (1a, 2a) **OR** Situation “B” (1b, 2b)

## Logic of the test

1. **adverb  $\gg \neg$**

	Situation A	Situation B
adverb $\gg \neg \gg$ NPI $\exists$		yes
adverb $\gg$ NPI $\forall \gg \neg$		yes
NPI $\forall \gg$ adverb $\gg \neg$	yes	yes

- If Situation “A” is NOT an available interpretation, then either
  - the NPI is  $\forall$ , but the adverb is an intervener **OR**
  - the NPI is  $\exists$
- If Situation “A” is an available interpretation, then the NPI is  $\forall$

2.  **$\neg \gg$  adverb**

	Situation A	Situation B
$\neg \gg$ NPI $\exists \gg$ adverb	yes	yes
NPI $\forall \gg \neg \gg$ adverb	yes	yes
$\neg \gg$ adverb $\gg$ NPI $\exists$		yes

- If Situation “A” is NOT an available interpretation then the NPI is  $\exists$
- If Situation “A” is an available interpretation, then either
  - the NPI is  $\exists$ , but the adverb is an intervener **OR**
  - the NPI is  $\forall$

## Tested adverbs

- *általában* “usually”: scopes above negation in all word orders
  - (1) János általában nem eszik reggelit. adverb  $\gg \neg$   
János usually NEG eats breakfast.
  - (2) János nem eszik reggelit általában. adverb  $\gg \neg$
- *gyakran* “often”: relative scope to negation depends on word order
  - (3) János gyakran nem eszik reggelit. adverb  $\gg \neg$   
János often NEG eats breakfast
  - (4) János nem eszik reggelit gyakran.  $\neg \gg$  adverb

## Tested sentences

We tested various word orders of the following sentences:

- (5) Senki nem megy be *általában/gyakran* az órákra.  
NPI NEG go PRT usually/often the classes,TO  
'Nobody goes to classes usually/often.'
- (6) Laci semelyik órára nem megy be *általában/gyakran*.  
Laci NPI class.TO NEG go PRT usually/often  
'Laci doesn't go usually/often to any classes'

## Results

Surface order	a	b	Surface order	a	b
'often' $\gg \neg \gg$ NPI	1	5	'often' $\gg \neg \gg$ NPI	0	5
'often' $\gg$ NPI $\gg \neg$	0	6	'often' $\gg$ NPI $\gg \neg$	0	6
'usually' $\gg \neg \gg$ NPI	0	5	'usually' $\gg \neg \gg$ NPI	0	3
'usually' $\gg$ NPI $\gg \neg$	0	4	'usually' $\gg$ NPI $\gg \neg$	0	4
$\neg \gg$ NPI $\gg$ 'usually'	0	5	$\neg \gg$ NPI $\gg$ usually	0	3
$\neg \gg$ 'usually' $\gg$ NPI	2	3	$\neg \gg$ 'usually' $\gg$ NPI	0	3
NPI $\gg \neg \gg$ 'usually'	1	4	NPI $\gg \neg \gg$ 'usually'	0	4

(a) Subject NPis

(b) Object NPis

Table 3: adverb  $\gg \neg$

Surface order	a	b	Surface order	a	b
$\neg \gg$ NPI $\gg$ 'often'	6	6	$\neg \gg$ NPI $\gg$ 'often'	4	3
$\neg \gg$ 'often' $\gg$ NPI	4	6	$\neg \gg$ 'often' $\gg$ NPI	5	5
NPI $\gg \neg \gg$ 'often'	6	5	NPI $\gg \neg \gg$ 'often'	5	6

(a) Subject NPis

(b) Object NPis

Table 4:  $\neg \gg$  adverb

## Discussion

- Overall, the results are inconclusive – all possibilities need stipulations
  - NPI as  $\forall$ :
    - \* *usually* is an intervener, *often* isn't
    - NPI can QR above *often*, but not above *usually*
    - \* Surface preverbal “adverb  $\gg$  NPI” order is frozen in scope
    - No situation A interpretation with those orders
    - \* Unexplained subject-object asymmetry – could be a result of only considering the most natural interpretations
  - NPI as  $\exists$ :
    - \* *often* is an intervener
    - \* Cannot explain availability of Situation A reading in Table 3a
- **Future study:**
  - Present a recording of the tested sentences instead of their written version → control for intonation and stress
  - Delineate subject-object asymmetry
  - Explore the nature of the adverbs further

## References

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