Long split focus constructions in Hungarian: a unified movement account

Adrienn Jánosi
HUB/CRiSSP/KUL
adrienn.janosi@hubrussel.be

Topic of the PhD project:
Long split focus constructions (LSF) in Hungarian: their types and derivation with a view on speaker variation

example of LSF:

(1) AUTÓT <Focus> mondott hogy újat vett.
   Car.ACC said.3SG that new.ACC bought.3SG
   ‘(S)he said that(s)he had bought a new CAR.’

Main research questions:
1. What different types of LSF are there?
2. What is the speaker variation related to LSF?
3. What is the analysis of (the different types of) LSF? How should the speaker variation be accounted for?

Central data:

Two questionnaires:
- Questionnaire1 - 5-point scale method, 91 questions distributed among 83 native speakers
- Questionnaire2 - magnitude estimation method, 32 questions distributed among 88 native speakers

Outline of the talk

1. INTRODUCTION
2. STATE OF THE ART
3. TWO TYPES OF LSF
4. EMPIRICAL RESULTS FROM QUESTIONNAIRE 1
5. FIRST ANALYSIS OF LSF
6. PROBLEMS OF THE FIRST ANALYSIS
7. EMPIRICAL RESULTS FROM QUESTIONNAIRE 2
8. FINAL ANALYSIS OF LSF
9. CONCLUSIONS

*I’m indebted to Jeroen van Craenenbroeck, Guido Vanden Wyngaerd and Anikó Lipták for discussions and encouragement. I’m grateful to Jutta Hartmann for her help with the statistical analyses. I would also like to thank my informants for their time and patience.
1. INTRODUCTION

1.1. Preliminaries about Hungarian

Hungarian is a Finno-Ugric discourse-configurational language spoken by ca. 10 million people in Hungary.

1.2. Basic word order rules

- In the pre-verbal domain, word order is based on the discourse function of the constituents.
- In the post-verbal domain, word order is relatively free.
- Word order of the main sentence constituents in preverbal position:

\[
\text{TOPIC}_1 - \text{TOPIC}_2 - \text{FOCUS} - \text{VERB} - \ldots
\]

example:

(3) Kate\text{Topic} Béla\text{INSTR} ÚJ AUTÓT\text{Focus} hoz haza holnap.

‘It’s a NEW CAR that Kate is going to take home with Béla tomorrow.’

<table>
<thead>
<tr>
<th>TOPIC\text{_1}</th>
<th>TOPIC\text{_2}</th>
<th>FOCUS</th>
<th>VERB</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) Kati</td>
<td>Ø</td>
<td>ÚJ AUTÓT</td>
<td>hoz haza</td>
</tr>
<tr>
<td>(5) Kati</td>
<td>új autót</td>
<td>BÉLAVAL</td>
<td>hoz haza</td>
</tr>
<tr>
<td>(6) Ø</td>
<td>Ø</td>
<td>BÉLAVAL</td>
<td>hoz haza</td>
</tr>
<tr>
<td>(7) Béla\text{VAL}</td>
<td>Kati</td>
<td>Ø</td>
<td>haza-sétál ‘walk home’</td>
</tr>
</tbody>
</table>

Table 1. Illustrations of some word order patterns in Hungarian

(8)
1.3. Main characteristics of focus in Hungarian

FOCUS:

● immediately precedes the verb (cf. (9))

(9) \text{Kati}_{\text{Topic}} <^{\text{ÚJ \ AUTÓT}_{\text{Focus}}} > \text{Bélával}_{\text{Topic}} <^{\text{ÚJ \ AUTÓT}_{\text{Focus}}} > \text{hoz} \text{ haza.}
Kate new car.ACC Béla.INSTR new car.ACC bring.3Sg PV
'It's a NEW CAR that Kate is going to take home with Béla.'

● triggers verb-preverb inversion

(10) \text{Holnap} \text{ Kati}_{\text{Topic}} <^{\text{haza}} > \text{jön} <^{\text{haza}} > .
Tomorrow Kate PV come3SG PV
'Kate is coming home tomorrow.'

(11) \text{Holnap} \text{ KATI}_{\text{Focus}} <^{\text{haza}} > \text{jön} <^{\text{haza}} >
Tomorrow Kate PV come.3SG PV
'It's KATE that is coming home tomorrow.'

● receives the strongest stress in the sentence
● obligatorily gets an exhaustive interpretation:

(12) \text{AUTÓT}_{\text{Focus}} \text{ hoz} \text{ haza} \text{ holnap} \text{ Kati} (*\text{és biciklit is}).
Car.ACC bring.3SG PV tomorrow Kate (*and bike.ACC too).
'It’s a CAR that Kate is going to take home tomorrow *(and also a BIKE).*'

● occupies the same syntactic position as wh-words

(13) <^{\text{*MIT}_{\text{Focus}}} > \text{Marival} <^{\text{MIT}_{\text{Focus}}} > \text{hoz} \text{ haza} \text{ holnap} \text{ Kati?}
what.ACC Mary.INSTR what.ACC bring.3SG PV tomorrow Kate
'What is Kate going to take home with Mary tomorrow?'

1.4. Split focalization in Hungarian

Two types:

● Short: the two parts of the discontinuous NP are clause-mates:

(14) \text{AUTÓT}_{\text{Focus}} \text{ vett} \text{ Kati} \text{ újat.}
car.ACC bought.3SG Kate new.ACC
'Kate bought a new CAR.'

● Long: the two parts of the NP surface in separate clauses:

(15) \text{AUTÓT}_{\text{Focus}} \text{ mondott} \text{ Kati} \text{ hogy} \text{ újat} \text{ vett.}
Car.ACC said.3SG Kate that new.ACC bought.3SG
'Kate said that she had bought a new CAR.'

\rightarrow \text{Topic of this PhD: long split focus constructions (LSF) in Hungarian}
2. STATE OF THE ART

2.1. Long unsplit focus constructions (LUF)

(16) ÚJ AUTÓT<sub>Focus</sub> mmondott Kati hogy vett.
    new car.ACC said.3SG Kate that bought.3SG
   'Kate said that she had bought a NEW CAR.'

- Zolnay (1926)
- É. Kiss (1987)
- É. Kiss (1998)
- Lipták (1998)

Movement accounts

- Den Dikken (2010)

Movement+base-generation accounts

Common to all of the above-mentioned accounts: they mention **speaker variation**.

Main research questions in the literature on LUF:

➔ How many types of LUF are there?
➔ How are they derived?
➔ How to account for speaker variation?

2.2. Long split focus constructions (LSF)

- Unexplored in previous research on long focus constructions
- Unlike in LUF (cf. (17)), in LSF the adjective is case-marked (cf. (18)).

(17) ÚJ*(at) AUTÓT<sub>Focus</sub> mmondott Kati hogy új*(at) vett.
    new car.ACC said.3SG Kate that new.ACC bought.3SG
   'Kate said that she had bought a new CAR.'

(18) AUTÓT<sub>Focus</sub> mmondott Kati hogy új*(at) vett.
    car.ACC said.3SG Kate that new.ACC bought.3SG
   'Kate said that she had bought a new CAR.'

I show that LSF:

- has the same syntactic characteristics as LUF
- shows structural variation in the same ways as LUF
- is derived in the same way(s) as LUF
- can shed new light on what the analysis of LUF should be
3. TWO TYPES OF LSF

Research question #1: Are there different types of LSF? If so, how many?

Research hypothesis: There are two types of LSF in Hungarian.

3.1. Case in LSF

TYPE 1: the higher NP-portion bears matrix case

(19) \texttt{\textsc{Autő}Focus} hallott \texttt{hogy \texttt{új}nak örülnének.}
\texttt{Car.ACC heard.3SG.indef that new.DAT be.pleased.Cond.3Pl.}
\texttt{\textquoteleft(S)he heard that they would be pleased with a new CAR.\textquoteright}  

- the verb ‘hall’ \textit{hear} takes an ACC complement (20) while the verb ‘örül’ takes a DAT one (cf. (21))

(20) Mari hallotta a hírt.
\texttt{Mary heard.3SG.def the news.ACC}
\texttt{\textquoteleft Mary heard the news.\textquoteright}

(21) Mari örülné egy új autónak.
\texttt{Mary be.pleased.Cond.3SG a new car.DAT}
\texttt{\textquoteleft Mary would be pleased with a new car.\textquoteright}

TYPE 2: the higher NP-portion bears embedded case

(22) \texttt{\textsc{Autó}NakFocus} hallotta \texttt{hogy \texttt{új}nak örülnének.}
\texttt{Car.DAT heard.3SG.def that new.DAT be.pleased.Cond.3Pl}
\texttt{\textquoteleft(S)he heard that they would be pleased with a new CAR.\textquoteright}

3.2. Agreement in LSF

3.2.1. Introduction: object definiteness agreement in Hungarian

The relevant type of agreement is \textit{object definiteness agreement}, a common type of agreement in Finno-Ugric languages.

- Two verb conjugation paradigms, based on the definiteness of the object:
  - the ‘definite form’ (cf. (23))
  - the ‘indefinite form’ (cf. (24))

(23) Lát-o-\texttt{m} a hajót.
\texttt{See.1SG.def the ship.ACC}
\texttt{\textquoteleft I can see the ship.\textquoteright}

(24) Lát-o-\texttt{k} egy hajót.
\texttt{See.1SG.indef a ship.ACC}
\texttt{\textquoteleft I can see a ship.\textquoteright}
• the ‘indefinite form’ is the default, since we find it when there is no direct object:

(25) Jól lát-o-k.
    Well see.1SG.indef
    ‘I can see well.’

(26) Öt munkásra számí-t-o-k.
    Five worker.ONTO count.1SG.indef
    ‘I count on five workers.’

(27) Az öt munkásra számí-t-o-k.
    The five worker.ONTO count.1SG.indef
    ‘I count on the five workers.’

3.2.2. Object definiteness agreement in LSF

• The higher NP portion can agree (type1) or not agree (type2) with the matrix verb

TYPE 1: the higher NP portion agrees with the matrix verb: \( \text{N}_{\text{indef}} + \text{V}_{\text{indef}} \)

(28) AUTÓT focus hallott hogy újnak örülnének.
    Car.ACC heard.3SG.indef that new.DAT be.pleased.Cond.3PL
    ‘(S)he heard that they would be pleased with a new CAR.’

(29)* AUTÓT focus hallott hogy újnak örülnének.
    car.ACC heard.3SG.def that new.DAT be.pleased.Cond.3PL
    ‘(S)he heard that they would be pleased with a new CAR.’

TYPE 2: the higher NP portion doesn’t agree with the matrix verb: \( \text{N}_{\text{indef}} + \text{V}_{\text{def}} \)

(30) AUTÓNAX focus hallotta hogy újnak örülnének.
    Car.DAT heard.3SG.def that new.DAT be.pleased.Cond.3PL
    ‘(S)he heard that they would be pleased with a new CAR.’

(31)* AUTÓNAX focus hallotta hogy újnak örülnének.
    Car.DAT heard.3SG.indef that new.DAT be.pleased.Cond.3PL
    ‘(S)he heard that they would be pleased with a new CAR.’

3.3. Correlation between case and agreement in LSF

→ Matrix case assignment and object definiteness agreement go together

<table>
<thead>
<tr>
<th>Case of the higher NP-portion</th>
<th>Object definiteness agreement in the matrix clause</th>
<th>Case of the lower NP-portion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>assigned by the matrix verb</td>
<td>[+] agreement</td>
</tr>
<tr>
<td>Type 2</td>
<td>assigned by the embedded verb</td>
<td>[-] agreement</td>
</tr>
</tbody>
</table>

Table 2. Two types of LSF
Proposed analysis

- TYPE 1: base-generation + ellipsis
  two separate NPs are base-generated in their respective clause and the lower one is deleted

\[ (32) \left[ \text{CP} \ FocP \ NP_{\text{ACC}} \ [VP \ V' \ V \ \text{ACC}] \ \text{CP} \ NP_{\text{FocP}} \ [VP \ [NP \ AP_{\text{DAT}}] \ [VP \ V \ V_{\text{DAT}}]]]] \]

- TYPE 2: movement
  one single NP is split up by movement to the focus position of the matrix clause (cf. example (30) depicted in (33)).

\[ (33) \left[ \text{CP} \ FocP \ NP_{\text{DAT}} \ [VP \ V' \ V \ \text{ACC}] \ \text{CP} \ FocP \ [VP \ [NP \ AP_{\text{DAT}}] \ [VP \ V \ V_{\text{DAT}}]]]] \]

4. EMPIRICAL RESULTS FROM QUESTIONNAIRE 1

<table>
<thead>
<tr>
<th>Research question #2:</th>
<th>What is the speaker variation related to LSF?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research hypothesis:</td>
<td>Speaker groups divide over whether or not their grammar allows the movement derivation</td>
</tr>
<tr>
<td>Results:</td>
<td>All speakers accept LSF type 1, a subgroup of all speakers accepts LSF type 2</td>
</tr>
</tbody>
</table>

4.1. Set-up and methodology

Date: April-March 2011
Venue: College of Nyíregyháza
Number of informants: 83

Basic profile of the informants

Age: 19-25
Profession: student (78 out of 83)
Major: English/Marketing
Place of living: 80% in North-Eastern Hungary

Number of test items: 91 (plus 32 fillers)
Type of questions: acceptability judgements on a scale of 1 (unacceptable) to 5 (fully acceptable).
4.2. Two types of LSF-speakers

*Group A:* accepts both LSF TYPE 1 and TYPE 2  → dialect 1

*Group B:* accepts LSF TYPE 1 but not TYPE 2  → dialect 2

*(Group C: accepts neither type of LSF)*

<table>
<thead>
<tr>
<th>LSF Type 1</th>
<th>Case of the higher NP</th>
<th>Object definiteness agreement in the matrix clause</th>
<th>Case of the lower NP</th>
<th>Dialect 1 (43.32%)</th>
<th>Dialect2 (56.63%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>assigned by the matrix verb</td>
<td>[+ agreement]</td>
<td>assigned by the embedded verb</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>LSF Type 2</td>
<td>assigned by the embedded verb</td>
<td>[- agreement]</td>
<td>assigned by the embedded verb</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>

*Table 3. Dialectal variation concerning the two types of LSF based on questionnaire 1*

4.3. Testing the proposed analyses

**Research question #3:** What is the analysis of (the different types of) LSF? How should the speaker variation be accounted for?

**Predictions:**

1. LSF type 1 does not involve movement  →  doesn’t show island effects.
2. LSF type 2 involves movement  →  island effects.

Three types of wh-island configurations were tested in questionnaire 1:

(i) Adjunct island  
(ii) Bi-clausal complex NP island  
(iii) Tri-clausal complex NP island

As speakers of *dialect 2* do not accept baseline LSF type 2 constructions (i.e. they cannot derive LSF by movement), their scores were not taken into account concerning LSF type 2 in island configurations.
4.3.1. Adjunct island configurations

Context:
'There is a competition organized in a forest. The task is to collect as many green animals as possible in one hour. After the competition Eve says that Robi from the other group has said that he found a green bug as soon as the competition finished. Peter thinks that Robi said he had found a butterfly (and not a bug) and says:'

LSF TYPE 1:

(34) LEPKÉT mondott hogy már vége lett a versenynek
Butterfly.ACC said.3SG.indef that already end became.3SG the competition.DAT
mikor zöldet találtak.
when green.ACC found.3PL.indef
'He said that by the time they found a green BUTTERFLY, the competition had ended.'

80.72% of all speakers accept this.

LSF TYPE 2:

(35) *LEPKÉT mondta hogy már vége lett a versenynek
Butterfly.ACC said.3SG.def that already end became.3SG the competition.DAT
mikor zöldet találtak.
when green.ACC found.3PL.indef
INTENDED: 'He said that by the time they found a green BUTTERFLY, the competition had ended.'

80.65% of dialect 1 reject this.

4.3.2. Bi-clausal complex NP island configurations

LSF TYPE 1:

(36) *AUTÓT hallott olyan híreket hogy újat vettek.
Car.ACC heard.3SG.indef such news.ACC that new.ACC bought.3PL.indef
'(S)he heard some news that they had bought a new CAR.'

80.73% of all speakers reject this.

LSF TYPE 2:

(37) *AUTÓT hallotta a hírt hogy újat vettek.
Car.ACC heard.3SG.def the news.ACC that new.ACC bought.3PL.indef
INTENDED: '(S)he heard the news that they had bought a new CAR.'

74.2% of dialect 1 reject this.

4.3.3. Tri-clausal complex NP island configurations

LSF TYPE 1:

(38) % AUTÓT mondott hogy hallotta a hírt hogy újat vettek.
Car.ACC said.3SG.indef that heard.3SG.def the news.ACC that new.ACC bought.3PL
'He said that he heard the news that they had bought a new CAR.'

48.20% of all speakers accept this.
LSF TYPE 2:

(39) % AUTÓT mondta hogy hallotta a hírt hogy újat vettek.
    Car.ACC said.3SG.def that heard.3SG.def the news.ACC that new.ACC bought.3PL
    ‘He said that he heard the news that they had bought a new CAR.’

54.84% of dialect 1 reject this.

4.3.4. Interim conclusions based on questionnaire 1

<table>
<thead>
<tr>
<th>Research question #2: What is the speaker variation related to LSF?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• LSF type 1 is acceptable to all speakers of Hungarian</td>
</tr>
<tr>
<td>• LSF type 2 is acceptable to a subgroup of all speakers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research question #3: Do the two types of LSF correspond to two different derivations?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The adjunct island configurations support the proposed two analyses.</td>
</tr>
<tr>
<td>• The bi-clausal complex NP island configurations are unacceptable for independent reasons.</td>
</tr>
<tr>
<td>• The tri-clausal complex NP island configurations are less clear. However, even these complicated structures reveal a contrast between LSF type 1 and LSF type 2 that is consistent with our research hypothesis.</td>
</tr>
</tbody>
</table>

→ The results of questionnaire 1 confirm the predictions made by the proposed double analysis:

• type 1 – base-generation: no island sensitivity
• type 2 – movement: island sensitivity

5. FIRST ANALYSIS OF LSF

5.1. Three structures for embedded constituent focus in Hungarian: EA, LUF, LSF

In Hungarian there are three ways to mark embedded constituent focus syntactically: EA (expletive-associate constructions, cf. (40)), LUF and LSF.

(i)     EA (expletive-associate):

(40) Azt mondta hogy ÚJ AUTÓTFocus vett.
    Expl.ACC said.3SG that new car.ACC bought.3SG
    ‘(S)he said that (s)he had bought a new CAR.’

(ii)    LUF:

(41) ÚJ AUTÓTFocus mondott hogy vett.
    new car.ACC said.3SG that bought.3SG
    ‘(S)he said that (s)he had bought a new CAR.’

(iii)   LSF:

(42) AUTÓTFocus mondott hogy újat vett.
    Car.ACC said.3SG that new.ACC bought.3SG
    ‘(S)he said that (s)he had bought a new CAR.’

5.2. Analysis of LSF type 1

(43) **AUTÓT** mondott **hogy** **újat** vett.
    car.ACC said.3SG.indef that new.ACC bought.3SG.indef

'(S)he said that (s)he had bought a new CAR.'
Main steps of the derivation:

- The higher NP (i.e. the expletive) is base-generated in Spec VP₁
- Phrasal movement of the lower NP to SpecFocP₂
- Subphrasal movement of the core of the lower NP to SpecCP₂
- Concord (i.e. transfer of features) except for case from the lower NP to the higher NP (cf. Den Dikken (2010))
- Deletion of the lower NP

This analysis explains the main properties of the construction:

- definiteness agreement and case assignment in the matrix clause: the case on the matrix NP is assigned in the matrix clause
- since the focused N does not originate in the lower clause, the construction does not show island sensitivity.

5.3. Analysis of LSF type 2

(45) AUTÓT mondtá hogy űjat vett.
car.ACC said.3SG.def that new.ACC bought.3SG.indef
‘(S)he said that (s)he had bought a new CAR.’
Main steps of the derivation:

- the lower NP is base-generated as complement of the embedded verb
- the full NP ‘new car’ moves to Spec,FocP₂
- the core noun ‘car’ subextracts and moves further successively cyclically to Spec,FocP₁

This analysis explains the main properties of the construction

- no definiteness agreement and case assignment in the matrix clause, as case on the matrix NP is assigned in the embedded clause
- since the focused noun originates in the embedded clause and moves into the main clause, the construction shows island sensitivity.

6. PROBLEMS OF THE FIRST ANALYSIS

6.1. Two types of LUF

- Matrix case assignment and matrix definiteness agreement in LUF correlate in the same way as in LSF and divide LUF structures into two types (Den Dikken 2010, Gervain 2007):

<table>
<thead>
<tr>
<th>LUF TYPE 1:</th>
<th>LUF TYPE 2:</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many girl.ACC want.2SG.indef that how many girl.NOM PV.come.3SG</td>
<td>You said that all the girls were coming.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case of the NP in the matrix clause</th>
<th>Object definiteness agreement in the matrix clause</th>
<th>Case of the NP in the embedded clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1: assigned by the matrix verb</td>
<td>[+ agreement]</td>
<td>assigned by the embedded verb</td>
</tr>
<tr>
<td>Type 2: assigned by the embedded verb</td>
<td>[- agreement]</td>
<td>assigned by the embedded verb</td>
</tr>
</tbody>
</table>

Table 5. Two types of LUF

6.2. Previous accounts concerning the two types of LUF

6.2.1. Gervain’s (2007) classification

Gervain (2007)

- splits speakers into two groups: ’movement’ speakers (dialect1) and ’base-generation’ (dialect2) speakers
- claims that the two dialects do not overlap: speakers either use only the base-generation or only the movement strategy
accounts for the generally acceptable LUF type 1 structure (cf. (46)) by claiming that it is derived in either of two ways (i.e. base-generation or movement), depending on which dialect a speaker belongs to.

- supports her analysis by showing that dialect 2 but not dialect 1 accepts LUF in island configurations.

<table>
<thead>
<tr>
<th>LUF structure</th>
<th>Proposed analysis</th>
<th>Dialect 1</th>
<th>Dialect 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Base-generation</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Movement</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Type 2</td>
<td>Movement</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

Table 6. Gervain's classification of LUF

6.2.2. Den Dikken’s (2010) classification

Den Dikken (2010)

- proposes two distinct analyses for the two distinct types of LUF
- does not take note of systematic speaker variation

<table>
<thead>
<tr>
<th>LUF structure</th>
<th>Proposed analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Base-generation</td>
</tr>
<tr>
<td>Type 2</td>
<td>Movement</td>
</tr>
</tbody>
</table>

Table 7. Den Dikken’s classification of LUF

6.3. My proposal

- My proposal for LSF carries over to LUF.

<table>
<thead>
<tr>
<th>LUF structure</th>
<th>Proposed analysis</th>
<th>Dialect 1</th>
<th>Dialect 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Base-generation</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Type 2</td>
<td>Movement</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

Table 8. My classification of LUF

Based on the results of questionnaire 1 I argued that

- the two types are derived by two distinct derivations (cf. Den Dikken 2010)
- speakers of dialect 1 can derive the structure in two ways (contra Gervain 2007)

Problem:

Different accounts of the two types of LUF/LSF differ both in terms of the nature of dialectal variation and in terms of proposals for their derivation.

A possible explanation:

Previous accounts/questionnaires rely heavily on one bridge verb, namely mond ‘say’.
7. EMPIRICAL RESULTS FROM QUESTIONNAIRE 2

7.1. Goals of questionnaire 2

GOAL 1

- involve a reasonable number of equally distributed bridge verbs

GOAL 2

- establish whether speaker variation in LSF and LUF go along the same lines

The research questions to answer remain the same but are now extended to LUF:

- What is the speaker variation related to LSF and LUF?
- What is the analysis of (the different types of) LSF and LUF? How should the speaker variation be accounted for?

7.2. Set-up and methodology

Date: December 2011
Venue: College of Nyíregyháza
Number of informants: 88 (of which 10 excluded)

Basic profile of the informants

Age: 19-25
Profession: student (and some teachers)
Place of living: 80% in North-Eastern Hungary

Method: magnitude estimation testing
Number of test items: 16 testing LUF, 16 testing LSF (plus 14 fillers)
Type of questions: acceptability judgements on an unfixed scale, compared to a reference sentence with a minor violation

Reference sentence:

(48) A tanár mindenkit át-engedett szerencsére a vizsgán.
The teacher everyone.ACC PV.let Past.3SG luckily the exam.ON

'Luckily the teacher let everybody pass the exam.'

Instructions:

'Write a round, positive number (>0) next to the reference sentence.'

'Compared to this sentence, how grammatical are the following test sentences? Try to express your judgment in numbers.'
Types of test sentences: complex sentences, each one presented in context, e.g.:

(49) A: - Azt mondta Béla, hogy vett egy új házat.  
  ‘Béla said that he had bought a new house.’

  B: - AUTÓT mondott hogy újat vett.  
  car.ACC said.3Sg.indef that new.ACC bought.3SG.indef  
  ‘He said that he had bought a new CAR.’

For both LSF and LUF

- baseline, type 1
- baseline, type 2
- adjunct island configurations, type 1
- adjunct island configurations, type 2

The examples contained each of the following 8 bridge verbs 4 times (2 times in LUF, 2 times in LSF)

(50)

mond  ‘say’
hall  ‘hear’
iğer  ‘promise’
hisz  ‘believe’
gondol  ‘think’
állít  ‘claim’
mesél  ‘tell’
remél  ‘hope’

7.3. Results

7.3.1. A reminder: the results of questionnaire 1

Recall the results of questionnaire 1. Table 3 is repeated here as table 9.

<table>
<thead>
<tr>
<th>Case of the higher NP</th>
<th>Object definiteness agreement in the matrix clause</th>
<th>Case of the lower NP</th>
<th>Dialect 1</th>
<th>Dialect 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSF Type 1</td>
<td>assigned by the matrix verb</td>
<td>[+ agreement]</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LSF Type 2</td>
<td>assigned by the embedded verb</td>
<td>[- agreement]</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

Table 9. Dialectal variation concerning the two types of LSF based on questionnaire 1

⇒ All speakers accept LSF type 1. Dialect 1 but not dialect 2 accepts LSF type 2.
⇒ Island effects suggest a double analysis of LSF (i.e. base-generation/movement)
7.3.2. Results of questionnaire 2

<table>
<thead>
<tr>
<th></th>
<th>LSF,type1 baseline</th>
<th>LSF,type2 baseline</th>
<th>LUF,type1 baseline</th>
<th>LUF,type2 baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>mond</em> 'say'</td>
<td>-0.005</td>
<td>-0.165</td>
<td>0.299</td>
<td>0.124</td>
</tr>
<tr>
<td><em>hall</em> 'hear'</td>
<td>0.003</td>
<td>-0.188</td>
<td>-0.015</td>
<td>-0.031</td>
</tr>
<tr>
<td><em>ígér</em> 'promise'</td>
<td>0.155</td>
<td>0.022</td>
<td>0.311</td>
<td>0.163</td>
</tr>
<tr>
<td><em>hisz</em> 'believe'</td>
<td>-0.150</td>
<td>-0.279</td>
<td>0.004</td>
<td>-0.447</td>
</tr>
<tr>
<td><em>gondol</em> 'think'</td>
<td>0.067</td>
<td>-0.346</td>
<td>0.075</td>
<td>-0.250</td>
</tr>
<tr>
<td><em>állit</em> 'claim'</td>
<td>-0.284</td>
<td>-0.281</td>
<td>-0.241</td>
<td>-0.239</td>
</tr>
<tr>
<td><em>mesél</em> 'tell'</td>
<td>-0.225</td>
<td>-0.176</td>
<td>-0.099</td>
<td>-0.057</td>
</tr>
<tr>
<td><em>remél</em> 'hope'</td>
<td>-0.398</td>
<td>-0.181</td>
<td>0.095</td>
<td>0.045</td>
</tr>
</tbody>
</table>

Table 10. z-scores received for baseline construction types per bridge verb

The results show that

- baseline type 1 structures do not always receive better scores than baseline type 2 structures neither in LUF nor in LSF (cf. table 10). Definiteness agreement (i.e. ‘type 1’/’type 2’ construction) is not a significant factor in the judgments.

→ There is no evidence for the existence of dialects as far as type 1 and type 2 structures are concerned.

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Adjunct island</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LSF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>type 1</td>
<td>-0.10743447</td>
<td>-0.472220154</td>
</tr>
<tr>
<td>type 2</td>
<td>-0.20076221</td>
<td>-0.498226433</td>
</tr>
<tr>
<td><strong>LUF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>type 1</td>
<td>0.080786711</td>
<td>-0.57376247</td>
</tr>
<tr>
<td>type 2</td>
<td>-0.07781355</td>
<td>-0.526611097</td>
</tr>
</tbody>
</table>

Table 11. z-scores received for each construction type in questionnaire 2

Table 11 shows that

- island configurations received worse scores than baseline structures, for each construction type.

Conclusions based on questionnaire 2:

→ There is no evidence for the existence of dialects

→ Both type 1 and type 2 structures show island effects
8. FINAL ANALYSIS OF LSF

8.1. The syntactic structure of LSF

Gist of the analysis:

The fact that both type 1 and type 2 structures show island effects to the same degree suggests a single movement analysis.

Where type 1 and type 2 differ:

- in type 1 the matrix verb agrees with the focused noun
- in type 2 the matrix verb agrees with the (silent) expletive
8.2. ‘Type 1’ constructions

(51) AUTÓT mondott hogy újat vett.
car.ACC said.3SG.indef that new.ACC bought.3SG.indef
’S(he said that (s)he had bought a new CAR.’
Main steps of the derivation:

- The NP ‘új autót’ ‘new car.ACC’ is base-generated as complement of the embedded verb.
- It moves up to the embedded Spec,FocP.
- From there the NP ‘autót car.ACC’ subextracts and moves through the matrix Spec,vP1 to Spec,FocP1.
- **The matrix verb agrees with the focused noun.**

This analysis explains

- why the matrix verb assigns case to the long-focused NP and why it agrees with it in definiteness.
- why the construction is island-sensitive.
8.3. ‘Type 2’ constructions

(52) AUTÓT monda hogy újat vett.
car.ACC said.3SG.def that new.ACC bought.3SG.indef
‘(S)he said that (s)he had bought a new CAR.’
Main steps of the derivation:

- The NP új autót ‘new car.ACC’ is base-generated as complement of the embedded verb.
- It moves up to the embedded Spec,FocP
- From there the NP autót ‘car.ACC’ subextracts and moves through the matrix Spec,vP₁ to Spec,FocP₁.
- **The matrix verb agrees with the (silent) expletive.**
- The adjective újat ‘new.ACC’ remains stranded in Spec,FocP₂

This analysis explains

- why the matrix verb cannot assign case to the long-focused NP and why it cannot agree with it in definiteness.
- why the construction is island-sensitive.

9. **CONCLUSIONS**

**Research question #1:** What different types of LSF are there?

**Results:** Based on the correlation of case marking and matrix definiteness agreement in the matrix clause there are two types of LSF in Hungarian.

**Research question #2:** What is the speaker variation related to LSF?

**Results:** There is no evidence for the existence of dialects as far as type 1 and type 2 LSF structures are concerned.

**Research question #3:** What is the analysis of the (different types of) LSF?

**Results:** The analysis of both types of LSF involves long-distance movement

**Additional results concerning LUF:** The analysis of LSF can be carried over to LUF.

**REFERENCES**