From overt to zero marking of spatial relations: the loss of SE in Asia Minor Greek

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Introduction

• The prepositional inventory of Ulaghátsh Cappadocian does not include σε.
  
  – Dawkins (1916: 83): “complete disuse of the preposition είς”.
  
  – Κεσίσογλου (1951: 54): «ἡ κίνηση σὲ τόπο, ποὺ στὴν κοινὴ νεοελληνικὴ γίνεται μὲ τὸ στό, στήν, κλπ., στὸ ἰδίωμά μας γίνεται μὲ τὸ δό, δά ἢ ἀσύνδετα»
Introduction

• In Ulaghátsh, all the functions that are normally encoded by $SE$ in other Cappadocian varieties are encoded by

  – bare accusative marked NPs: $[\text{NP}_{\text{ACC}}]$

  – postpositional phrases: $[\text{NP}_{\text{ACC}} + \text{ADVERB}]$
Introduction

(1) Ulaghátsh Cappadocian

a. émi [ta qonáca mésa]_{PostP}, kiríʃde [to jasduúq píso]_{PostP}. Tránse ci [to meidán]_{NP} en ávja.
   ‘She went into the houses and hid behind the cushions. She saw that in the yard there is some game.’ (Dawkins 1916: 348)

b. do koríʃ írte [énà isíz tópos]_{NP}
   ‘The girl came to a deserted place.’ (Kesisoglu 1951: 140)
Today’s talk

I. A diachronic account of the loss of SE in Ulaghátsh Cappadocian.
The journey of SE in Cappadocia

Most Cappadocian varieties (Delmesó, Mistí, Axó, ...) SE STAGE I

Phloïtá Cappadocian, Silliot¹ SE ~ Ø STAGE II

Ulaghátsh Cappadocian Ø STAGE III

¹ Κωστάκης (1968: 105): «ἡ κίνηση πρὸς κάποια κατεύθυνση ἢ ἡ στάση κάπου, ἔκφερεται πολὺ συχνὰ χωρὶς πρόθεση». 
Theoretical premises

- Core components in a spatial situation (*cf.* Talmy 2000)
  - Theme
  - Ground
  - Spatial relation
    - Static (Place, *aka* Locative)
    - Dynamic
      - Allative (or Goal)
      - Ablative (or Source)
      - Perlative (or Path)
Theoretical premises

• Core components in a spatial situation:
  – Figure
  – Ground
  – Spatial relation
  – Spatial region
    • Front space
    • Top space
    • Inner space
    • Vicinity space
Theoretical premises

(2) Delmesó Cappadocian

a. anévin so meiván apáno
   SpatialV/Dynamic-Goal Goal Ground Region
   ‘he climbed up the fruit tree’ (Dawkins 1916: 308)

b. kaθótun so meiván apáno
   SpatialV/Static Place Ground Region
   ‘she was sitting on the fruit tree’ (Dawkins 1916: 310)
**Stage I: Prepositional inventory**

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Forms</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td><em>se, s_, z</em></td>
<td>‘at, to’</td>
</tr>
<tr>
<td>APO</td>
<td><em>apo, apu, ap, ab, ape, pe, as, az, po</em></td>
<td>‘from’</td>
</tr>
<tr>
<td>GIA</td>
<td><em>ja</em></td>
<td>‘for’</td>
</tr>
<tr>
<td>ME(TA)</td>
<td><em>met, me, mi, m, mo, mode</em></td>
<td>‘with’</td>
</tr>
<tr>
<td>KHORIS</td>
<td><em>xoris, xors</em></td>
<td>‘without’</td>
</tr>
<tr>
<td>OS</td>
<td><em>os, oz, us</em></td>
<td>‘up to, until’</td>
</tr>
<tr>
<td>TSAUS/TSAX</td>
<td><em>tfaus, tfax</em> (Mistí)</td>
<td>‘up to, until’</td>
</tr>
</tbody>
</table>
Stage I: the semantics of SE

- A highly grammaticalised, polysemous preposition (3):
- ALLATIVE
- DESTINATION
- DIRECTION
- GOAL
- PLACE
- RECIPIENT
- ADDRESSEE
- BENEFICIARY

Space (Goal)

Space (Place)

Social
Stage I: the syntax of SE

• Two types of adpositional phrase:

① Prepositional Phrases \([SE + NP_{ACC}]\)

② Circumpositional Phrases \([SE + NP_{ACC} + ADVERB]\)
## Stage I: the syntax of SE

<table>
<thead>
<tr>
<th>Region</th>
<th>Forms</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPERIOR</td>
<td><em>apáno, abáno, apánu, apán, epáno</em></td>
<td>‘on top of, above’</td>
</tr>
<tr>
<td>INFERIOR</td>
<td><em>apokáto, apkáto, aptágo, pokáto, káto, kádo, kat, katu</em></td>
<td>‘under’</td>
</tr>
<tr>
<td>INTERIOR</td>
<td><em>apéso, apés, béso, mésa, emésa, méfi, meʃ, apésu, apés</em></td>
<td>‘inside’</td>
</tr>
<tr>
<td>EXTERIOR</td>
<td><em>okso, oksu</em></td>
<td>‘outside’</td>
</tr>
</tbody>
</table>
Goal–Place vs Source

(4) Delmesó Cappadocian

a.  so aslánon embró índe líya dicéna
    ‘in front of the lion are a few thorns’
    (Dawkins 1916: 320)

b.  ðes ta so aslánon embró
    ‘put them in front of the lion’
    (Dawkins 1916: 320)

c.  épar áso aslánon embró ta dicéna
    ‘take the thorns from in front of the lion’
    (Dawkins 1916: 320)
## Stage II: the variable use of SE

- Sources of data: three corpora

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Size (words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phloïtá</td>
<td>5,300</td>
</tr>
<tr>
<td>(8 stories, Dawkins 1916: 410–441)</td>
<td></td>
</tr>
<tr>
<td>2. Sílli (D)</td>
<td>2,850</td>
</tr>
<tr>
<td>(7 stories, Dawkins 1916: 284–304)</td>
<td></td>
</tr>
<tr>
<td>3. Sílli (K)</td>
<td>2,310</td>
</tr>
<tr>
<td>(9 stories, Kostakis 1968: 116–130)</td>
<td></td>
</tr>
</tbody>
</table>
Stage II: the variable use of SE

- Variants:

<table>
<thead>
<tr>
<th></th>
<th>Conservative</th>
<th>Innovative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>([SE + NP_{ACC}]_{\text{PrepP}})</td>
<td>([NP_{ACC}]_{\text{NP}})</td>
</tr>
<tr>
<td>Complex</td>
<td>([SE + NP_{ACC} + \text{ADVERB}]_{\text{CircumP}})</td>
<td>([NP_{ACC} + \text{ADVERB}]_{\text{PostP}})</td>
</tr>
</tbody>
</table>

- (5)–(8) on the handout.
Stage II: the variable use of se

• Envelope of variation:
  – All clauses containing a phrase that expresses one of the spatial functions associated with se (both complements and adjuncts):
    i. ALLATIVE
    ii. DESTINATION
    iii. DIRECTION
    iv. GOAL
    v. LOCATIVE
Stage II: the variable use of SE

• Envelope of variation:
  – Phrases encoding the RECIPIENT, ADDRESSEE and BENEFICIARY were excluded.
  – In their case, the use of bare, accusative-marked NPs could be the diachronic result of the transfer of these functions from the dative to the accusative (Humbert 1930; Trapp 1965; Lendari & Manolessou 2003; Manolessou & Beis 2006; Georgakopoulos 2011, 2014).
Stage II: the variable use of SE

• Envelope of variation:
  – All instances of pseudo-incorporation were also excluded:

  (9) a. Phloïtá
    
    epsés **spit=mas** írtén saráfos me to néka=t
    ‘Last night a money changer and his wife came to our house.’ (Dawkins 1916: 434)

   b. Sílli
    
    yo se **ipáyu xurjó=mu**
    ‘As for me, I will go to my village.’ (Dawkins 1916: 298)
Stage II: the variable use of SE

- Envelope of variation:

<table>
<thead>
<tr>
<th>Corpus</th>
<th>Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phloïtá</td>
<td>212</td>
</tr>
<tr>
<td>2. Sílli (D)</td>
<td>58</td>
</tr>
<tr>
<td>3. Sílli (K)</td>
<td>62</td>
</tr>
</tbody>
</table>
Stage II: the variable use of SE

• Results: the distribution of SE- and SE-less phrases

<table>
<thead>
<tr>
<th></th>
<th>Phloïtá</th>
<th>Sílli (D)</th>
<th>Sílli (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clauses without se</td>
<td>8.5</td>
<td>70.7</td>
<td>88.7</td>
</tr>
<tr>
<td>Clauses with se</td>
<td>91.5</td>
<td>29.3</td>
<td>11.3</td>
</tr>
</tbody>
</table>
Stage II: the variable use of SE

• Observations:
  – The Phloïtá corpus represents an incipient stage in the loss of SE.
  – The Sílli (D) corpus represents an intermediate stage.
  – The Sílli (K) corpus represents the most advanced stage.
  – In all three corpora, SE-variants are in complementary distribution with SE-less variants.
Stage II: the variable use of SE

- Analysing the variable distribution:

<table>
<thead>
<tr>
<th>Figure expressions</th>
<th>animacy definiteness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatial verbs</td>
<td>(no) spatial complement</td>
</tr>
<tr>
<td>Type of spatial relation</td>
<td>Goal vs Place</td>
</tr>
<tr>
<td>Ground expressions</td>
<td>animacy definiteness semantic type attribution</td>
</tr>
</tbody>
</table>
**Stage II: the variable use of SE**

- **Results: Goal vs Place in all SE-less phrases**

![Bar chart showing the percentage of Goal and Place in Phloïtá, Sílli (D), and Sílli (K).]

- Phloïtá: 72.2% Goal, 27.8% Place
- Sílli (D): 70.7% Goal, 29.3% Place
- Sílli (K): 61.8% Goal, 38.2% Place
Stage II: the variable use of SE

- Results: complements and adjuncts in SE-less Goals

<table>
<thead>
<tr>
<th></th>
<th>Complement</th>
<th>Adjunct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phloïtá</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Sílli (D)</td>
<td>93.1</td>
<td>6.9</td>
</tr>
<tr>
<td>Sílli (K)</td>
<td>94.1</td>
<td>5.9</td>
</tr>
</tbody>
</table>
Stage II: the variable use of SE

- Results: the omission of SE in simple and complex phrases

<table>
<thead>
<tr>
<th></th>
<th>Phloïtá</th>
<th>Sílli (D)</th>
<th>Sílli (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PostP</td>
<td>12.5</td>
<td>94.1</td>
<td>95.7</td>
</tr>
<tr>
<td>Average for all phrases</td>
<td>8.5</td>
<td>70.7</td>
<td>88.7</td>
</tr>
<tr>
<td>NP</td>
<td>7.8</td>
<td>61</td>
<td>84.6</td>
</tr>
</tbody>
</table>
Stage II: the variable use of SE

- Results: different semantic types of Grounds
Stage II: the variable use of \textit{se}

- Results: phrases with adnominal genitives (10)
## Stage II: the variable use of SE

<table>
<thead>
<tr>
<th>Ø</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>① Goal</td>
<td>Place</td>
</tr>
<tr>
<td>② Spatial complements</td>
<td>Spatial adjuncts</td>
</tr>
<tr>
<td>③ Prototypical locations</td>
<td>Non-prototypical locations (body parts, humans)</td>
</tr>
<tr>
<td>(towns, cities, geographical spaces, buildings and parts thereof)</td>
<td></td>
</tr>
<tr>
<td>④ Adnominal genitives and other modifiers</td>
<td>No adnominal genitives or other modifiers</td>
</tr>
<tr>
<td>⑤ Region-encoding adverbs</td>
<td>No region-encoding adverbs</td>
</tr>
</tbody>
</table>
The locus of the innovation

(11) a. Phloïtá
   *ce ístera píjen so vuiní*
   ‘and afterwards he went to the mountain’
   (Dawkins 1916: 410)

b. Silli (D)
   *kóri pajé̱nni doyrú staxtidží stu spí̱fti*
   ‘the girl goes straight to the house of the ash seller’
   (Dawkins 1916: 286)

c. Sílli (K)
   *érxumisti stun Áji-Vasíli brostá*
   ‘we come in front of the church of Saint Vasileios’
   (Kostakis 1968: 118)
The motivations of the innovation

• Lestrade (2010, 2013) and Stolz et al. (2014) account for the (syntagmatic or paradigmatic) omission of spatial markers such as *se* in terms of
  a. economy
  b. predictability.

• The use (or not) of zero markers is driven by the speakers’ preference to produce economical utterances while at the same time ensuring communicative success.
The motivations of the innovation

• In utterances in which the spatial relation between a Figure and a Ground is predictable (it can be recovered from the linguistic context, from world knowledge or a combination of the two), the overt marker that would otherwise be used to express this relation may seem redundant and be omitted by the speaker in an attempt to save the effort required for its pronunciation.
The motivations of the innovation

• In the case of spatial relations that are not intra- or extra-linguistically predictable and for which recoverability is therefore not possible, overt markers are retained as their omission would lead to communicative failure.
**Compare**

\[ \text{kóri pajeñni doyrú staxtidzí stu spítsí} \]

<table>
<thead>
<tr>
<th>kóri</th>
<th>prototypical Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>pajeñni</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theme</td>
</tr>
<tr>
<td></td>
<td>Goal</td>
</tr>
<tr>
<td></td>
<td>NP</td>
</tr>
<tr>
<td></td>
<td>PrepP</td>
</tr>
<tr>
<td>s(tu)</td>
<td>Goal</td>
</tr>
<tr>
<td>spítsí</td>
<td>prototypical Ground</td>
</tr>
</tbody>
</table>
From less to more economical utterances

\[ kóri \text{ pajɛnni doyr}ú \rightarrow \text{ kóri pajɛnni doyr}ú \]

[staxtidzi \text{ stu spîf}i]_{\text{PrepP}} \rightarrow [staxtidzi \text{ tu spîf}i]_{\text{NP}}
What about genitives and adverbs?

• Adnominal genitives and spatial adverbs make considerable contributions to the informational load of Ground-encoding NPs:
  – Genitives provide additional information on the reference object of the spatial relation, which needs to be retrieved from the more or less immediate context.
  – Adverbs redundantly encode information on where the Figure is found alongside the spatial verb.
What about genitives and adverbs?

(12) ístera jyzbasís durmánsen anéven so duvár apáno

<table>
<thead>
<tr>
<th>jyzbasís:</th>
<th>prototypical Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>anéven:</td>
<td>Theme</td>
</tr>
<tr>
<td></td>
<td>Goal + Region: superior</td>
</tr>
<tr>
<td></td>
<td>NP</td>
</tr>
<tr>
<td></td>
<td>PrepP</td>
</tr>
<tr>
<td>s(o):</td>
<td>Goal</td>
</tr>
<tr>
<td>duvár:</td>
<td>prototypical Ground</td>
</tr>
<tr>
<td>apáno:</td>
<td>Region: superior</td>
</tr>
</tbody>
</table>
What about genitives and adverbs?

• The omission of SE in these contexts can be thought of as an informational load relief strategy, which helps to produce more economical utterances.

• The formally and semantically most vulnerable element that redundantly encodes part of the spatial relational meaning is dispensed with.

• In Asia Minor Greek, the higher the informational load of the motion event encoding utterance, the more likely the omission of SE.
Stage III: the complete loss of SE

REDUNDANCY

high        low

Goal
Complements
Prototypical Grounds
NP_{GEN} + NP_{ACC}
Spatial adverbs

Place
Adjuncts
Non-prototypical Grounds
NP_{ACC}
No spatial adverbs
## Ulaghátsh Cappadocian: a SE-less dialect

<table>
<thead>
<tr>
<th>Preposition</th>
<th>Function</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ap/as</em></td>
<td>ABLATIVE</td>
<td>‘from’</td>
</tr>
<tr>
<td><em>me</em></td>
<td>COMITATIVE</td>
<td>‘with’</td>
</tr>
<tr>
<td><em>os</em></td>
<td>TERMINATIVE</td>
<td>‘up to, until’</td>
</tr>
<tr>
<td><em>Ø</em></td>
<td>ALLATIVE/LOCATIVE</td>
<td>‘at, to’</td>
</tr>
</tbody>
</table>

- Stolz *et al.* (2014): syntagmatic $\rightarrow$ paradigmatic zero
Ulaghátsh Cappadocian: a SE-less dialect

• Bare, accusative-marked NPs encode all spatial functions:
  – ALLATIVE
  – DIRECTION
  – GOAL
  – PURPOSE
  – LOCATIVE

• PostPs are used when Region needs to be additionally specified.

• (13)–(14) on the handout.
Ulaghátsh Cappadocian: a SE-less dialect

• Bare, accusative-marked NPs additionally encode indirect object functions:
  – RECIPIENT
  – ADDRESSEE
  – BENEFICIARY

• (15) on the handout.
Ulaghátsh Cappadocian: a SE-less dialect

- Bare, accusative-marked NPs additionally encode direct object functions:
  - PATIENT
  - THEME

- (16) on the handout.
Ulaghátsh Cappadocian: a SE-less dialect

• Object = Dative = Allative = Locative

• Blansitt (1988): a rare type of language, only two other known cases (Guaraní, Tahitian).
Ulaghátsh Cappadocian: a SE-less dialect

• Accusative forms are identical to nominative forms in both numbers across all inflectional classes (Table 1 on the handout).

• Subject = Object = Dative = Allative = Locative

• Semantic disambiguation is heavily dependent upon syntactic means and pragmatic inferencing.
Thank you for your attention!
Medieval roots?

• Tachibana (1994): \([\text{ADVERB} + \text{NP}_{\text{ACC}}]_{\text{PrepP}}\) was a substandard construction of the Late Medieval vernacular

(17)  

a. \(\text{Καὶ ἀποκάτου τὰ ξύλα ἐκείτοντα ἀνθρωποι, ἀποκάτου τὰ φύλλα καὶ εἰς τὲς ρίζες τους ἔξεβαιναν βρύσες καθαρὲς} \) (Historia Alexandri Magni F 80, 3, 4–6)

b. \(\text{kατέβημεν χαρζανιστοὶ ἀνάμεσα τὸν κάμπον} \)  
(Digenes Akritis E 509)
(Un)related developments

• Pantelidis (in press): omission of SE in both simple and complex PrepPs is attested, albeit marginally, in Peloponnesian varieties:

(18) Vrésthenas, Laconia
emí̂s sikoθíkame kampná katostí fabeλés ce
pá̂me ta tzí̂ntzia, apó ci vjē̂nome ton ái
vasíli ti rematçá mé̂sa
(Koukoules 1908: 249)
The variable use of *se* (Phloïtá, Sílli)

<table>
<thead>
<tr>
<th>Pseudo-incorporation</th>
<th>Omission of <em>se</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Only locations, not parts of locations</td>
<td>Both locations and parts of locations</td>
</tr>
<tr>
<td>2. Only prepositional complements</td>
<td>Both complements and adjuncts</td>
</tr>
<tr>
<td>3. Does not introduce discourse referents</td>
<td>Introduces discourse referents</td>
</tr>
<tr>
<td>4. No regular modifiers</td>
<td>Regular modifiers are fine</td>
</tr>
</tbody>
</table>

(Ioannidou & den Dikken 2009; Terzi 2010; Gehrke & Lekakou 2013)