Metaphoricity in English L2 learners’ prepositions

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RaAM
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Prepositions are difficult
<table>
<thead>
<tr>
<th>Material</th>
<th>NICLE</th>
<th>LINDSEI-NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The International Corpus of Learner English (Norw.)</strong></td>
<td>Untimed, argumentative essays</td>
<td>The Louvain International Database of Spoken English Interlanguage (Norw.)</td>
</tr>
<tr>
<td><strong>Prompts provided</strong></td>
<td><strong>Collection = 1999-2002</strong></td>
<td><strong>15-minute ‘interviews’</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Tri-fold structure</strong></td>
</tr>
<tr>
<td><strong>Collection = 2010-2012</strong></td>
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</tr>
<tr>
<td><strong>29 texts</strong></td>
<td><strong>50 texts</strong></td>
<td><strong>83,675 words (learner turns)</strong></td>
</tr>
<tr>
<td><strong>20,466</strong></td>
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</tbody>
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Year-long tertiary level course in English
Upper intermediate - advanced proficiency
Research questions

1. How often do Norwegian learners of English produce a divergent preposition?

2. Is there a significant difference between metaphorical use of prepositions across the spoken and written modes in Norwegian L2 learner English?

3. Is there a correlation between divergent use and metaphorical use?
How can prepositions be metaphorical?

fall in love
Procedure

- Identify prepositions
  - NICLE = CLAWS PoS tagging
  - LINDSEI = 92 prepositions
  - Exclusions
    - Phrasal verb particles, polywords, titles
    - as, than, like

- Categorize for divergence

- Categorize for metaphor status
  - Metaphor Identification Procedure (MIP)
I got some relatives (em) *in* New Jersey and *in* Salt Lake City as well (NO046)

and then (eh) there is competition *in* this level (NO006)

so I went there and: . I really liked it so after the= and it was only for three months a half semester (NO014)
Overview:

Preposition frequency
NICLE & LINDSEI

- 6839 tokens, 53 types
- 6.6% of all lexemes
- 'Top 10' = 92.3%

Frequency (%)

0 5 10 15 20 25 30

among between over during without around through after into by about from at on with for to of in

15 15 19 22 23 45 45 56 143 278 316 332 427 545 635 754 1295 1628

(> 15 occurrences)

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Preposition frequency per mode

LINDSEI
- 5170 tokens, 49 types
- 6.2% of all lexemes
- 'Top 10' = 93.4%

NICLE
- 1669 tokens, 38 types
- 8.1% of all lexemes
- 'Top 10' = 82.9%

( > 15 occurrences)

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Question 1: How often do Norwegian learners of English produce a divergent preposition?

Median = 3.2%
Mean = 4.0%
Divergence across the modes

Overall divergence frequency per mode

<table>
<thead>
<tr>
<th>Percent</th>
<th>S</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median 3.2%</td>
<td>Median 2.6%</td>
</tr>
<tr>
<td></td>
<td>Mean 3.8%</td>
<td>Mean 4.4%</td>
</tr>
</tbody>
</table>

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The most metaphorical word class...

Overall metaphor frequency

Median = 71.9%
Mean = 70.4%
The most metaphorical word class...

...but some prepositions are more metaphorical than others
Metaphoricity per preposition

Metaphorical frequency (%)

during by at around to among over with from into through in on of between without for about after

( > 15 occurrences)
Question 2: Is there a significant difference between metaphorical use of prepositions across the spoken and written modes in Norwegian L2 learner English?
Question 3: Is there a correlation between divergent use and metaphorical use?
Observation correlation

Excluding NULL observations
Concluding remarks

About metaphor:
✓ As a class, prepositions are highly metaphorical
✓ Not all prepositions are equally metaphorical

About learner language:
✓ Few divergent prepositions overall
✓ More divergent prepositions in spoken learner language
  ➢ Online processing
✓ More metaphorical prepositions in written learner language
  ➢ Topic
✓ No correlation between divergence and metaphoricity

About method:
✓ Consider the individual informants/texts, not (just) aggregate data
✓ Which average?
✓ Valid statistical tests for your data

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Future areas of research

- Learners with other L1s
- Younger / less proficient learners
- Longitudinal studies
- Individual prepositions

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Selected references


Corpora and tools:


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