Syntactic variation, constructional entrenchment and World Englishes
Inside the English dative alternation

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Previous research

**ditransitive dative**

Mary gave [John] [the apple]
- recipient
- theme

Mary gave [him] [the apple]
- recipient
- theme

**prepositional dative**

Mary gave [the apple] to [John]
- theme
- recipient

Mary gave [the apple] to [him]
- theme
- recipient
Previous research

Two research paradigms:

**Probabilistic grammar**
(e.g. Bresnan 2007)

- grammatical knowledge is partially probabilistic
- multiple probabilistic constraints influence the outcome of grammatical variation

**World Englishes**
(e.g. Schneider 2007)

- structural characteristics and sociohistorical background of varieties of English

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stochastic constraints

regional variation
Previous research

Stochastic generalizations = probabilistic grammar

Usage-based approaches

Linguistic experience

He send us his new tools to work with.

You can just pay those people more attention.

We have to get them typed photocopies.

Why would I need to give my new toy to my stupid brother?

Szmrecsanyi et al. 2016; Röthlisberger et al. 2017
Research aim

Explore the extent to which regional variation in probabilistic constraints is reflected in regional variation in lexical profiles...
Lexical profiles

- defined as the system of lexical items (e.g. verbs, recipients, themes) that are attracted to a syntactic variant
- measure the strength of association between lexical items and the constructions they occur in *(collostructions)*
Theoretical background

Three

Two research paradigms:

**Probabilistic grammar**
(e.g. Bresnan 2007)

- grammatical knowledge is partially probabilistic
- multiple probabilistic constraints influence the outcome of grammatical variation

**World Englishes**
(e.g. Schneider 2007)

- structural characteristics and sociohistorical background of varieties of English

**Construction grammar**
(e.g. Boas 2010)

- grammatical knowledge is experience- and usage-based
- grammatical knowledge is made up of constructions
**Taxonomic networks**

Macro-Cx
schematic
level

Meso-Cx
subschemaic
level

Micro-Cx
substantive
level

TRANSFER of POSSESSION

\[ V \text{ NP}_{rec} \text{ NP}_{theme} \]

\[ \text{give} \text{ NP}_{rec} \text{ NP}_{theme} \]

\[ \text{send} \text{ NP}_{rec} \text{ NP}_{theme} \]

- give Mary a book
- give them the answer
- send me a copy
- ...

**Diagram:**

- Macro-Cx schematic level
- Meso-Cx subschematic level
- Micro-Cx substantive level

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\[ \text{V NP}_{rec} \text{ NP}_{theme} \]
Entrenchment and abstraction

[V NP_{rec} NP_{theme}]

generalize to macro level

[bring NP_{rec} NP_{theme}]
[tell NP_{rec} NP_{theme}]
[hand NP_{rec} NP_{theme}]
[offer NP_{rec} NP_{theme}]
[give NP_{rec} NP_{theme}]
[send NP_{rec} NP_{theme}]
[show NP_{rec} NP_{theme}]

generalize to meso level

The teacher gave us the answer
I gave Mary the book
You’ve given them too much already
Bill gave the kids a hand
It gave the people hope
We gave them a warning
He will give me my dues
The noise is giving some of us a headache
CAUSE X TO HAVE Y
[V ?X ?Y]

ditransitive dative
[V NP_X NP_Y]

prepositional dative
[V NP_Y to NP_X]

allostrucutional relationship

[give NP_X NP_Y]

[give NP_Y to NP_X]

...
Research aims

Explore the extent to which regional variation in probabilistic constraints is reflected in regional variation in lexical profiles...

... on different levels of the taxonomic network
Data & Methodology
Corpus data

Corpora
• International Corpus of English (ICE)
• Corpus of Global web-based English (GloWbE)
Data extraction and annotation

(e.g. Bresnan et al. 2007)

- retrieval of dative variants using verb list and perl script
- restrict to choice context (incl. pronouns)

\[ N = 13,171 \]
Distinctive collexeme analysis

- measure the strength of association between lexical items (verb, recipient heads, theme heads) with the ditransitive vs. prepositional variant
- using the base-ten logarithm of the $p$-value from the Fisher-Yates Exact test (Stefanowitsch & Gries 2005: 9)
- indicates strength of association and statistical significance
Focus on

Higher-level schemas
• verb collostructions

Lower-level schemas
• verb-recipient collostructions
• verb-theme collostructions
• verb sense collostructions

see also Bernolet & Colleman 2016
Results
Verbs associated with ditransitive dative

ditransitive construction

<table>
<thead>
<tr>
<th>verb</th>
<th>BrE</th>
<th>CanE</th>
<th>IrE</th>
<th>NZE</th>
<th>JamE</th>
<th>SinE</th>
<th>IndE</th>
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Verbs associated with prepositional dative

prepositional construction

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<th>BrE</th>
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**Taxonomic network**

- **Macro-Cx**
  - schematic level

- **Meso-Cx**
  - subschematic level

- **Micro-Cx**
  - substantive level

**TRANSFER of POSSESSION**

\[ V \ NP_{rec} \ NP_{theme} \]

- \[ give \ NP_{rec} \ NP_{theme} \]
  - give Mary NP
  - give them NP
  - give Mary a book
  - give them the answer

- \[ send \ NP_{rec} \ NP_{theme} \]
  - send me a copy
  - ...

8/30/18
Verb-recipients associated with the ditransitive construction

[give PRON$_{rec}$ NP] = mini-Cx?
Verb-recipients associated with the prepositional

![Bar chart showing collostructional strength for different verbs in NZE, JamE, IndE, and PhiE.

- NZE: 1.576
- JamE: 1.849
- IndE: 1.734
- PhiE: 1.321

Verbs include:
- give_member
- give_police
- give_people
- give_someone]
**Taxonomic network**

Macro-Cx  
schematic  
level

Meso-Cx  
subschematic  
level

Micro-Cx  
substantive  
level

TRANSFER of POSSESSION  
\[ V \text{ NP}_{rec} \text{ NP}_{theme} \]

- \[ \text{give} \text{ NP}_{rec} \text{ NP}_{theme} \]
  - give \text{ NP a book}
  - give \text{ NP an answer}

- \[ \text{send} \text{ NP}_{rec} \text{ NP}_{theme} \]
  - give \text{ Mary a book}
  - give them the answer
  - send me a copy
  - ...
Verb-themes associated with the ditransitive

ditransitive construction

Verb 2 themes (associated with the (ditransitive

BrE  2  2
CanE  1  2
IrE  2  2
NZE  3  2
JamE  2  2
SinE  2  2
IndE  2  2
HKE  3  2

collostructional strength

verb – theme

give_chance  give_name  give_opportunity  give_time  tell_this
Verb-themes associated with the prepositional construction

The chart shows the strength of verb-themes associated with prepositional constructions across different dialects:

- **BrE**: Bring benefit, Convey message, Give attention, Give it, Give priority
- **CanE**: Convey message, Give priority
- **IrE**: Bring benefit, Convey message, Give attention, Give it, Give priority, Pay amount, Pay attention, Pay visit
- **NZE**: Convey message, Give priority
- **JamE**: Send letter, Send mail, Send message, Show it
- **SinE**: Convey message, Give priority
- **IndE**: Pay amount, Pay attention
- **HKE**: Convey message, Give priority

The x-axis represents different dialect abbreviations, and the y-axis shows the collostructional strength.
Summary

- Higher association strength of *verb-theme collexemes* in prepositional dative and *verb-recipient collexemes* in ditransitive dative.
- Regional variation in *verb-recipient collexemes*: higher association strength of verb-recipient with ditransitive dative in L2 vs L1.
Discussion & Conclusion
Further implications

- Higher association strength of verb dative and verb-recipient collexemes in ditransitive dative.
- Regional variation in verb-recipient collexemes: strength of verb-recipient with ditransitive dative.

[V NP] = meso-Cx

[give PRON_{rec} NP] = mini-Cx
Research aims

Explore the extent to which regional variation in probabilistic constraints is reflected in regional variation in lexical profiles:

Regional variation in the influence of recipient pronominality ⇒ regional variation in the strength of association between pronominal recipients and the ditransitive dative in L2 vs. L1

...on different levels of the constructional network

It is on the more subschematic levels, i.e. verb-recipient (and verb-theme collexemes), that differences in association strength – regional variation in constructional entrenchment – becomes apparent.

cf. Ziegeler 2014
Take home

We need to

- focus on other elements of the argument structure,
- consider the whole cline of the taxonomic network, from most schematic to more lexically specific constructions and, particularly, meso-constructions
- to assess the extent of regional variation in constructional entrenchment more fully
Thank you!

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References I


References II


