On the history of permissive *get* in American English: New quantitative evidence

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English *get* – a linguistic Swiss Army knife

- lexical meaning of ‘receiving’
  - *Look what I got for my birthday!*
- the *get*-passive
  - *Nobody move, nobody get hurt.*
- the *get*-causative
  - *Can I get you to deliver a message?*
- inchoative *get*
  - *It gets worse and worse.*
- idiomatic uses
  - *I get up at seven, I don’t get it.*
Permissive get

(1) In the movies the prisoners always get to make one phone call.
(2) This is a big day for the guards. They get to remind us who’s boss.
(3) I want to be a Marine. They get to wear swords, right?

• modal use of get that expresses permission (may, can)
  • a permitted action
    • They get to make one phone call. = ‘They are allowed to make one phone call.’
  • an opportunity
    • They get to remind us. = ‘They have the opportunity to remind us.’
  • a privilege
    • They get to wear swords. = ‘They have the privilege of wearing swords.’
Questions

• When and how did permissive *get* emerge?
• What has been said about permissive *get* in earlier work?
• Can we use corpus data and distributional semantics to better understand how the construction developed?
Overview

- Two conflicting accounts of permissive *get*:
  - The causative-to-permissive pathway (Gronemeyer 1999)
  - The acquisitive-to-permissive pathway (Van der Auwera et al. 2009)
- An alternative hypothesis:
  - The inchoative-to-permissive pathway
- Data
  - Permissive *get* in the COHA
- Distributional evidence
  - Developments in the semantic spaces of inchoative *get* and permissive *get*
- Conclusions
Two conflicting accounts
The causative-to-permissive pathway

- Gronemeyer (1999: 1):
  - «Using diachronic data, I show that possession leads to movement as well as stative uses (possession and obligation), movement develops into the causative and inchoative, from which the passive develops, and the infinitival causative gives rise to permission and ingressive aspect.»
The causative-to-permissive pathway

Gronemeyer (1999: 30):
causative: I got him to be a chaplain.
permissive: He got to be a chaplain.
The acquisitive-to-permissive pathway

• Van der Auwera et al. (2009: 284):
  «Gronemeyer (1999: 30-32, 35) actually claims that what she calls ‘permissive’ *get* derives from ‘causative’ *get*, illustrated in (23), a use which definitely refers to a participant-internal, causative force.

(23) John got me to clean his car.

This is not very plausible though.»
The acquisitive-to-permissive pathway

• Van der Auwera et al. (2009: 272):
  • «get lends itself easily to to the expression of [...] permission, and [...] it is plausible to relate this usage diachronically to a lexical verb meaning ‘acquire’.»

* I get to swim. ‘I can swim.’  
* He gets to be the murderer. ‘He could be the murderer.’

I’ve got a new book.  
They get to use Linda’s car.
The acquisitive-to-permissive pathway

Cross-linguistic data shows robust evidence for acquisition >> permission.
An alternative hypothesis
The inchoative-to-permissive pathway

• A central meaning of get: change of state, onset of a new activity or state of affairs
  • It gets worse and worse.
  • I got into the habit.
  • You’re getting to be a big girl now.

• «Privileged» inchoatives
  • I guess we won’t get to see Colonel Morrison after all. (1910s)
  • Some day she’d get to be an editor herself. (1930s)
  • Oh thank you and you’ll get to meet our new minister then sure! (1900s)

• Bridging contexts between change of state and permission:
  • verbalized message: a change of state occurs
  • implicature: the change of state was granted by some authority
Data from the COHA
data

- Exhaustive retrieval of \([get] + to + Vinf\) (n = 31’316)
- Annotation in terms of five semantic categories
  - permission
    - Prisoners get to make one phone call.
  - obligation
    - I got to leave.
  - causative
    - Who did you get to confess?
  - possession
    - What have I got to be ashamed of?
  - inchoative
    - You’re getting to be a big girl now.
- Identification of the verb in the infinitive
frequency developments

![Frequency developments graph]

- **Obligation**
- **Inchoative**
- **Permission**
- **Possessive**
- **Causative**

**Axes:**
- **Y-axis:** Tokens per million words
- **X-axis:** Time (1860 to 2000)

The graph shows the frequency developments of various linguistic phenomena over time.
permissive *get*

- **tokens**
- **types**
- **hapaxes**

**tokens per million words**

**types per million words**

**hapaxes per million words**
Distributional evidence
Distributional evidence

• Hypothesis: permissive “get to V” derives from secondary grammaticalization of inchoative “get to V”

• Two predictions from the literature:
  • Lexical persistence (Hopper 1991): grammaticalized constructions retain traces of their lexical history (especially initially)
  • Host-class expansion (Himmelmann 2004): grammaticalized constructions gradually expand the range of their lexical fillers

• Do the two constructions collocate with similar verb meanings?
• To what extent does permissive get emancipate itself from inchoative get (if ever)?
Distributional semantic plots

- Can be examined with distributional semantic plots (Perek 2014; 2016; 2018, Hilpert & Perek 2015)
- Visual representation of the semantic areas occupied by the lexical distribution of a construction
- Based on distributional semantics to capture similarity between word meanings
Distributional semantics

“You shall know a word by the company it keeps”  Firth (1957: 11)

• Words that occur in similar contexts tend to have related meanings (Miller & Charles 1991)

• Therefore, a way to characterize the meaning of words is through their distribution in large corpora

• Semantic similarity is quantified by similarity in distribution

• In particular, the frequent collocates of words in a large corpus
Example: *drink* and *sip*

Sentences from the COCA corpus:

- the pizzeria for a while, drinking a beer at a table
  - hell, I'd meet you, drink a glass of beer or a glass of cold water
  - books. She changed her dress, drank a glass of cold water
  - Willie picks up his cup, drinks some coffee, and leaves with them, and put them back
- men picked up their beers, sipped from the champagne glass and
  - to trust his intuition. She sipped from his cold beer, it was
  - food itself. Even when he sipped from her water bottle, then
- Emily was no different. Kate sipped
Example: *drink* and *sip*

- the pizzeria for a while, drinking a beer at a table
- hell, I'd meet you, drink a glass of beer or a glass of cold water
- books. She changed her dress, drank a glass of cold water
- Willie picks up his cup, drinks some coffee, and leaves with

- men picked up their beers, sipped some coffee, and leaves with
- to trust his intuition. She sipped some coffee, and leaves with
- food itself. Even when he sipped some coffee, and leaves with
- Emily was no different. Kate sipped some coffee, and leaves with

**Beverages**
Example: *drink* and *sip*

the pizzeria for a while, drinking a **beer** at a table
    hell, I'd meet you, drink a **glass of beer or**
        books. She changed her dress, drank a **glass of cold water**
    Willie picks up his **cup**, drinks some **coffee**, and leaves with

    men picked up their **beers**, sipped them, and put them back
to trust his intuition. She sipped from the **champagne glass and**
food itself. Even when he sipped his cold **beer**, it was
    Emily was no different. Kate sipped from her **water bottle**, then

**Beverages**

**Containers for beverages**
Example: *drink and sip*

the **pizzeria** for a while, drinking **a beer** at a **table**
hell, I'd meet you, **drink** a **glass of beer** or
books. She changed her dress, **drank** a **glass of cold water**
Willie picks up his **cup**, **drinks** some **coffee**, and leaves with

men picked up their **beers**, **sipped**
to trust his intuition. She **sipped**
food itself. Even when he **sipped**
Emily was no different. Kate **sipped**

**Beverages**

**Containers for beverages**

**Drinking and dining**
Distributional semantics

• Co-occurrence data for all verbs extracted from COHA (+/-2 words window)
• Semantic distance between words is measured by the distance between their set of collocates (cosine distance)
• Pairwise distances between words are used to position them in a 2-dimensional plot (MDS, t-SNE)
Distributional semantic plots

• The two uses occupy the same semantic areas in early periods
  => Lexical persistence

• The semantic domain of permissive *get* expands into different areas over time
  => Host-class expansion

• But: mere casual observation; how can we measure this?

• Idea: quantifying how similarly the same semantic areas are populated
Partitioning the semantic space

• How to partition the distributional semantic space into areas?
• Hierarchical clustering: the 389 verbs found in inchoative and/or permissive *get* are sorted according to semantic similarity
• 12 clusters identified as the “best” clustering solution (elbow method); correspond to 12 semantic areas
• NB: similar results with different numbers of clusters around 12
Examples of verb clusters

• Cluster 1: speech and sound
  say, tell, ask, hear, speak, play, answer, laugh, sing, sound, repeat, etc.

• Cluster 3: emotions and cognition
  know, think, love, remember, prove, enjoy, express, hate, hurt, trouble,
  entertain, excite, amuse, dread, dislike, sin, relish, loathe, etc.

• Cluster 5: food
  eat, drink, swallow, taste, suck, chew, sniff, nibble, sample, garnish, smell, etc.

• Cluster 9: manipulation and force
  turn, open, throw, wear, shake, pull, drop, pick, touch, lift, push, hit, beat, etc.
Similarity between distributions

• Are the same areas populated in the same way by the two constructions?

• Verbs in each group are counted in each period and construction
  E.g., permissive *get* in period 1 (1860-1909):

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>...</th>
<th>Group 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>...</td>
<td>0</td>
</tr>
</tbody>
</table>

• Correlations (Kendall’s tau) can be calculated between sets of counts
  • To measure similarity between the distribution of two constructions at different points in time
  • To quantify change in one construction at different points in time
\[ \tau = 0.86 \]

- 1950-1979 (inchoative)
- \[ \tau = 0.32 \]

- 1980-2009 (inchoative)
- \[ \tau = 0.55 \]

- 1950-1979 (permissive)
- \[ \tau = 0.87 \]

- 1980-2009 (permissive)
- \[ \tau = 0.79 \]
Summary

• Decrease in similarity between inchoative and permissive *get*

• Less change in inchoative *get* than permissive *get*

• Inchoative *get* regains more type in the last period and becomes more similar to permissive *get*
Conclusions

• Inchoative *get* is a plausible source for the grammaticalization of permissive *get*

• Bridging contexts are attested between the two uses

• Distributional evidence portrays a typical trajectory of grammaticalization

• New method to compare the semantic spread of constructions, both between constructions and in the same construction over time
References


Many thanks!