If you want a quick kiss, make it count: How grammar affects estimated event durations

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syntax → conceptualization

“I snapped my chin down onto some guy's fist and hit another one in the knee with my nose.”

“Some guy punched me on the chin, and another hit me in the nose with his knee.”

→ syntactic choices lead to semantic inferences
→ inferences are informative for…
  • theories of event representation & processing
  • theories of linguistic representation & processing
syntax → conceptualization

• Agent omission → less blame: 
  As Jane jumped back, she overturned the table vs
  the table overturned…  
  (Fausey & Boroditsky, 2010)

• Dative alternation → possessive vs locative inferences:
  He zorked the flig a garb vs He zorked a garb to the flig…
  (Myslín & Levy, 2015, and many others)

• Light verbs vs transitisves → transfer vs contact inference:
  Mary gave John a kiss vs Mary kissed John
  (Wittenberg & Snedeker 2014, Wittenberg et al., under review)
Can syntactic structure influence comprehenders’ inferences about event duration?

Mary gave John a kiss

Mary kissed John

verbal aspect (semantics) × mass/count (syntax)
verbal aspect and mass vs. count

punctive events:
• bounded in time (to kiss)
• often understood as repeated (Kim & Kaiser, 2015)

durative events:
• unbounded in time (to advise, to talk)

count nouns:
• bounded in space (an apple)

mass nouns:
• unbounded in space (string, iron, glass)
• arbitrary transformations when in count syntax:
  a string, an iron, a glass

Count syntax aids in event individuation for punctive events
(Hale and Keyser, 1993; Jackendoff, 1991; Krifka, 1992)
## mass/count syntax in light verbs*

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>punctive</td>
<td>After their first date, Douglas kissed/gave a kiss to Mary.</td>
<td>**</td>
</tr>
<tr>
<td>durative</td>
<td>The CEO talked/gave a talk about his latest sales strategy last night.</td>
<td>The professor advised/gave her student advice on his paper yesterday.</td>
</tr>
</tbody>
</table>

* with give

** no linguistic examples:

bounds can be drawn but not erased
key predictions

punctive verbs: 

\( \text{to give a kiss} \)

\( \times \times \times \times \times \)

count syntax

to kiss

durative verbs:

\( \text{to give advice} \)

\( \sim \sim \sim \sim \sim \sim \sim \)

mass syntax

to advise

to give a talk

count syntax

\( \text{to give a talk} \neq \text{to talk} \)

\( \rightarrow \text{shorter construal of events:} \)
\( \text{to give a kiss} < \text{to kiss} \)

\( \rightarrow \text{fewer events:} \)
\( \text{to give a kiss} < \text{to kiss} \)

\( \rightarrow \text{shorter construal of events:} \)
\( \text{to give advice} < \text{to advise} \)

\( \rightarrow \text{same number of events:} \)
\( \text{to give advice} \approx \text{to advise} \)

\( \rightarrow \text{fewer events:} \)
\( \text{to give a talk} < \text{to talk} \)
studies

→ shorter construal of events:
  *to give a kiss* < *to kiss*

→ shorter construal of events:
  *to give advice* < *to advise*

→ different construal of events:
  *to give a talk* ≠ *to talk*

→ fewer events:
  *to give a kiss* < *to kiss*

→ same number of events:
  *to give advice* ≈ *to advise*

→ fewer events:
  *to give a talk* < *to talk*

① How long does the event take?
  ① Open Estimates
  ② Categorization

② How many events?

③ How similar are the events?
how long does it take? (1/2)

PC: After their first date, Douglas kissed/gave a kiss to Mary.
DC: The CEO talked/gave a talk … last night.
DM: The professor advised/gave her student advice… yesterday.

How long did that take? _____

100 English native speakers answers transformed into log-seconds; LMER

Key prediction:
PC & DM: shorter in ditransitive light verb
how long does it take? (1/2)

→ main effects of event class and construction
→ construction effect on PC & DM, but none on DC
→ giving a kiss and giving advice are shorter than kissing and advising
how long does it take? (2/2)

PC: After their first date, Douglas *kissed/gave a kiss to* Mary. How long did that take?
[shortest] up to 15 seconds
[short] between 15 seconds and and 46 seconds
[long] between 46 seconds and 1 hour
[longest] more than 1 hour

DC: The CEO *talked/gave a talk* … last night.

DM: The professor *advised/gave her student advice* … yesterday.

80 English native speakers mixed-effects cumulative logit model

Key prediction:
PC & DM: shorter in ditransitive light verb
how long does it take? (2/2)

- punctive count
- durative count
- durative mass

longest
- (0.01)
- (0.02)
- (0.04)
- (0.08)

long
- giving a kiss and giving advice are shorter than kissing and advising
- (0.28)
- (0.36)

short
- (0.67)
- (0.53)

shortest
- (0.42)
- (0.35)
- (0.36)
- (0.56)

Proportion of duration category chosen

Construction
- transitive verb
- ditransitive light verb

n.s.
key predictions & findings

punctive/iterative verbs:

kiss

\[ \times \times \times \times \] count syntax

to give a kiss

durative verbs:

advise/talk

\[ \sim \sim \sim \sim \sim \sim \sim \sim \sim \sim \sim \] mass syntax

to give advice

to give a talk

\[ \rightarrow \text{shorter construal of events:} \]

to give a kiss < to kiss

\[ \rightarrow \text{shorter construal of events:} \]

to give advice < to advise
how many events?

PC: After their first date, Douglas *kissed/gave a kiss to* Mary. How many events did you just imagine? ______

DC: The CEO *talked/gave a talk* ... last night.

DM: The professor *advised/gave* her student *advice*... yesterday.

80 English native speakers
event counts transformed into log; LMER

Key prediction:
  count syntax (PC & DC)
  leads to fewer events
Event Counts, on log scale

- punctive count (kiss – to give a kiss)
- durative count (talk – to give a talk)
- durative mass (advise – to give advice)

→ main effect of construction and event category
→ effect of construction on PC and DC

Construction
- transitive verb
- ditransitive light verb
key predictions & findings

punctive/iterative verbs: "kiss"

- count syntax
- shorter construal of events: to give a kiss < to kiss
- fewer events: to give a kiss < to kiss

durative verbs: "advise/talk"

- count syntax
- mass syntax
- shorter construal of events: to give advice < to advise
- same number of events: to give advice ≈ to advise
- fewer events: to give a talk < to talk
how similar are the events?

kissing --- giving a kiss (PC)

How similar are these events?

the same events  o  o  o  o  o  o  o  o  completely different
(1)  (7)

talking --- giving a talk (DC)
advising --- giving advice (DM)

40 English native speakers; LMER

Key prediction:
DC pairs less similar
how similar are the events?

- punctive count (kiss – to give a kiss)
- durative count (talk – to give a talk)
- durative mass (advise – to give advice)

→ conceptual shift in DC
key predictions & findings

punctive/iterative verbs:

\[ \text{kiss} \]

\[ \times \times \times \times \times \]

to give a kiss

count syntax

durative verbs:

\[ \text{advise/talk} \]

\[ \text{to give advice} \]

\[ \text{to give a talk} \]

mass syntax

\[ \text{to give advice} \approx \text{to advise} \]

\[ \text{to give a talk} \neq \text{to talk} \]

count syntax

\[ \rightarrow \text{shorter construal of events:} \]

to give a kiss < to kiss

\[ \rightarrow \text{shorter construal of events:} \]

to give advice < to advise

\[ \rightarrow \text{different construal of events:} \]

to give a talk \neq \text{to talk}

\[ \rightarrow \text{fewer events:} \]

to give a kiss < to kiss

\[ \rightarrow \text{same number of events:} \]

to give advice \approx \text{to advise}

\[ \rightarrow \text{fewer events:} \]

to give a talk < to talk
summary

- squeezing an event into a light verb construction systematically affects...

- construal of event duration

- construal of event repetitions

- construal of event similarity

→ predictable from the interaction of aspectual class and mass/count syntax

→ mapping from grammar to event representation beyond “who dunnit”
Thank you! And…

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My RA:
Suhas Arehalli

doa jump should work too. Stay tuned.