

## Tense use in dialogue

Jos Tellings, Martijn van der Klis, Bert Le Bruyn, and Henriëtte de Swart

<https://time-in-translation.hum.uu.nl/>

### 1 Switchboard results

- Tense use in ‘forward-looking’ (f\*) dialogue acts in Switchboard:

	fa	fc	fp	ft
present perfect	2	144 [21.9%]	0	0
past	3	209 [31.8%]	0	0
present	44	304 [46.3%]	60	8

Table 1: fa = Apology, fc = Conventional-closing, fp = Conventional-opening, ft = Thanking

- Use of PERFECTS in various dialogue acts:

Dialogue Act	# of PERFECTS	
Negative non-no answers [ng]	37/203	18.2%
Conventional-closing [fc]	144/1100	13.1%
Declarative yes-no-question [qy^d]	98/1011	9.7%
Declarative wh-question [qw]	7/74	9.5%
Yes-no question [qy]	400/4412	9.1%
Statement-non-opinion [sd]	5931/69972	8.5%
all other DAs		<8.5%

Table 2: Occurrences of PERFECTS in Switchboard

<p><b>Negative non-no answers (ng):</b></p> <ul style="list-style-type: none"> <li>- but I <u>haven't been</u> there.</li> <li>- Uh, I <u>haven't gotten</u> through it yet.</li> <li>- I <u>haven't bought</u> any new clo-</li> <li>- I have not <u>heard</u> of it, any problems of it flooding anywhere.</li> </ul>	<p><b>Declarative wh-questions (qw):</b></p> <ul style="list-style-type: none"> <li>- What kind of, what kind of jobs <u>have you done</u>?</li> <li>- What kind of a degree <u>have you got</u>?</li> <li>- How long <u>have you been</u> with them?</li> <li>- And where <u>have you been</u> on these cruises?</li> </ul>
<p><b>Yes-no questions (qy):</b></p> <ul style="list-style-type: none"> <li>- So, <u>have you ever served</u> on a jury?</li> <li>- <u>Have you seen Robin Hood</u> yet?</li> <li>- All right, <u>have you lived</u> in this area long?</li> <li>- But, uh, <u>have you had</u> any major repairs recently?</li> </ul>	<p><b>Declarative yes-no-question (qy^d)</b></p> <ul style="list-style-type: none"> <li>- I don't know if you've <u>ever read</u> that?</li> <li>- I guess you've <u>gone</u> that way, maybe.</li> <li>- You've <u>never seen Northern Exposure</u>?</li> <li>- I'm, I'm sure you've <u>probably heard</u> of Marion Berry.</li> </ul>
<p><b>Statement-non-opinion (sd):</b></p> <ul style="list-style-type: none"> <li>- I've <u>been</u> with them for seven years.</li> <li>- <u>Haven't had</u> any problems since.</li> <li>- I've had cats growing up all the time.</li> <li>- And I've <u>always been</u> very impressed with the <i>Taurus</i>.</li> </ul>	<p><b>Conventional closing (fc)</b></p> <ul style="list-style-type: none"> <li>- It's <u>been</u> pleasant talking to you.</li> <li>- Well I've <u>really enjoyed</u> the conversation.</li> <li>- Well, it has, it has <u>been</u> really fun.</li> <li>- Well, I think we've <u>done</u> them a good job today then.</li> </ul>

Table 3: Examples of PERFECT use in Switchboard (randomly selected)

## 2 TARSQI output example

Input sentence: *Has John read the book?*

Partial output:

```
<EVENT begin="2" end="5" aspect="NONE" class="OCCURRENCE" eid="e1" eiid="ei1" epos="
  "VERB" form="Has" origin="EVITA" pos="VBZ" tense="PRESENT" />
<EVENT begin="11" end="15" aspect="NONE" class="OCCURRENCE" eid="e2" eiid="ei2"
  epos="VERB" form="read" origin="EVITA" pos="VB" tense="INFINITIVE" />
<TLINK eventInstanceID="ei1" lid="11" origin="CLASSIFIER-0.3926" relType="IDENTITY"
  relatedToEventInstance="ei2" />
```

## 3 BNC results

Results from the BNC corpus (<http://www.natcorp.ox.ac.uk/>):

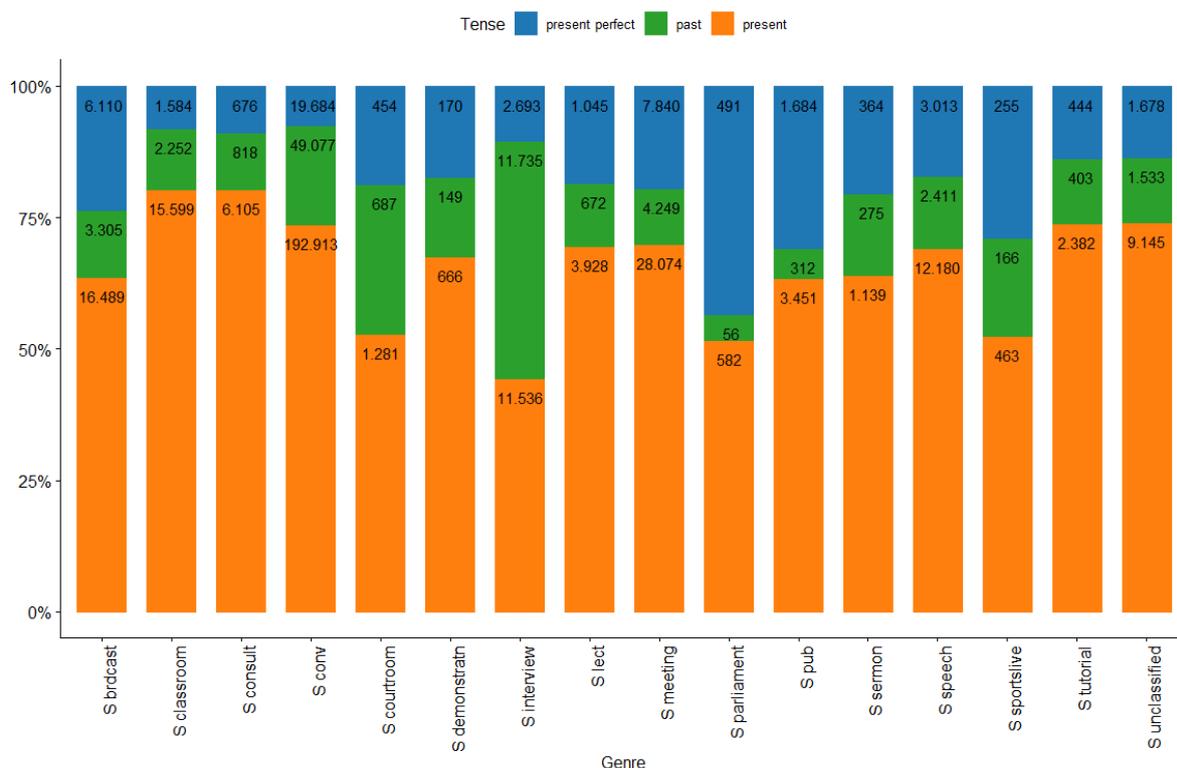


Figure 1: Tense use in BNC by genre

The results above have been generated via the **PerfectExtractor**. For finding PERFECTS, it uses a simple algorithm that looks for an auxiliary verb (either HAVE or BE) and finding a neighbouring past participle. It takes care of words between auxiliary and participle, passive/continuous present perfects (e.g. English and French), lexical restrictions of the auxiliary (French, German and Dutch), and reversed order in subordinate clauses (German and Dutch). PerfectExtractor is configured for various (parallel) corpora.

### Software links

TARSQI: <http://www.timeml.org/tarsqi/toolkit/index.html>

TMV: <https://clarin09.ims.uni-stuttgart.de/tmv/>

SitEnt: <http://www.coli.uni-saarland.de/projects/sitent/page.php>

PerfectExtractor: <https://github.com/UUDigitalHumanitieslab/perfectextractor>