Combining corpus and experimental methods to study dialogic engagement in spoken discourse

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Background
CTP constructions

• Epistemic and evidential complement-taking predicate (CTP) constructions:

  – *I suppose* COMPLEMENT
    
    » I *suppose [that’s one option]*, but it’s not a very practical one.

  – *I think* COMPLEMENT
    
    » Honestly I *think [it was intentional]*.

  – *I am convinced* COMPLEMENT
  
  – *I know* COMPLEMENT
  
  – etc.
Background

CTP constructions: traditional vs. dialogic view

The ‘traditional’ view

How certain is the speaker about what she says?

The dialogic view

How willing is the speaker to accept other people’s opinions?
Background
APPRAISAL theory

• APPRAISAL theory (Martin & White, 2005)

• Three components of APPRAISAL:
  – ATTITUDE
    » The movie was amazing!
  – GRADUATION
    » Officers arrested him and described him as extremely drunk.
  – ENGAGEMENT
    » I believe that no deal is better than this bad deal.
Background
APPRAISAL theory

- APPRAISAL theory (Martin & White, 2005)
- Three components of APPRAISAL:
  - ATTITUDE
    » The movie was amazing!
  - GRADUATION
    » Officers arrested him and described him as extremely drunk.
  - ENGAGEMENT
    » I believe that no deal is better than this bad deal.
And, [Marco Rubio] referred to my hands: ‘If they’re small, something else must be small.’ I guarantee you, there’s no problem. I guarantee.

I think the only difference between me and the other candidates is that I’m more honest and my women are more beautiful.
APPRAISAL theory’s treatment of CTPs

- APPRAISAL theory tends to adopt a rigid classification. For example:
  - *I believe* belongs to the category of EXPANSION because it is generally used to signal that the speaker’s opinion is one out of many possible viewpoints (Martin and White, 2005: 98)
  - *I know* is used to express CONTRACTION, signalling that further comments are disinvited (Martin and White, 2005: 155)
Challenges in analyzing ENGAGEMENT

• ENGAGEMENT expressions are flexible and defy a rigid a-priori classification
  – *believe* can function as marker of EXPANSION and CONTRACTION in different contexts (Fuoli, *forthcoming*)
  – evaluation is highly context-dependent (e.g. Hunston, 2011; Paradis et al., 2012; Thompson & Alba-Juez, 2014)
  – CTPs serve multiple pragmatic functions (e.g. Aijmer, 2014; Boye & Harder, 2007; Brinton, 2008; Kaltenböck, 2013; Simon-Vandenbergen 2000; Thompson & Mulac, 1991; Van Bogaert, 2009)
Research questions

1. What are the dialogic functions of first-person epistemic and evidential CTP constructions in spoken discourse?
2. What linguistic and extra-linguistic factors determine the dialogic function of the constructions?
Overview of the study

1. Exploratory corpus-based analysis based on the London-Lund Corpus of spoken British English (LLC)
   - GOAL: identify potentially relevant contextual factors affecting the dialogic force of CTPs

2. Experiment
   - GOAL: test the effect of three factors on speakers’ interpretation of utterances containing CTPs as expansive or contractive
The corpus study
Data

• The London-Lund Corpus of spoken British English
  – Spontaneous face-to-face conversations
  – Six texts of 5,000 words each:
    » Conversations between equals (S.1.2, S.1.6, S.2.13)
    » Conversations between disparates (S.3.1, S.3.2, S.3.3)

• We searched for first-person epistemic-evidential CTPs
  – 246 CTP utterance were identified
  – 19 different predicates, including ASSUME, BE AFRAID, BE CERTAIN, BE CONVINCED, BE SURE, DOUBT…
Corpus analysis

Phase 1
The utterances were annotated in accordance with five factors

Phase 2
The utterances were annotated as either dialogically expansive or contractive

Comparison
The two annotations were compared to find correlations between the dialogic function of CTP constructions and the five factors

1. Interlocutor status
2. Prosody
3. Presence of additional expansive marker
4. Presence of additional contractive marker
5. Type of complement clause
Corpus analysis

Phase 1
The utterances were annotated in accordance with five factors

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The utterances were annotated as either dialogically expansive or contractive

Comparison
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- Fuoli’s (forthcoming) step-wise method for annotating APPRAISAL
- Included inter-coder reliability test
Corpus analysis

**Phase 1**
The utterances were annotated in accordance with five factors

**Phase 2**
The utterances were annotated as either dialogically expansive or contractive

**Comparison**
The two annotations were compared to find correlations between the dialogic function of CTP constructions and the five factors
Key findings from corpus study

• First-person epistemic and evidential CTP constructions express both dialogic EXPANSION and CONTRACTION

• There are two linguistic factors and one extra-linguistic factor that most strongly correlate with dialogic function:
  – Interlocutor status
  – Presence of a co-occurring contractive marker
  – Prosodic marking of the first-person CTP

• The effect and significance of the factors will be tested in an experiment
The experiment
Hypotheses

**Hypothesis 1.** Utterances containing *I think* produced by equal-status speakers will be perceived as more expansive than utterances produced by higher-status speakers.

**Hypothesis 2.** Utterances containing *I think* only will be perceived as more expansive than utterances containing *I think* and an additional contractive marker.

**Hypothesis 3.** Utterances in which *I think* receives an accent on the verb will be perceived as more expansive than utterances in which the accent is on the pronoun, which in turn will be perceived as more expansive than utterances with no accent on *I think*.

**FRIEND:** I think that Jim is wrong

**BOSS:** I think that Jim is wrong

**OPEN**

**CLOSE**

*I think that Jim is wrong*

*I think that Jim is clearly wrong*

**OPEN**

**CLOSE**

*I think that Jim is wrong*

*I think that Jim is wrong*

**OPEN**

**CLOSE**

*I think that Jim is wrong*

*I think that Jim is wrong*

**OPEN**

**CLOSE**

*I think that Jim is clearly wrong*

*I think that Jim is clearly wrong*
Experimental design

• 2 x 2 x 3 within-subjects factorial design

1. Interlocutor status
   a. Equals (attributed to an equal-status interlocutor)
   b. Disparates (attributed to a higher-status interlocutor)

2. Contraction
   a. Presence of a co-occurring contractive marker
   b. Absence of a co-occurring contractive marker

3. Prosodic marking of *I think*
   a. Accent on pronoun
   b. Accent on verb
   c. No accent
Procedure

• Participants took part in 36 imaginary conversations with another person
  – the person expressed her opinion on something
    » the opinion is always framed by I think
    » the conversations and opinion statements were manipulated to represent all the factors and their combinations
  – the participants both read and listened to the conversations
  – the participants were asked to answer two questions using Likert-type scales
Questions

1. To what extent would the person take a different opinion from you into consideration?

Perceived openness to dialogue

2. How comfortable are you in expressing a different opinion?

Willingness to disagree
Participants

• 31 participants (23 female, 8 male)
• Native speakers of English
• 19-42 years of age
• Either staff or students at Lund University
• Movie ticket
Results

• The results were analyzed using repeated measures ANOVA, followed by Bonferroni corrected post-hoc tests
• Hypothesis tests
  – Hypothesis 1: supported
  – Hypothesis 2 and 3: partially supported
    » three way interaction between the factors
FRIEND: I think that Jim is clearly wrong
BOSS: I think that Jim is *clearly* wrong

With contractive marker

Without contractive marker
Conclusions

• First-person epistemic and evidential CTP constructions express both dialogic **expansion** and **contraction**, depending on:
  i. the meaning of the CTP itself
  ii. the relationship between the interlocutors
  iii. the presence or absence of other stance markers
  iv. the prosodic marking of the first-person CTP
The study

• Is going to be published in a special issue on ‘corpus approaches to evaluation’ of the journal Corpora, co-edited by Susan Hunston and Stanislaw Roszkowski

• The manuscript can be downloaded from Nele Põldvere’s Lund University or Academia page
## Phase 1: Annotation of five factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlocutor status</td>
<td>- Equals</td>
</tr>
<tr>
<td></td>
<td>- Disparates</td>
</tr>
<tr>
<td>Prosody</td>
<td>- Accent on pronoun</td>
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<tr>
<td></td>
<td>- Accent on verb/adjective</td>
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<tr>
<td></td>
<td>- No accent</td>
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<tr>
<td>Expansive marker</td>
<td>- Expansive marker(s)</td>
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<tr>
<td></td>
<td>- No expansive marker(s)</td>
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<tr>
<td>Contractive marker</td>
<td>- Contractive marker(s)</td>
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<tr>
<td></td>
<td>- No contractive marker(s)</td>
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<tr>
<td>Complement clause</td>
<td>- Opinion</td>
</tr>
<tr>
<td></td>
<td>- Fact</td>
</tr>
</tbody>
</table>
I think with a contractive function

(B is complaining about the department)

B: but once again I’m not surprised. because I think it had been b/uilt up into a very powerful instrument indVeed. [əːm] with with you know four. four vice-presbyters five vice-presbyters with Coventry [əːm əːm] all chipping in. together
Stimuli

Context

You are working in human resources in London. You and your boss Mrs. Chambers are discussing why there are not so many people taking part in the company’s social gatherings.

Conversation

MRS. CHAMBERS SAYS TO YOU:
People’s don’t seem to be interested in spending their Friday nights with the people they spend the whole week together with. There’s so much more to do in the city.

** I think it’s obviously because we live in London **.
You are working in human resources in London. You and your boss Mrs. Chambers are discussing why there are not so many people taking part in the company's social gatherings.

PRESS 'SPACE' TO MOVE ON TO THE CONVERSATION
Without additional contractive marker

With additional contractive marker

Perceived openness to dialogue

No accent  Pronoun  Verb

Status
Equals  Disparates

Pronoun
Verb

Status
Equals  Disparates

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Without contractive marker

- Perceived openness to dialogue
- Status: Equals

With contractive marker

- Perceived openness to dialogue
- Status: Disparates

Willingness to disagree
- No accent
- Pronoun
- Verb

No accent
- Pronoun
- Verb

function(x) { mean(x, na.rm = T) of Addressee.Scale

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Unaccented *I think* and contractive marker

• Most expansive utterance type in conversations between equals

• Significantly more contractive in conversations between disparates

• The construction has two functions:
  – Reinforcement of authority and expertise of the speaker (Aijmer, 2014; Simon-Vandenbergen, 2000)
  – Used to seek approval from the interlocutor and negotiate the validity of what is said (Brezina, 2009)

• The functions are activated depending on power differences between interlocutors
Prosodic marking of *I think*

- Speakers alter the prosodic realisations of *I think* to control and influence the course of the conversation.
- Accent on verb expresses a high degree of epistemic uncertainty and dialogic expansion.
- Accent on pronoun is interpreted as relatively more contractive:
  - The pragmatic function of *I think* changes from a downtoner to a booster (Kaltenböck, 2008).
  - Comparable to formulations of authorial emphasis, or contraction, in appraisal.
- Points to the need to extend appraisal to spoken discourse.