Negotiating stances across speaker turns in everyday conversation

CARITA PARADIS, LUND UNIVERSITY
Stance-taking in dialogue

- How are meanings created and negotiated off the top of people’s heads?
- Through what language resources (in the broad sense)?
- How do people behave (act and interact)?
Bla bla bla bla bla bla blaaaaa...
People

- discuss, argue, fight, banter, chit-chat, gossip, natter, tête-a-tête talk, argue, converse ....
So, let’s start from scratch

What are the basic assumptions of language?

George Keatining
Language is social action performed by humans to re-contextualize, communicate and negotiate experiences and take stance.
and conversation involves perception, cognition, language and culture – and is multimodal both in production and uptake
Everyday conversation is like

Photo: Edward Eyer
Photo: Tim Gouw
Photo: Vera Arsic
Conversation

- is social interaction performed by speakers
- proceeds in a turn-taking fashion
- requires joint attention and action perception
- includes both production and comprehension
- meanings are constantly negotiated
- speakers coordinate their stances to establish mutual understanding

Brennan & Clark, 1996; Clark, 1996; Du Bois & Giora, 2014; Fusaroli & Tylén, 2012; Gibbs & Clark, forthc.; Linell, 2009; Pöldvere, & Paradis, 2019, 2020; Rasenberg, Özyürek & Dingemanse, 2020
Conversations

• are performed by speakers through meetings of minds. (Gärdenfors, 2014)
Meetings of minds

This metaphor highlights the dynamic and emergent nature of interaction with meeting-points at which interlocutors have reached a sufficient degree of mutual understanding.

Gärdenfors, 2014; Paradis, 2015; Tomasello, 2010
To study this

- We need production data of natural conversation in wilderness (= also outside our labs)

Photo: Deva Darshan
This talk has two parts

- The data
- A case study of stance-taking across speaker turns
2014

- Was the year when we decided to compile a new spoken corpus
- The London-Lund Corpus 2 (LLC–2)
The LLC–2 team

Nele Põldvere  Carita Paradis  Victoria Johansson
In particular this very special person

Nele Põldvere
The spoken data situation in 2014

- The LLC–1 (50s – 80s)
- The Santa Barbara Corpus (80s)
- ICE (90s)
- The British National Corpus (1994)
Requirements for LLC–2

- Easily accessible for academic use
- Suitable for research on contemporary speech
- Accompanied by text aligned sound files
- Principled diachronic comparisons with LLC–1
LLC–1

1950s–1980s

LLC–2

2014–2019

c. 50 years

- Spoken British English
- Adult educated speakers
- ~500,000 words
- Dialogue & monologue
# LLC–2 design

<table>
<thead>
<tr>
<th>Text categories</th>
<th>Texts</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face conversation</td>
<td>47</td>
<td>235,000</td>
</tr>
<tr>
<td>Phone/Skype conversation</td>
<td>12</td>
<td>60,000</td>
</tr>
<tr>
<td>Broadcast discussions and interviews</td>
<td>12</td>
<td>60,000</td>
</tr>
<tr>
<td>Spontaneous commentary</td>
<td>12</td>
<td>60,000</td>
</tr>
<tr>
<td>Parliamentary language</td>
<td>4</td>
<td>20,000</td>
</tr>
<tr>
<td>Legal language</td>
<td>4</td>
<td>20,000</td>
</tr>
<tr>
<td>Prepared speech</td>
<td>9</td>
<td>45,000</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>500,000</td>
</tr>
</tbody>
</table>
Nele recorded

- Face-to-face conversation, mobile phone/Skype conversation, university lectures
- University College London, Lancaster University, Lund University
- Non-surreptitious (compared to LLC–1)
- Consent forms & questionnaires
Are you a native speaker of British English?
Do you think spoken British English has changed a lot over the last 50 years?

HELP US FIND OUT!

We are interested in recording conversations between adult native speakers of British English.

If you wish to participate and/or receive more information about the project, please send an email to Nele Pöldvere at nele.poldvere.15@alumni.ucl.ac.uk.

THANK YOU!
The speakers

- Approximately 350 unique speakers
- Extensive metadata for Nele’s recordings
  - Questionnaire: age, gender, occupation, education, (foreign) language use, place(s) of residence, accent
- More limited for Other recordings
LLC–2 transcription and markup

• Orthographic
• Based on XML (e.g., `<pause/>`, `<anon>Mary</anon>)
• Sound files aligned with the time-stamped transcriptions (not LLC–1)
it's like some fitness place
and some woman was just handing them out but it looks alright they do like it
it's all weird juices
no they do like banana smoothies and stuff
so yeah just weird juices well this could be nice
any free stuff is like I was just passing the woman with the fliers and everyone was passing her by and then I saw the flier said free and I was like give
yes I'm interested now
Russell Square is it ah ah do you wanna go now
yeah ah
no yeah
so now I have two free drinks I have the one from Eat which I haven't used yet
and the Waitrose one
I haven't got the Waitrose
oh if if you buy one
I'll catch up
and this one
what do you have on tomorrow you said you were really busy
yes I have Icelandic and then Spanish so I have grammar for four hours
ugh
from nine till one
you're gonna have to have a big lunch are you gonna have time for breakfast with her
I don't know
cause you need to eat before that
I missed it last time because I was late
I missed it this morning
I missed it last time you didn't okay
but then I ended up meeting her anyway
yeah you don't have any like biscuits do you have any biscuits left
yeah I have three shortbread biscuits left I ate all the rest of them
aw there's your breakfast have shortbread with Nutella and peanut butter and stuff
for lunch I made boiled eggs eventually
how many
mm
It's like some fitness place.

and some woman was just handing them out but it looks alright they do like banana smoothies and stuff.

so yeah just weird juices well this could be nice.

any free stuff is like I was just passing the woman with the flyers and everyone was passing her by.

yes I'm interested now.

Russell Square is it ah ah you want go now.

yeah no and the Waitrose one.

I haven't got the Waitrose.

oh if if you buy one.

I'll catch up.

and this one.

what do you have on tomorrow you said you were really busy.

yes I have Icelandic and then Spanish so I have grammar for four hours.

ugh from nine till one.

you're gonna have to have a big lunch are you gonna have time for breakfast with her.

I don't know.

cause you need to eat before that.

I missed it last time because I was late.

what.

no I missed it this morning.

I missed it last time.

oh last time.

but then I ended up meeting her anyway.

yeah you don't have any like biscuits do you have any biscuits left.

yeah I have three shortbread biscuits.

aw there's your breakfast have shortbread with Nutella and peanut butter and stuff.

for lunch I made boiled eggs eventually.

mmh how many.

two.

mmm.

I had to go down to the to the kitchen on the next floor down.

how was it was it like amazing.

well the stuff worked so that was a change.
I was just passing through.

I'm interested now.

Turn 4: "I have Icelandic.

Turn 5: From nine till eleven.

Turn 6: "What are you doing?"

Turn 7: "I'm having a big lunch.

Turn 8: "Oh last last morning.

Turn 9: "Meeting her anyway.

Turn 10: "No, I don't mind.

Turn 11: "Do you guarantee that?

Turn 12: "I can't guarantee those.

Turn 13: "Either.

Turn 14: "But I wouldn't guarantee those.

Turn 15: "He said I've got some there at ten for a quarter.

Turn 16: "That seems pretty expensive.

Turn 17: "All right.

Turn 18: "I don't mind.

Turn 19: "Do you guarantee those?

Turn 20: "I can't guarantee those.

Turn 21: "Either.

Turn 22: "But I wouldn't guarantee those.

Turn 23: "Of fact the only ones I can guarantee.

Turn 24: "I and I can't.

Turn 25: "I can't guarantee those.

Turn 26: "Either.

Turn 27: "But I wouldn't guarantee those.

Turn 28: "He said I've got some here at ten for a quarter.

Turn 29: "That seems pretty expensive.

Turn 30: "All right.

Turn 31: "I don't mind.

Turn 32: "Do you guarantee those?

Turn 33: "I can't guarantee those.

Turn 34: "Either.

Turn 35: "But I wouldn't guarantee those.

Turn 36: "Of fact the only ones I can guarantee.

Turn 37: "And I can't.

Turn 38: "I can't guarantee those.

Turn 39: "Either.

Turn 40: "But I wouldn't guarantee those.

Turn 41: "He said I've got some there at ten for a quarter.

Turn 42: "That seems pretty expensive.

Turn 43: "All right.

Turn 44: "I don't mind.

Turn 45: "Do you guarantee those?

Turn 46: "I can't guarantee those.

Turn 47: "Either.

Turn 48: "But I wouldn't guarantee those.

Turn 49: "Of fact the only ones I can guarantee.

Turn 50: "I and I can't.
A Corpus of English Conversation

EDITED BY

JAN SVARTVIK
RANDOLPH QUIRK

LLC–1
Launch symposium in 2019
Jan Svartvik
Launch symposium in 2019
Open Access

- Released in the autumn of 2020
- Lund University Humanities Lab’s corpus server

https://corpora.humlab.lu.se

- Metadata
- Corpus manual
- End User Licence agreement (to obtain password)
- XML files
- Corresponding anonymized sound files

Põldvere, Johannson & Paradis submitted b, c
Our research objectives

Language science orientation
• Meaning-making in spoken language?
• Realizations of meanings through speech?

Psychological orientation
• Human behaviour and spoken communication
• Language processing (production and uptake)
Stance-taking and re-use of meanings and forms in conversation
Stance-taking in dialogue

Du Bois, 2007
Re-use in dialogue a la Du Bois

(A Tree's Life SBC007: 581.32-585.99)

1 ALICE; I don’t know if she’d do it. (0.6)

2

3 MARY; I don’t know if she would either.
Our focus

• Re-use of ideas and constructions across speaker turns in stance sequences

✓ Dialogic resonance (Du Bois, 2014)
Looking closely at the data
When and why is resonance used?

• Previous work holds that it is an effective way to express divergent alignment in a range of discourse contexts.

• Zima et al. (2009) show that it is commonly used in parliamentary debates with political opponents.

• Dori-Hacohen (2017) shows that resonance is an effective tool for rejecting requests for driving directions.
RQs

• Is it the case that resonance more likely than non-resonance in divergent stance alignment than in convergent stance alignment?

• Does resonance lead to faster turn transitions than non-resonance?
Resonance comes in different flavours
Pre-existing resonance

• ‘Simple’ repetition of pre-existing content words

A: probably Grade two listed
B: Grade two yeah
Creative resonance

A: it's a little bit confusing

B: it is all a bit wobbly
A: yet he is still healthy# he reminds me [of my brother]
B: [he is still walking] around#
Non-resonance: response items

A: you’d think what I do isn’t valuable
B: no no no
Non-resonance: extended turns

A: you need to moderate the length
B: yeah that was a long essay
(Wife (A) and husband (B) are talking about their daughter)

A: I’m surprised that she’s unaware of the programme at seven AM on Sunday which is called uh it’s called Sunday

B: well why should she be she hasn’t hitherto been particularly interested in religious things [has she]

A: [you mean] she hasn’t particularly been up at seven AM

B: no that too
Data

- London–Lund Corpus–2
- Sample for this study
  - ~100,000 words of everyday face-to-face conversation
  - 260 resonating stance-taking sequences and 316 non-resonating sequences (sequence = two utterances produced by two different speakers)

(Põldvere, Johansson & Paradis, subm. a)
Manual annotation

- **Resonance**
  - Resonance: pre-existing vs. creative resonance (Du Bois, 2010)
  - Non-resonance: response items vs. extended turns

- **Stance function**
  - Convergence (agreement) vs. Divergence (disagreement)

- **Measurements of turn transitions** (in ms)
Inter-rater reliability

- We ran a series of inter-rater reliability tests on ~10% of the stance-taking sequences.
- A detailed annotation protocol was devised.
- A research assistant with no prior experience in dialogic resonance.
Annotator comparisons

- 94.83% agreement for the broad classification (resonance – non-resonance)
- 89.66% agreement for the fine-grained classification into pre-existing and creative resonance and response items and extended turns in non-resonance
- 100% agreement for convergent and divergent
Two different approaches to resonance

Du Bois (2014):
Socially motivated phenomenon that occurs because speakers want to engage with the words of their interlocutors for various communicative purposes (cf. Clark, 1996)

Garrod and Pickering (2004):
Automatic cognitive process whereby prior expression primes the reuse of the same linguistic representations by the next speaker
Points of overlap

Du Bois (2014):
The cognitive process of priming *facilitates* the uptake of certain linguistic constructions

Garrod and Pickering (2004):
Priming *facilitates* processing in dialogue; social processes may play a role
Aims of this study

• To explore what kind of a job resonance does for us

• Consider the theoretical issue of social (Du Bois) and cognitive (Garrod & Pickering) aspects of resonance
Social motivation for resonance

• Explored through functions in stance-taking sequences → convergence vs. divergence

Prediction 1. Resonance is more likely to express divergence with the interlocutor’s prior turn than non-resonance, which is more likely to express convergence
Cognitive facilitation in resonance

- Operationalized as the time it takes for speakers to respond to the interlocutor’s prior stance

**Prediction 2.** Due to the facilitating effect of reusing prior linguistic constructions, transitions between speaker turns are faster in resonating sequences compared to when the turns are constructed anew.
Results
Part I: Social motivation

35% of resonating sequences are divergent

Logistic regression analysis:

***Significant association between resonance and divergence

11% of non-resonating sequences are divergent
Part I: Social motivation

- Support for Prediction 1: speakers who disagree are more likely to resonate with one another than not
- But why? What could the interpersonal motivations and effects be?
Our interpretation

- Resonance reinforces the perception of interpersonal solidarity between the speakers.
because

- interlocutors get a feeling of engagement with their own stance
- they take less offence when they hear their own words back
- satisfies people’s adaptive needs, and
- therefore has a mitigating effect on divergence
Part II: Cognitive facilitation

- How did we do it?
Example in ELAN (Wittenburg et al., 2006)

A: yeah well so don’t end up at home every day (8 ms)
B: I won’t be at home every day <anon>Sara</anon>
This is how it sounds...

A: it’s really difficult living with him I’m telling you [he is] really

B: [yeah well so don’t]

B: end up at home every day

A: I won’t be at home every day <anon>Sara</anon>

B: well you will if you don’t set something up
Part II: Cognitive facilitation
Part II: Cognitive facilitation

“don’t end up at home every day -> I won’t be at home every day” ($M = 195.21$ ms)

“you need to reduce the length -> but it was already a short essay” ($M = 599.43$ ms)

Linear regression analysis:

**Significant difference between pre-existing resonance and extended non-resonating turns**
Part II: Cognitive facilitation

Prediction 2. Due to the facilitating effect of reusing prior linguistic constructions, transitions between speaker turns are faster in resonating sequences compared to when the turns are constructed anew.
Part II: Cognitive facilitation

- Partial support for Prediction 2: Speaker turns are produced faster in pre-existing resonating turns than in extended non-resonating turns

Cognitive facilitation plays a role in resonance ➔ it makes it possible for speakers to counter the temporal challenges of dialogic interaction
Taken together...

- In divergent alignment, resonance is more likely to be used than non-resonance.
- Alignment is slower in divergent sequences than convergent ones.
- But, pre-existing resonance is the fastest condition and extended non-resonating turns the slowest.
Conclusion

This engagement with previous speaker contributions appears to be a compelling feature in meaning negotiation, dialogue management and stance coordination in everyday face-to-face conversation. And more apt in stance divergence.
Conclusion

The results suggest that resonance does not lie in the privileged role of any one process but in the close association between social motivation and cognitive facilitation.

• Future research
  – Extract more direct online measures of priming
  – Confirm the mitigating function of resonance through experimentation
Thanks to our sponsors

- The Swedish Research Council (grant no. 349-2007-8695)
- Erik Philip-Sörensen Foundation
- Åke Wiberg Foundation
- Olof Sager Foundation
- The Birgit Rausing Language Programme
- The Royal Society of Letters
Thanks to...

- LLC–2 speakers and organisations
- Paschal O’Hare
- UCL Survey of English Usage
- ESRC Centre for Corpus Approaches to Social Science at Lancaster University
- Lund University Humanities Lab
- ... and everyone else who helped us along the way
References


References


References


Contact information

https://projekt.ht.lu.se/llc2/
llc2@englund.lu.se
@NelePoldvere
Thanks to you

Photo: Vincent Pelletier