The Grammar of Intersubjectivity and the Structure of Joint Projects

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Philosophical program...

• Embed (reduce?) intersubjectivity as an experiential and conceptual phenomenon in a view/theory of human practices (action)
• Rethink ‘culture’ as an activity, a (special) kind of human joint project

• But tonight primarily some problems of a linguist...
Human communication is special

• Animal communication

“Animals use signals in self-interested efforts to manage the behavior of other individuals, and they do so by exploiting the active assessment processes of other individuals.” (Owings and Morton 1998: i)
Intersubjectivity

• Human life is crucially cooperative - including communication

• Clark (1996): joint projects, mutual knowledge - common ground - Joint attention, shared goals

• Tomasello (2008) - Social cognition, the cognitive infrastructure for cooperation, underlies the emergence of conventional communication systems, i.e. languages
Intersubjectively shared cognition

• Shared goal – joint attention – common ground
Mutually shared knowledge

- Common ground
  - Grammatically different kinds of meanings relate to different sources of mutual knowledge
Mutually shared knowledge

- Common Ground
  - Deixis at the ‘core’

“The ability to create common conceptual ground—joint attention, shared experience, common cultural knowledge—is an absolutely critical dimension of all human communication, including linguistic communication with all of its he’s, she’s, and it’s.” (Tomasello 2008: 5)
Mutually shared knowledge

• How about
  - Commands? Questions? Negation?
  - In general: Argumentation, persuasion, rhetoric?
Hierarchy in joint projects

• A and B build a TV-stand together
  - 1. Build TV stand
    • 1.1. Attach cross-piece to side-piece
    • 1.1.1. Stick pegs into side-piece
      – 1.1.1.1. Find pegs
      – 1.1.1.2. Insert pegs into side-piece
    • 1.1.2. Affix cross-piece to side piece
    • 1.2. Attach top-piece to side-piece
    • ...

A: So, you wanna stick the ((screws in)). Or wait is, is, are these these things, or?
B: That’s these things I bet. Because there’s no screws.
A: Yeah, you’re right. Yeah, probably. If they’ll stay in.
B: I don’t know how they’ll stay in ((but))
Hierarchy in joint projects

- Build TV stand
  - Attach side pieces
    - Attach side piece left
    - Attach side piece right
  - Attach top piece
Hierarchy in joint projects

• Deictics and definite descriptions: select items w.r.t. common ground ("what we share, coordination already having been established")
  - if sharedness assumption invalid, communication fails

• Questions, negations (in general: argumentative moves): focus on (potential) difference, in present subproject
  - where joint commitment is yet to be established, in order to proceed with (overall) joint project
Hierarchy in joint projects

Build TV stand

- Attach side pieces
  - the screws
  - these things
- Attach top piece
  - no (screws)
  - probably
  - you’re right

Attach side piece left

time
Intersubjectivity 2): argumentation

• A: *Stick screws in? Or these things?*
  - Issue to be resolved, agreement must be reached
• B: *These things; there are no screws*
  - Proposal for resolution; argument
    • “change your situation model/view of object of joint attention; adopt mine”
• A: *You’re right, probably*
  - Acceptance of argument, with sufficient force to count as acceptance of proposal, allowing project to proceed

• “Managing others”, *in context of cooperation*
Intersubjectivity 2): argumentation

- In actual communicative use, "statements of fact" (There are no screws) are always arguments for conclusions

- Conclusions need (at least) two premises
- Where does second premise come from?

- Common ground: mutually shared knowledge
  - "In order to attach the sides, we are going to use screws, or these other things"
  - There are no screws
Intersubjectivity 2): argumentation

- Cultural cognitive models (‘topoi’) are part of common ground due to shared culture
  - ‘Content words’ provide access to cultural knowledge: mutually shared background assumptions

- He didn’t pass the statistics course, so we are worried that he will lose the year
- Shared background model: “Normally, success at statistics means success in general”
Common ground in negation

- Mutually shared assumptions in background

p = “He passed the statistics course”
q = “There is hope for his future”
Common ground in negation

• Mutually shared assumptions in background

  * The professor’s answer was not correct
    • evoking positive ‘presupposition’ (‘normally, professors know the right answers’), turning this case into an exception to the rule
  * Cf. unnaturalness of

    * The people at the funeral did not look happy
    * The people at the wedding did not look sad

→ ‘Negation Bias’: negations reinforce stereotypes!
  (Beukeboom et al. 2010)
Combinatoriality

• Dutch forward causal connectives in discourse (cf. Sanders, Sanders & Sweetser 2009)
  
  *Ik sta in de file. Daarom ben ik te laat.*
  *“I am stuck in a traffic jam. “Daarom” I am late.”*

  *Ik sta in de file. Dus ik ben te laat.*
  *“I am stuck in a traffic jam. “Dus” I am late.”*

A: Jan staat in de file.
B: Dus hij is te laat.

A: Jan staat in de file.
B: #Daarom is hij te laat.  ✔️Dààrom is hij te laat!
Combinatoriality

• Dutch forward causal connectives in discourse
• Analysis
  - utterances distributed over two different real speakers → distinct mental spaces: A:p, B:q
  - “daarom q” indicates that q is part of the common ground (no difference in epistemic stance), but this contradicts the very fact that B asserts q
    • only option: put the cause in contrastive focus: proposition presupposed
  - “dus q” is argumentative, implying distinctness of mental spaces
    • proposes a conclusion (“Do you agree?”)
Combinatoriality

- Interactions

*Bij ernstige brandwonden is het hele lichaam ziek. De lever, de nieren, alle organen doen mee. Daarom is de zorg voor deze patiënten erg ingewikkeld.*

“With serious burns the entire body is ill. Liver, kidneys, all organs take part. That’s why medical care for these patients is very complicated.”

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Combinatoriality

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Combinatoriality

• Interactions

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… Therefore medical care for these patients is so complicated.

- Zo ("so"): “…as we both know” – incompatible with distinct mental spaces
Conclusions

• Two types of ‘expressions of intersubjectivity’, serving coordination
  - deictic ones: invoking the communication event, relating to agreed-upon components of joint project
  - argumentational ones: relating to present sub-project, presupposing non-alignment, serving to establish agreement

• Different sources of mutually shared knowledge (‘common ground’), including culture
  - descriptive ones: construing objects of joint attention, providing access to culturally shared models, allowing inferences
Conclusions

• Recognizing role of argumentation in human cooperative communication and human cognition
  - Cf. Mercier & Sperber 2011
• … improves understanding of continuity and discontinuity w.r.t. animal communication
  - Not just ‘disinterested sharing of information’, but still managing
  - though in context of cooperation: establishing new joint commitments in present subproject, within overall joint project
References