Miscommunication and Clarification Requests

(Was: Miscommunication and Repair Strategies in Dialogue)

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Overview

- All in one (What has changed since Bostalsee?)
- Repairs and Clarification Requests
- Previous Work
- Baufix Corpus
- Ingredients (Miscommunication, Grounding, Focus, Questions)
- Summary
- What to do next?

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- Much more common are clarification requests

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- Hirst et al. '94: "Utterance that attempts to correct the problem."
- Traum '94: "... attempts to fix previous utterances that are perceived to be (possibly) insufficient for conveying what was intended."

Repairs

Clarifications　　Corrections

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- Initiation of repair by other conversant with *Next Turn Repair Initiator* (NTRI) $\longmapsto$ clarifictaion request

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$\mapsto$ important device for handling miscommunication

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  - Ginzburg '98; G & Cooper '01; G & Cooper (forthcoming); G & Sag '00; G, Gregory & Lappin '01; Purver, G & Healey '01

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- Form/Reading Distribution, (Source Separation Distance)

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- Conventional (indicate complete breakdown)

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  - “What did you utter?”
- (Correction)

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- Coercion operations part of dialogue competence

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- So far only transcripts but sound-files are on the way (thanks to Hannes Rieser)

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  - (State 4: B considers taking up A's proposed joint project)

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- (Or) Does a difference in (partial) grounding affect clarification requests?

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- (Extensional) semantic type of questions is the same as for propositions: $\langle s, t \rangle$
- Difference to propositions lies in intension: $\langle s, \langle s, t \rangle \rangle$ is constant for propositions but not for questions
- Questions are analyzed in terms of their possible answers:

$$?(\phi) \mapsto \begin{array}{|c|}\hline \phi \\ \hline \neg\phi \\ \hline \end{array} \qquad ?x(\phi(x)) \mapsto \begin{array}{|c|}\hline \neg\exists x(\phi(x)) \\ \hline \ldots \\ \hline \forall x(\phi(x)) \\ \hline \end{array}$$

Questions (II)

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- Clausal clarifications:

A:	Did Bill phone?	$?(phone(b))$
B:	Bill?	$?(ask(^\wedge phone(b))$
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- (Need Aloni '99 style extension of G&S semantics to account for constituent clarifications)

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- What is the relation to grounding?
- Do deaccented and/or omitted parts indicate grounding?

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- Clarification requests are a common phenomena in dialogues (esp. in “advanced” TOD but also in the BNC (Purver et al. ’01))
- Meta-linguistic abilities crucial for successful (natural) dialogue interaction (Perlis et al. ’98)
- Previous work focussed mainly on syntactic analysis (ellipsis) within a HPSG framework

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