

Convergence, Complementarity and Conventionalization in Dialogue

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Procedural co-ordination in dialogue

Dialogue requires co-ordinating on the timing and sequencing of turns. Co-ordination is underpinned by adjacency pairs (Schegloff, 2007). Adjacency pairs are *complementary* conventions: Interlocutors do *different* actions on subsequent turns. But, cognitive and conversation-analytic studies presuppose these are already shared by interlocutors.



Question 1: Do interlocutors converge on complementary conventions?

Method

Alphabetical sorting task:

- (1) Make procedural co-ordination as difficult as possible.
- (2) Test for the development of conventions

- Participants must combine their lists of words into a single sorted list
- Participants can only select each other’s words.
- Participants select words by typing the word preceded with slash “/”
- Participants see effects of *each other’s* actions
- Participants can restart at any time by typing “/restart”



Gradual development of procedural conventions

Initially: (low co-ordination)

P1, P2 have to combine their lists

P1, P2 have to co-ordinate their selections

Participant 1	Participant2
Ok, so which words do you have?	
	I have 3 words on mine, pear, apple and banana
Right, I have banana, tomato, peach	
	So that's 3, right?
Ok, so in order that would be apple banana peach and then pear, yeah?	
	Yeah, I can do mine?
Ok, that means I have to start..	
	Yeah, I think so, go for it
/APPLE	
/BANANA	
Right , I'm done, now u	
	/BANANA
	/PEACH
	Ok done , now you got to do yours?
Hang on, don't think it worked properly	
	What? Thought you said you're done?
No I said you had to	
	But I did banana
No I did that one	
	Hang on, which ones did you do?
Banana, and you?	
	Peach?
That don't make sense	
	AAAAAAAH
Lets start again?	
	Ok tell me when
/RESTART	

Medium co-ordination (25 mins)

Participant 1	Participant2
Right, I have these for you Peach, tomato	
Yeah	Is that all
	Ok, mine are tomato and pear
Ok simple then	Do I start?
You have to	With peach?
Yeah,do it now	
	/PEACH I did. u pear now?
/PEAR I did pear so either of us can do tomato	
	Yeah, u do it
/TOMATO	

High co-ordination (50 mins)

Participant1	Participant2
Apple, peach	
	Peach, pear
	/APPLE
	Peach
/PEACH /PEAR	

Adjacency pairs for combining lists

Adjacency pairs for making selections

Adjacency pairs

Participants conventionalize idiosyncratic adjacency pairs.

Within a dyad:

The same surface forms acquire different meanings at different sequential locations in the dialogue.

Across dyads:

The same surface forms, at the same sequential location, acquire different meanings in different dyads.

apple } “One of the words you need to select is “**apple**”, tell me my list in alphabetical order, and then, if you can start with the first word then do and then tell me when.”
peach }

apple } I've just selected the sub-list of words you told me to. You need to select the list that starts with **apple**, and then tell me when you're done by telling me the next word in the list that I need to select.
/APPLE }

apple } I've just selected the sub-list of words that ends with “**apple**”, you need to select the next word in your list,when you're done tell me what the last word is that you selected.
/NAME }

Conclusion

Globally convergent dialogue is locally divergent:
High co-ordination involves *complementarity* of turns.

Question 2: Do they associate these conventions with specific partners?

3 participant version of alphabetical task

- 2 Main participants (as before).
- 1 Side participant who only needs to participate in the first half of dialogue.

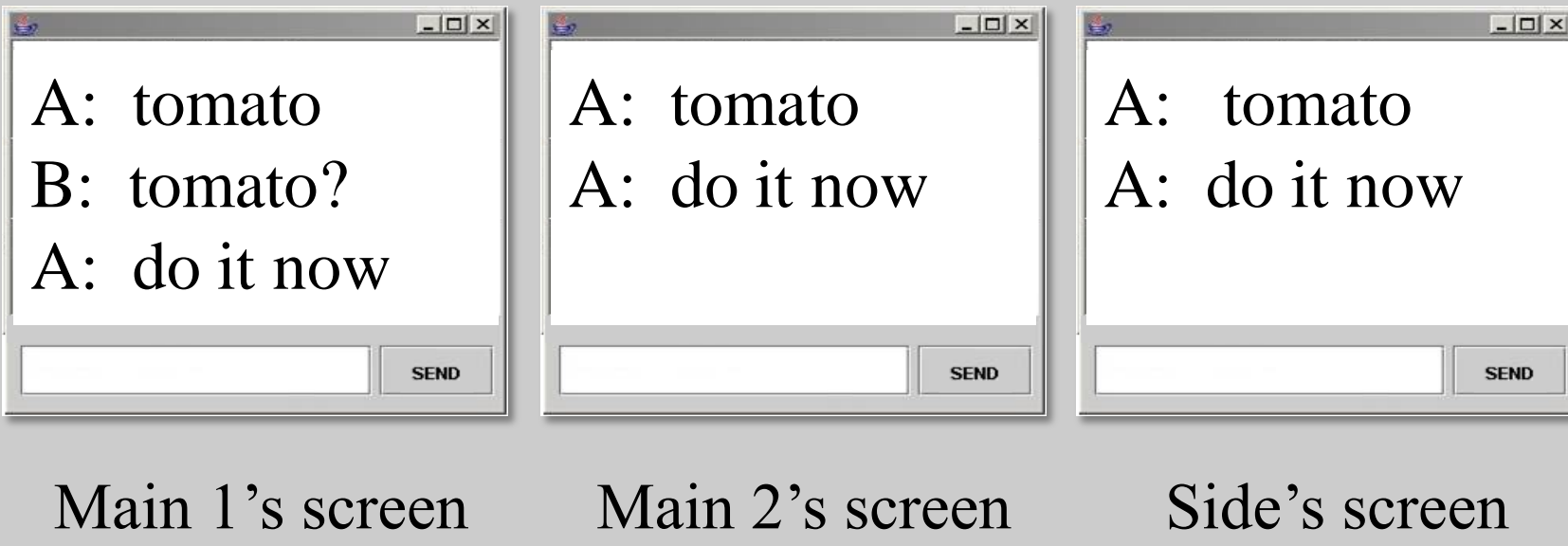
Allow participants to converge and then “break” the conventions

- Break conventions by inserting artificial clarification requests into the dialogue.
- Clarification requests appear to come from either Side or Main participants
- Compare responses to clarification from Side vs. Main participants

Artificial CR ➡ A: apple
B: **apple?**
A: did you select it?

Artificial CR ➡ A: tomato k?
C: **tomato?**
A: yup wait for me

Artificial CR ➡ Response ➡



Testing for partner-specific effects of artificial clarification requests

Initially

All 3 participants interact with each other

Only Main and Main2 need to make selections. Side does not need to make selections

Side	Main1	Main2
	Hey the words that I have here are peach and banana for Main2	
		I think we might have some of the same, mine are pear, apple and banana and they are all for you.
Ok I have some words peach and tomato for Main2		
	So I'll start with apple	
	OK	
	/APPLE	
	/BANANA	
Right I did it		So does that mean you've done peach?
	/PEACH	
Now I have, yeh, does that ma ke semse?		
	Erm but shouldn't you?	
Do tomato		Did pear
		/TOMATO

Medium co-ordination

Side	Main1	Main2
		Ok now it's peach and banana
So I have berry, grape for Main 1 and tomato for Main 2		
	and for Main2 it's peach and pear	
	/BANANA	
	/BERRY	
	/GRAPE	
	/PEACH	
	Right I did all of mine, now all you need to do is pear	
	ok	
	/PEAR	
		/TOMATO

High co-ordination

Side	Main1	Main2
	Peach	
	Peach?	
	It's yours	
Tomato?	tomato	
	Yeah	
	/PEACH	
	peach	
	Peach?	
	Done	
	/TOMATO	
tomato		
Tomato?	What?	

Artificial CR

Response

Artificial CR

Response

Artificial CR

Response

Artificial CR

Response

Compare responses to clarification from Side vs. Main

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Compare responses to clarification from Side vs. Main

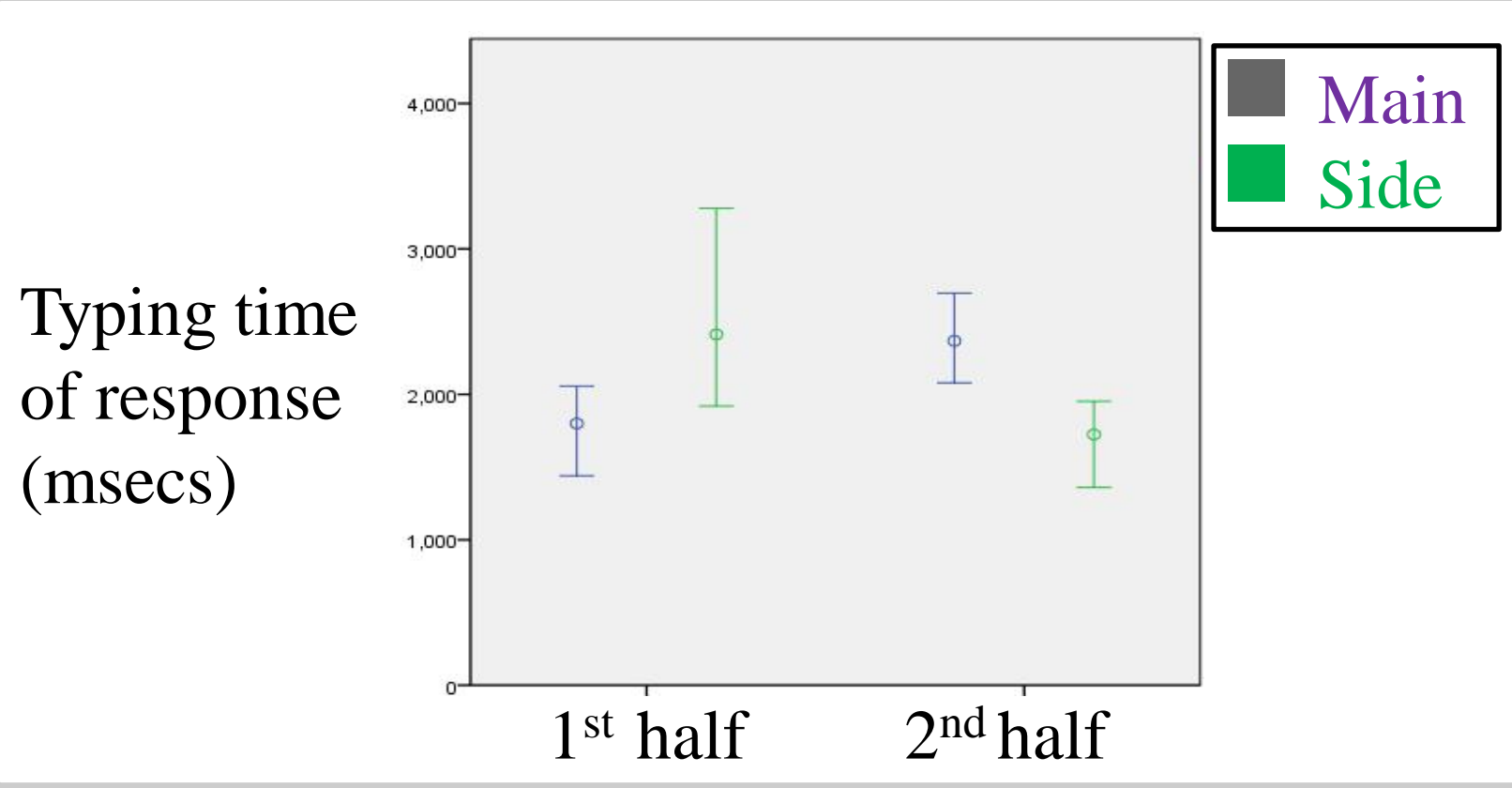
Compare responses to clarification from Side vs. Main

Compare partner-specific effects in both dialogue halves

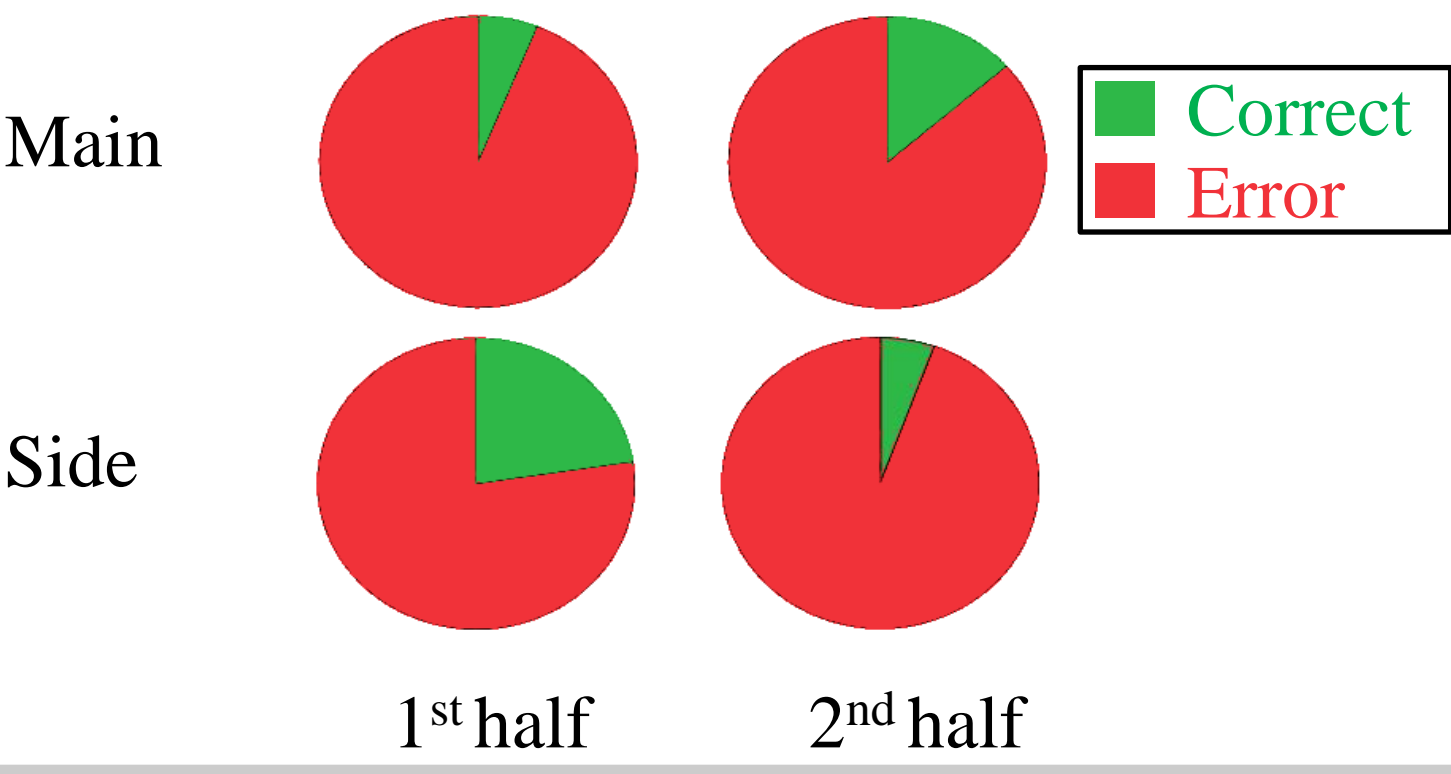
Compare partner-specific effects in both dialogue halves

Partner-specific effects

Participants respond *differently* to *different* interlocutors breaking the conventions at *different* stages in the dialogue.



Task performance (% correct)



Conclusion

Differentiation of partner-specific contexts demonstrates that global *convergence* implies *divergence* of roles.

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