

NIJMEGEN talk 2011-01

Joint Action & Knowing Other's Minds

(Nothing on this page to say: talk text starts on next page).

- On the usual way of thinking about joint action it presupposes ^{shared intention which is true} ~~mindreading~~ abilities.
- This way of thinking about j.a. precludes Torma + KS hypotheses. It also precludes the idea that j.a. might play a role in either the evolution or development of mindreading.

Plausible perhaps that abilities to act play a key role in development of conceptual abilities.

Natural extension of this idea is the conjecture that joint action will be important in the development of conceptual abilities involving other's minds and actions.

Not start but do insert

Maybe start w. mOm as background:

Will illustrate the spirit of mOm by contrasting understanding of intentions with understanding goals. This example runs through the paper. (Hard part of mOm is working out how to do the same; the goal/intention is easy ~~or~~ well-established).

1) Intention \rightarrow relates goal to action
 \downarrow
state

action
 \downarrow
goal

intention
OR
function
OR
...

I want to explore connections between mindreading, its evolution and development, and joint action.

~~My thesis is that joint action might play a role in ev. or dev. (or both) of mindreading.~~

I shall be concerned with two ~~sorts of~~ questions:-

- 1) What ~~sort~~ mindreading abilities are needed for joint action?
- 2) How might abilities to engage in joint action play a role in explaining the evolution or development (or both) of mindreading abilities?

(2)
The questions are related. If we follow the standard view in philosophy and suppose that all j.a. involves shared intention, then j.a. will require rich mindreading abilities. On this view, ~~abilities to eng~~ the second question does not arise. It is impossible for abilities to engage in j.a. to significantly explain emergence of mindreading.

But if, as I ~~say~~ will explain, we adopt a ~~more open~~ ^{*} different conception of j.a. then there is room for j.a. to play a role in the acquisition of mindreading.

Like to literature + Nijmegen's own K+N

plus M+T late quote: regular periphrasis...

These are the inspiration for my talk. ~~Just~~ What I'm doing in effect is looking at these bold conjectures and asking how does that work?

* one which assumes only minimal mindreading abilities

Q¹ : What mindreading abilities are required for joint action?

Tomasello : shared intention is *sine qua non*.

Gilbert : etc

Shared intention is what? Leading account requires intentions about intentions, among other stuff.

Not much mindreading abilities that it doesn't involve.

^{less demanding}
widely One response is to try to give a ~~simpler~~ ^{act} of what shared intention requires (Tollefson, Kutz, ...)

I want to suggest a more radical approach, one where we (temporarily abandon ~~joint action~~ shared intention...)

To explain this I need to stress a distinction between intentions and goals.

Goal as outcome vs. goal state.

Conceivable
~~that~~ that relⁿ bet. action & goal does not involve a goal state (we can make sense of this possibly)

This is
(see M&M) → Thf. pble to assign goals to actions w/o ascribing goal-states to agents.
INSERT p. 7 here

Collective Goals

① ~~Supp~~

We are concerned w. goal-directed joint action.

As I said at the start, a j-a. is ...

What's the minimum necessary for there to be j-a. in this sense?

Have to have relⁿ bet activities collectively that doesn't just amount to each agent's activities being individually directed to the goal.

Natural to assume that this can only be done with shared intention or some kind of god-state which is both shared and represent the goal

Actually, though, you can do it with collective goals --
→ need to talk about distributive goals, and give an eg that will fit with the points.
The coordination directs the agents' activities, taken collectively, to the goal.

② Shared goals : collective goal story is foundation, not nec an intrinsically interesting form of j-a.
[CTD: see p4]

③ Pickin' Mix

Now that we have collective goals we can add and remove stuff. I don't think that we should be too precious about any particular combinations. Eg can have commitments w/o awareness of intentions & conversely, may be no deep unity to joint action.

May have same for mutual knowledge

Shared Goals ctd

New idea: have shared goals when each agent correctly expects that the goal is a collective goal of all agents' activities.

So the idea is that we use the act of collective goals to characterise how the agents think of their joint actions.

Explain how this (a) involves not mindreading involving propositional attitudes and (b) is distinct from shared intention [see Leipzig] while (c) accounting for some of the features that make j.a. interesting [see Leipzig talk w/ Pat]

[Close with reflection on use of the term shared from Leipzig version - shared makes sense just because it fits a standard model of how actions relate to their goals.]

SO FAR: Conception of j.a. that doesn't require more than minimal mindreading
Next How could this facilitate dev. or ev. (or both) of mindreading? Rough idea: [j.a.] \rightarrow [communicative intent] \rightarrow [language] \rightarrow [full-blown mindreading]

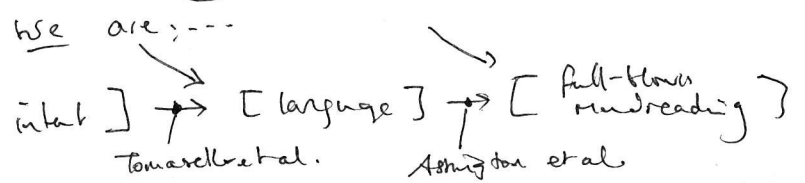
goal = break vase
 goal = make max dizzy



Might explain it like this:-

When watching ppl cleaning glass from street we could ascribe a collective goal to them. 'They are cleaning the glass.'

Shared goals involves each agent ascribing the ~~shared goal~~ collective goal to themselves (plural), we are;---



PART II

Claire Hughes: evidence that j.a. does facilitate acquisition of mindreading in dev.

How could joint action - abilities to engage in it - facilitate the acquisition of ~~the~~ mindreading abilities?

Recognizing goals is key to many distinctive cases.

Especially hard in comm. activities because of Gricean circle.

ie: it's one thing to have a general ability to recognize goals, quite another to be ~~in~~ able to recognize the goals of this or that activity.

Eg: Tomasello says primates other than humans don't recognize the goals of pointing activities where these are done not to request but to inform.

I want to suggest that abilities to engage in j.a. can bridge gap between general ability and particular applications of it.

Let me start by offering a diagnosis for why identifying particular goals is often hard.

1) Problem of opaque means ...
(see Leipzig talk).

2) This is not the only problem, we also have problem of false belief

How could abilities to engage in j.a. help to overcome these problems? ...

[Leipzig talk].

→ Hare & Call (2004) pointing vs. failed reach example.

→ Stress that seeing this as joint action involves ascribing a distributive goal, which may be odd.

Conclusion

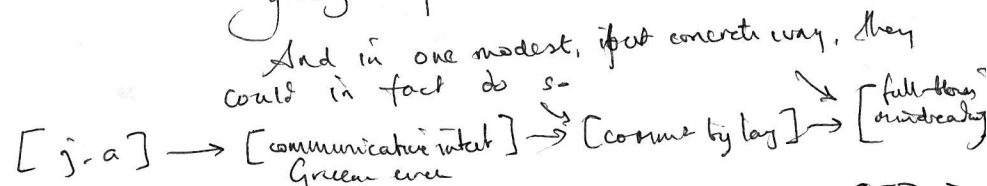
Two qns: Q¹ mindreading nec for joint action?

A: forms of joint action only require minimal theory of mind cognition

Q²: Role for ~~the~~ abilities to engage in joint action in evolution or development of mindreading?

A: Skipped down notions of joint action make ~~this point~~ remove an obstacle to giving a positive answer.

And in one modest, if not concrete way, they could in fact do so.



CTD →

NOTE. for PART II.

The strategy: 1) understanding pointing to inform seems to require understanding communicative intent and thus rich understanding abilities
(Moll & Tomasello quote, 'to understand pointing, the subject needs...')

2) But there is a way to understand pointing to inform that doesn't involve this.
 $MOM + ja =$ powerful combination for getting goal of action w/o understanding communicative intent.

When you put these together you get abilities to fake understanding of communicative intent.

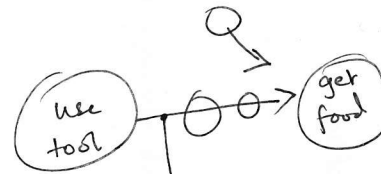
ie: ja. extends the range of mom abilities

3) And actually the ability to fake it is a step towards actually understanding it. You learn that the pointing is a way of getting the ^{agent's} person to the goal so could experiment with this outside ja. (cf tool example \rightarrow RHS)

Note to self

Might be easiest to run my goals $y =$ goal for tool-use first:

use of tool to achieve E: It's opaque
so I don't see that E has a role.



because the causal chains are opaque, I don't recognize that tool use is part of the solution + getting food.

In context of ja.: your using tool tells me that this must be part of the solution

Now I know this from ja. experience, I can replicate it outside of the context of ja.

It's not that the means are now transparent where before they were opaque — I still probably don't know how tool brings about the end.

But at least now I am in a position to ask the Q — before the Q. couldn't have arisen because I didn't know that the tool was necessary

(7)

INSERT after p 3 left (polly. paraphrase p 3 R)

... so one can represent g-d action w/o representing intentions.

This insight will be useful in several ways in what follows, but most directly in characterizing joint action without shared intentions.

To put it ^{In effect,} ~~metaphorically~~, I want to suggest that j.a. can involve sharing goals rather than intentions.

Q: What is an act. of joint action spse to achieve?

↓
As I said at the start, a j.a. is ---

A: Basic task is to explain relⁿ bet the joint action and its goal or goals.

Of course this is standardly done using shared intention.

~~Our challenge~~ I want to explain how it can be done w/o shared intention by

giving you a series of increasingly elaborate relations, from the ^{almost} completely initial to the really quite simple:

- 1) distributive goals
- 2) collective goals
- 3) shared goals