

Joint action and knowing others' minds

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The Vygotskian intelligence hypothesis

"the unique aspects of human cognition ... were driven by, or even constituted by, social co-operation"¹

Puzzle: how to characterise social co-operation in a way that doesn't (i) reduce to the sorts of co-operative and co-ordinated behaviours found in ants and other non-humans, and doesn't (ii) presuppose unique aspects of human cognition

Shared intention

for us to share an intention that we J it is sufficient that:

"1. (a) I intend that we J and (b) you intend that we J

"2. I intend that we J in accordance with and because of la, lb, and meshing subplans of la and lb; you intend that we J in accordance with and because of la, lb, and meshing subplans of la and lb

"3. 1 and 2 are common knowledge between us"²

Shared goals

Goal-directed action = a sequence of object-directed actions, which (1) has an outcome that is an outcome of the whole sequence and not any of its constituents, and (2) occurs in order to bring about this outcome.

A *plural activity* is one performed by two or more agents. For agents to be engaged in a plural activity it is sufficient that their individual behaviours are organised around a single outcome which occurs as a common effect of their activities.

Functional characterisation—the role of shared goals is to coordinate plural activities

Substantial account—for agents to share goals it is sufficient that:

(a) *many goals, one outcome*—
two or more agents' individual goals all require for their fulfilment a single outcome, where the outcome and goal are related in such a way that it is normally obvious to any agent of this kind that the goal's fulfilment requires the outcome;

(b) *identification*—
each agent can identify some or all of the other agents in a way that doesn't depend on knowledge of their goals;

(c) *expectations about goal-directed activities*—
on balance each agent expects each of the other agents she can identify to perform a goal-directed activity whose success obviously requires the outcome; and

(d) *expectations about a common effect*—
on balance each agent expects this outcome to occur as a common effect of some or all of their goal-directed actions.

The problem of opaque means

How can we identify the goals of an action? In many cases we cannot do better than to determine which outcomes the action does, or is likely to,

bring about and then assume that the goals are to bring about one or more of these outcomes.³

This method doesn't work when we don't know which outcomes the observed behaviour is likely to bring about. In particular, in actions which involve: novel tools, several steps or communication.

The your-goal-is-my-goal route to knowledge

Intuition: it is often easier to know that one is engaged in joint action than to figure out what another's goal is—but once one is engaged in joint action, one thereby knows what the other's goal is.

1. We are about to engage in some joint action or other.
2. The other agent or agents are disposed to help me with what I am currently attempting to achieve.
3. What I am attempting to achieve obviously requires a certain outcome.

Therefore:

4. The others will each have goals whose fulfilment requires that this outcome occur.

References

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2. Bratman, M. (1993) Shared Intention. *Ethics* 104, 97-113
3. Dennett, D. (1991) Real Patterns. *The Journal of Philosophy* 88, 27-51