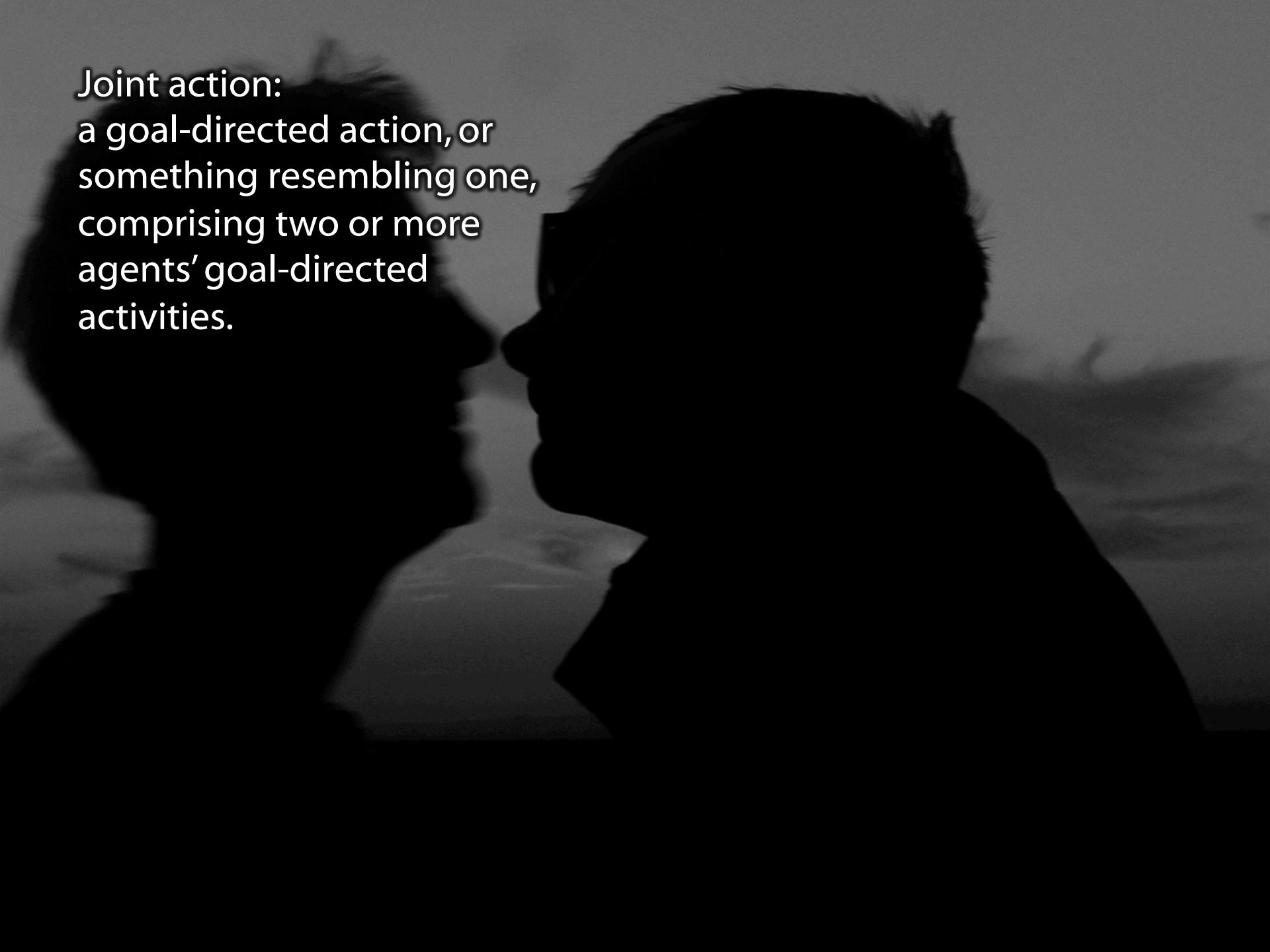


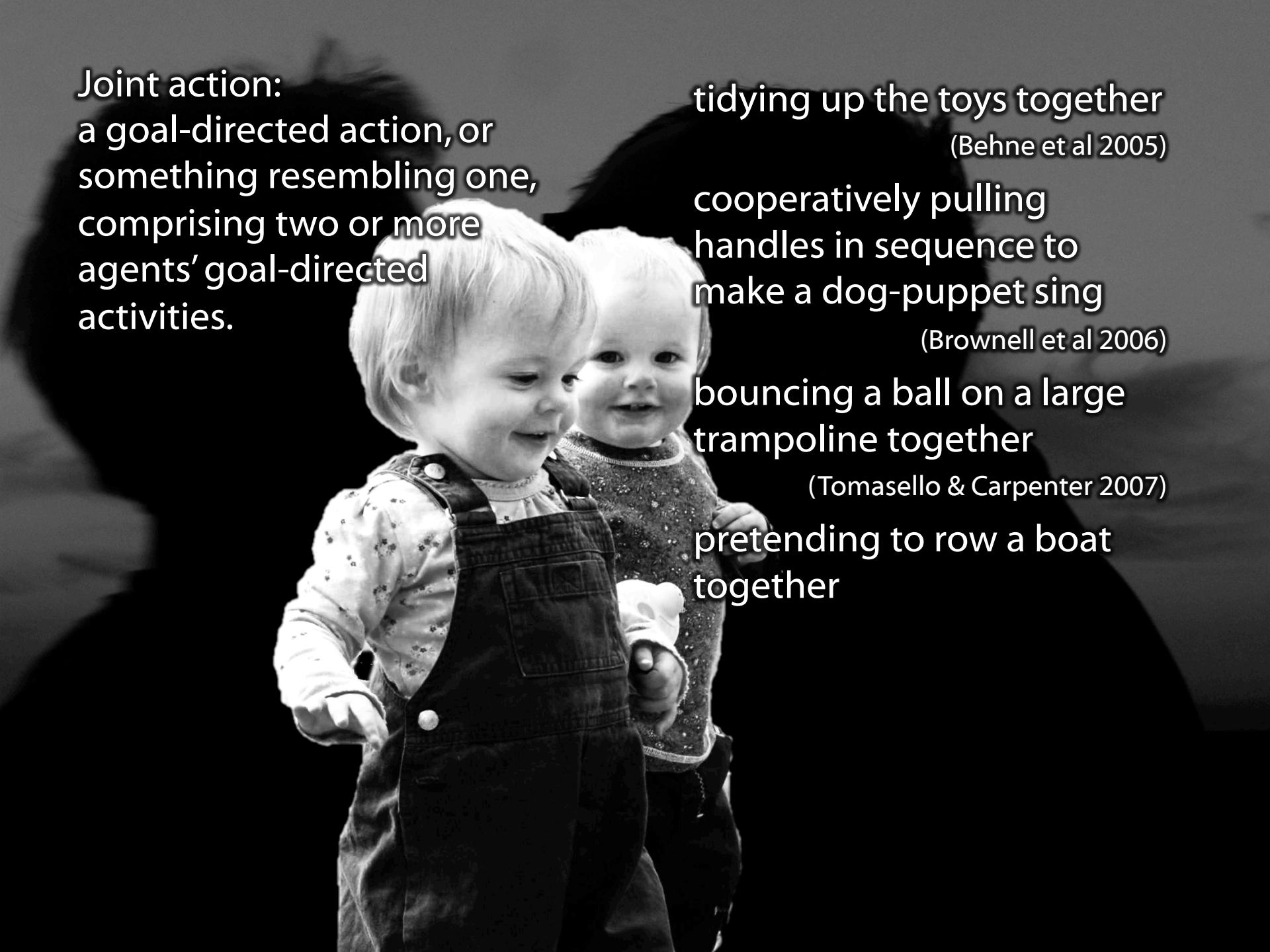
A silhouette of two people facing each other, set against a vibrant, colorful background of blues, greens, yellows, and purples.

Joint Action and Knowing Others' Minds

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Joint action:
a goal-directed action, or
something resembling one,
comprising two or more
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tidying up the toys together

(Behne et al 2005)

cooperatively pulling
handles in sequence to
make a dog-puppet sing

(Brownell et al 2006)

bouncing a ball on a large
trampoline together

(Tomasello & Carpenter 2007)

pretending to row a boat
together

first question

mindreading in joint action

'I take a collective action to involve a collective [shared] intention.'

(Gilbert 2006, p. 5)

'The sine qua non of collaborative action is a joint [shared] goal and a joint commitment'

(Tomasello 2008, p. 181)

'the key property of joint action lies in its internal component [...] in the participants' having a "collective" or "shared" intention.'

(Alonso 2009, pp. 444-5)

'Shared intentionality is the foundation upon which joint action is built.'

(Carpenter 2009, p. 381)

A black and white photograph of Michael Bratman, a middle-aged man with dark hair and glasses, wearing a plaid shirt. He is looking slightly to his left with a thoughtful expression.

Substantial account

We have a shared intention
that we J =

“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 [likewise] ...

“3. 1 and 2 are common
knowledge between us”

(Bratman 1993:View 4)



Intentions about intentions



Substantial account

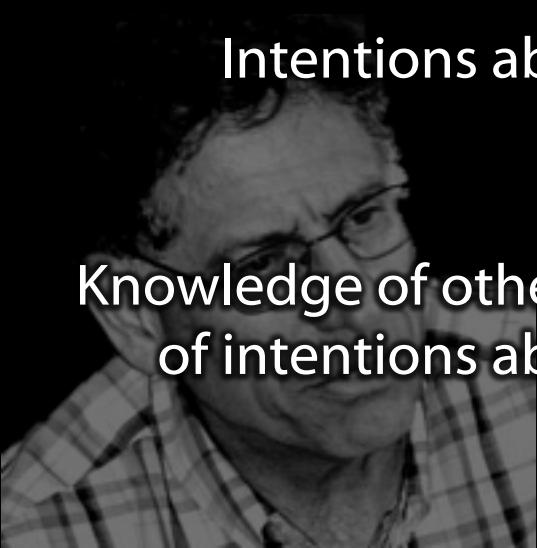
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Intentions about intentions

Knowledge of others' knowledge
of intentions about intentions



“3. 1 and 2 are common
knowledge between us”

(Bratman 1993:View 4)

1. All (significant) joint actions require shared intention.

2. Shared intention requires sophisticated mindreading abilities.

Therefore:

3. Abilities to engage in joint action could play no significant facilitative role in explaining the development, or the evolution, of mindreading abilities.

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What is the relation between an action and the goal (or goals) to which it is directed?

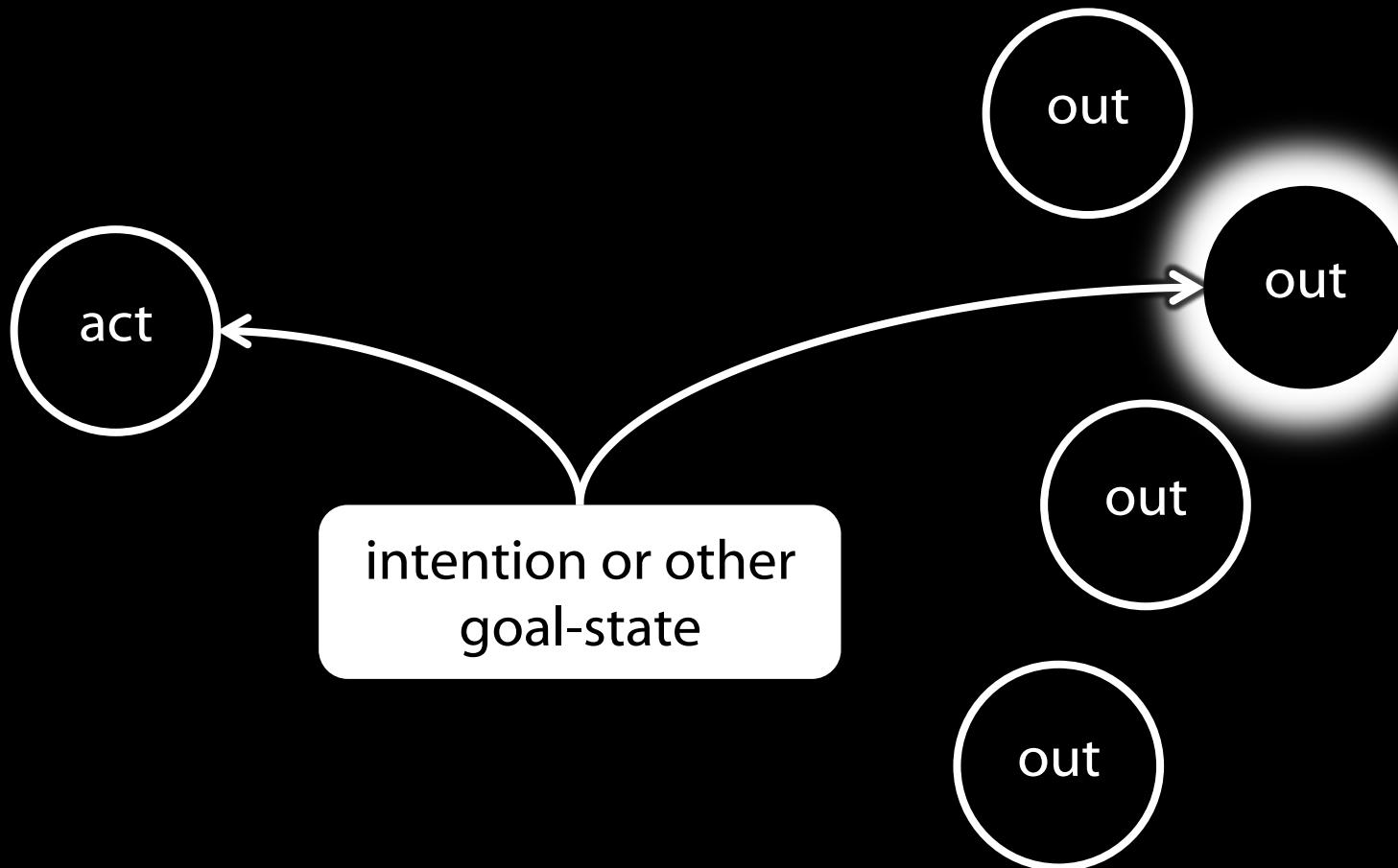
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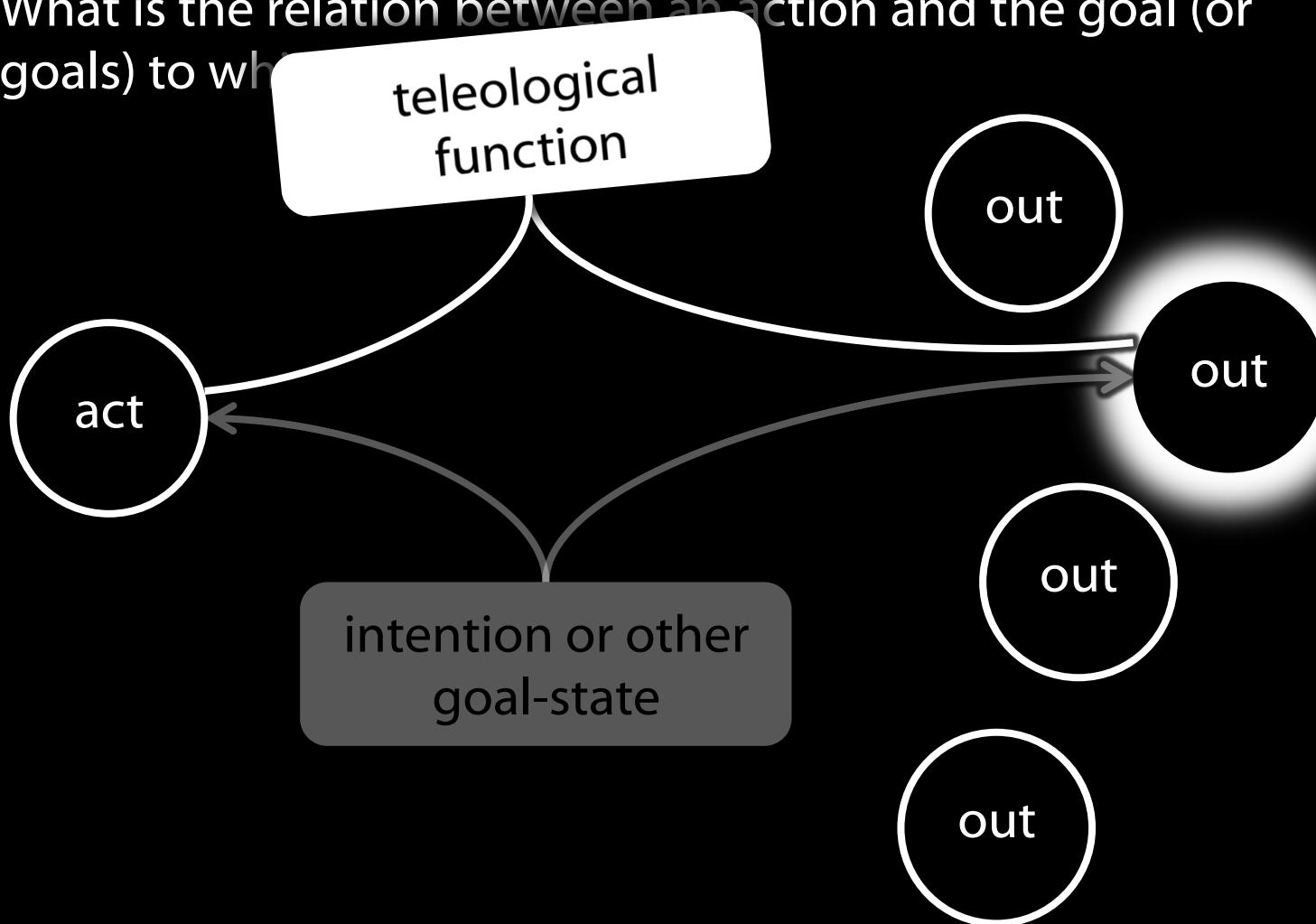
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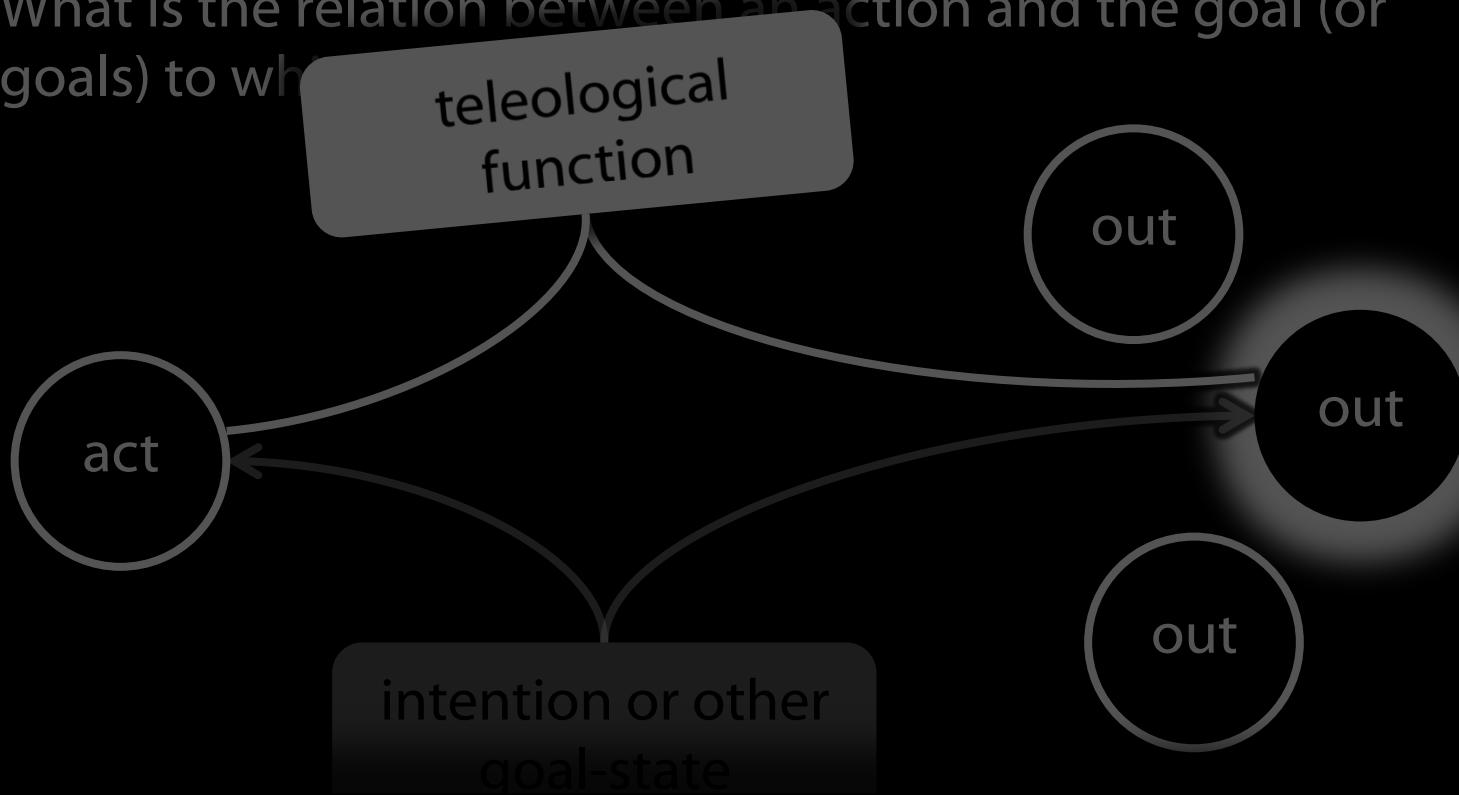
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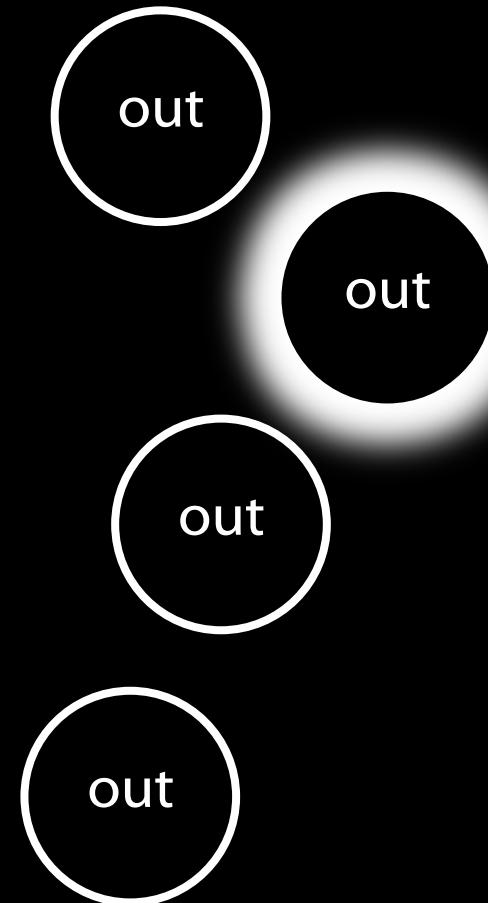
What is the relation between an action and the goal (or goals) to which it is related?



What is the relation between an action and the goal (or goals) to which it is directed?



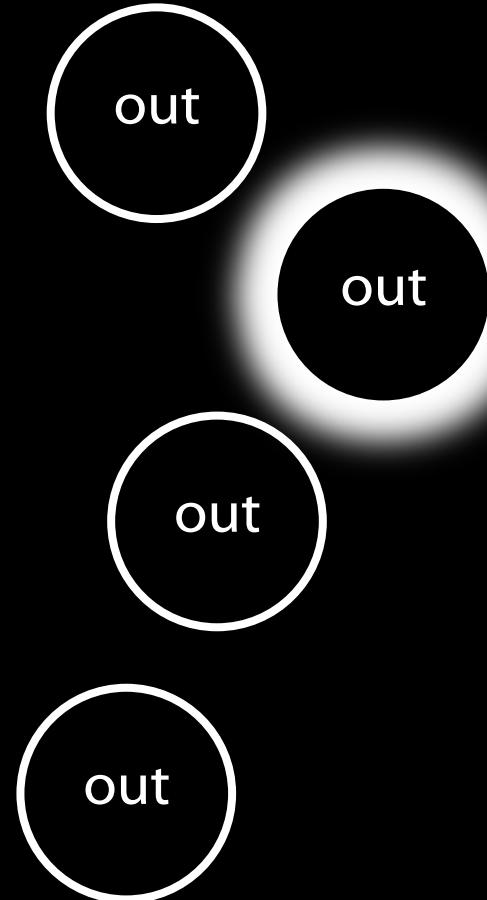
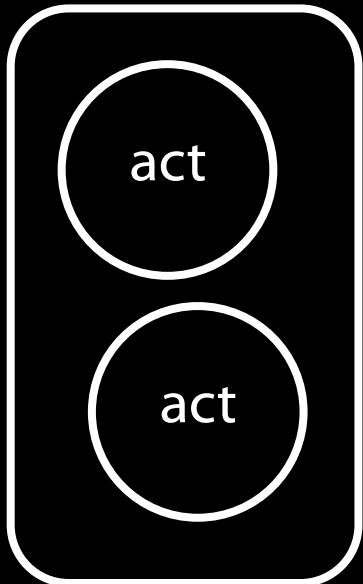
It is possible to represent goal-directed actions without representing intentions.



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- (a) it is a distributive goal;
- (b) the agents' activities are coordinated; and
- (c) this type of outcome would normally be facilitated by this type of coordination.

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G is a collective goal

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- (b) the agents' activities are coordinated; and
- (c) this type of outcome would normally be facilitated by this type of coordination.

Each agent expects each of the other agents to perform activities directed to the goal.

Each agent expects the goal to occur as a common effect of all their goal-directed actions.



**. second
question**

failed reach



point



source: Hare & Tomasello (2004)

The problem of opaque means

The problem of false belief

your-goal-is-my-goal

your-goal-is-my-goal

1. We are about to engage in some joint action* or other
2. I am not about to change my goal.

Therefore:

3. Your actions also will be directed to this goal.

[*in at least the minimal sense associated with distributive goals]

failed reach



point



source: Hare & Tomasello (2004)

failed reach



point



source: Hare & Tomasello (2004)

“to understand pointing, the subject needs to understand more than the individual goal-directed behaviour. She needs to understand that ... the other attempts to communicate to her ... and ... the communicative intention behind the gesture”

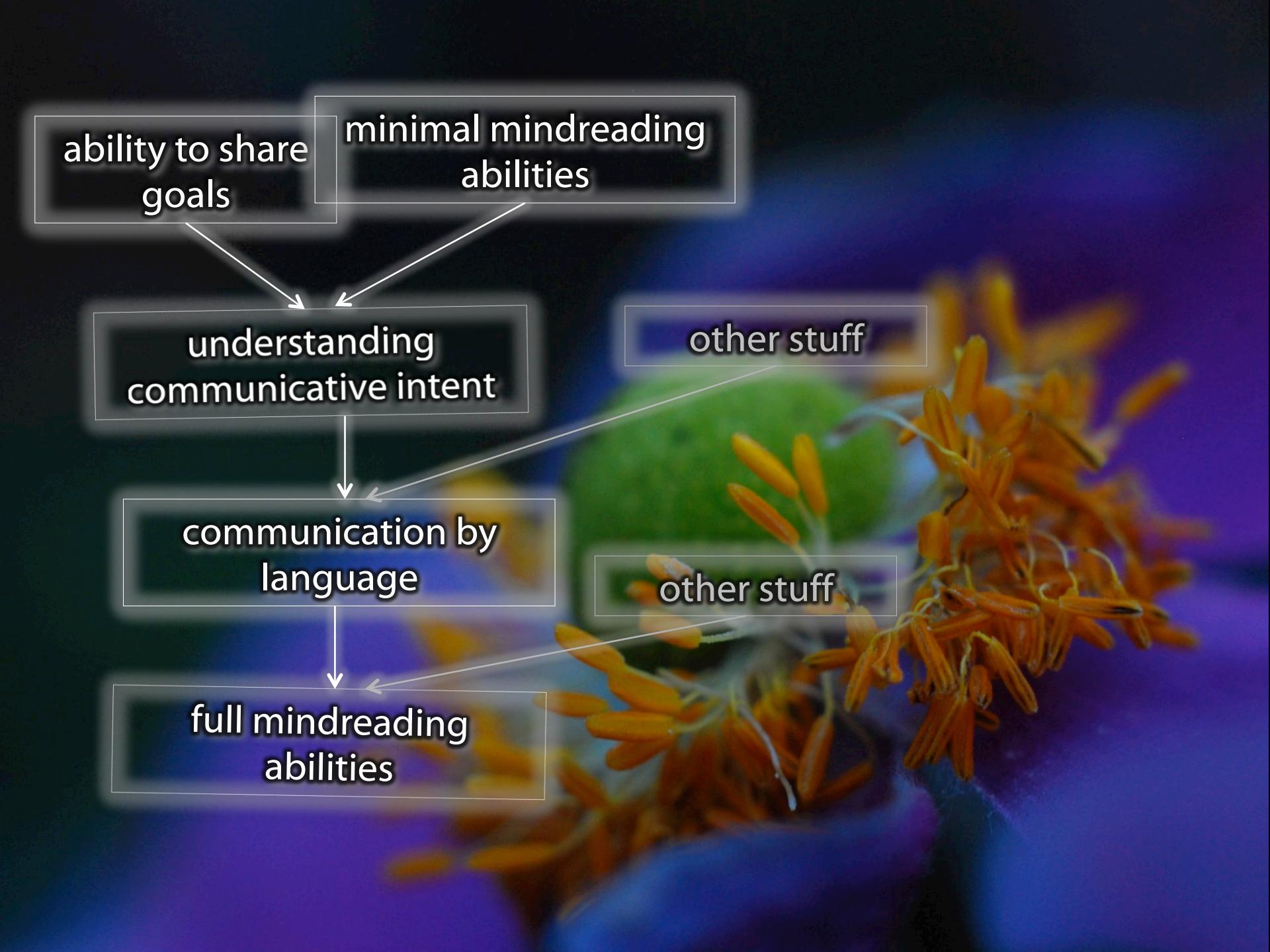
(Moll & Tomasello 2007)

Csibra's 'two stances':

Teleological and referential action interpretation 'rely on different kinds of action understanding'

These are initially two distinct 'action interpretation systems' and they come together later in development

Csibra (2003, p.456)



A close-up photograph of several orange flowers, possibly calendula, with green leaves visible in the background. The flowers have small, tubular petals and are arranged in a cluster. The background is dark and out of focus.

ability to share
goals

minimal mindreading
abilities

understanding
communicative intent

communication by
language

full mindreading
abilities

other stuff

other stuff

