

Mindreading & Joint Action

7. What Is Joint Action Shared Agency?



butterfills@ceu.hu



Outline

1. The leading philosophical approach to shared agency

2. Limits of this approach

3. (Building blocks for) an alternative approach

4. Motor representation

5. The emergence of mindreading

The leading philosophical approach
to shared agency

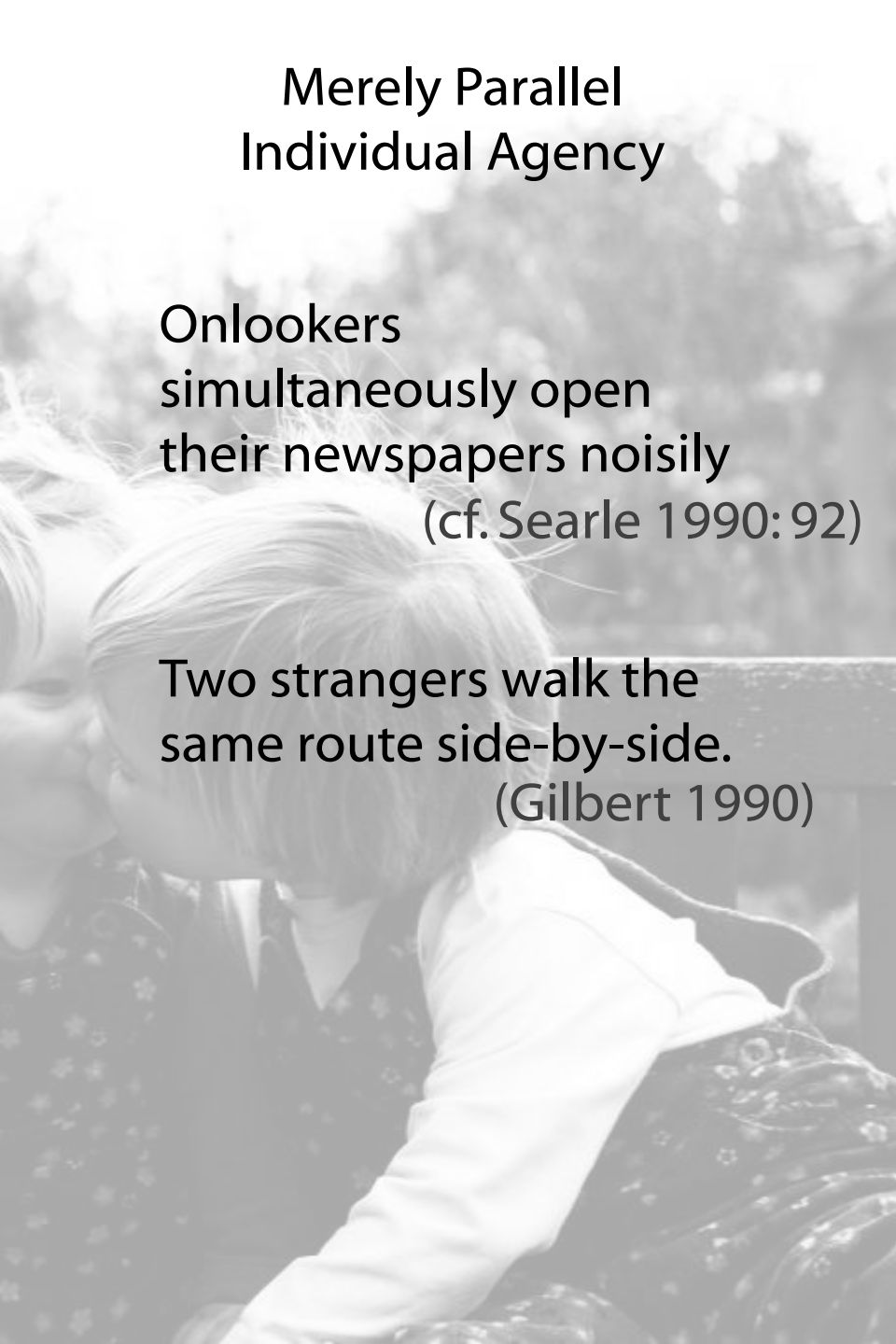




Shared Agency

Members of a flash mob
simultaneously open
their newspapers noisily

Two friends walk to the
metro station together.



Merely Parallel Individual Agency

Onlookers
simultaneously open
their newspapers noisily
(cf. Searle 1990: 92)

Two strangers walk the
same route side-by-side.
(Gilbert 1990)

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

(Gilbert 2006, p. 5)

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

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

(Tomasello 2008, p. 181)

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'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)

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

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

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'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)

shared intention
(or 'collective')

shared intention



action
w. shared agency

intention

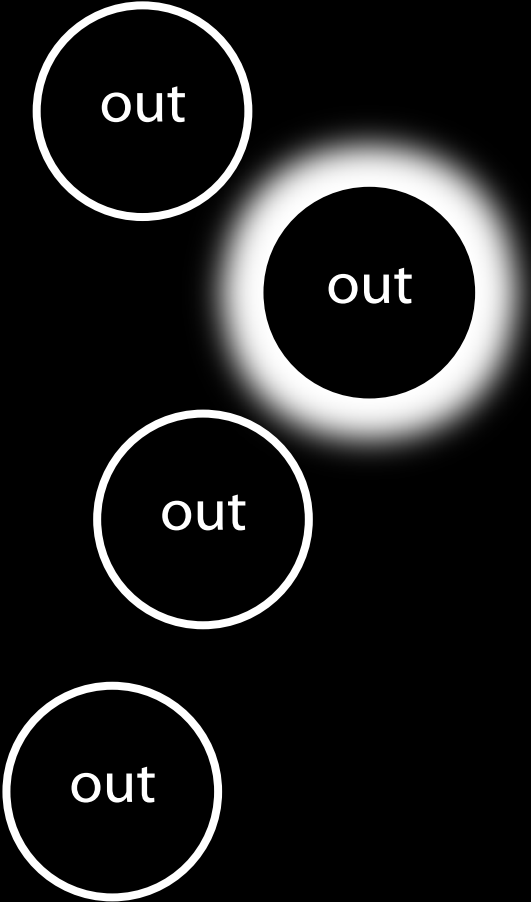


action
w. individual agency

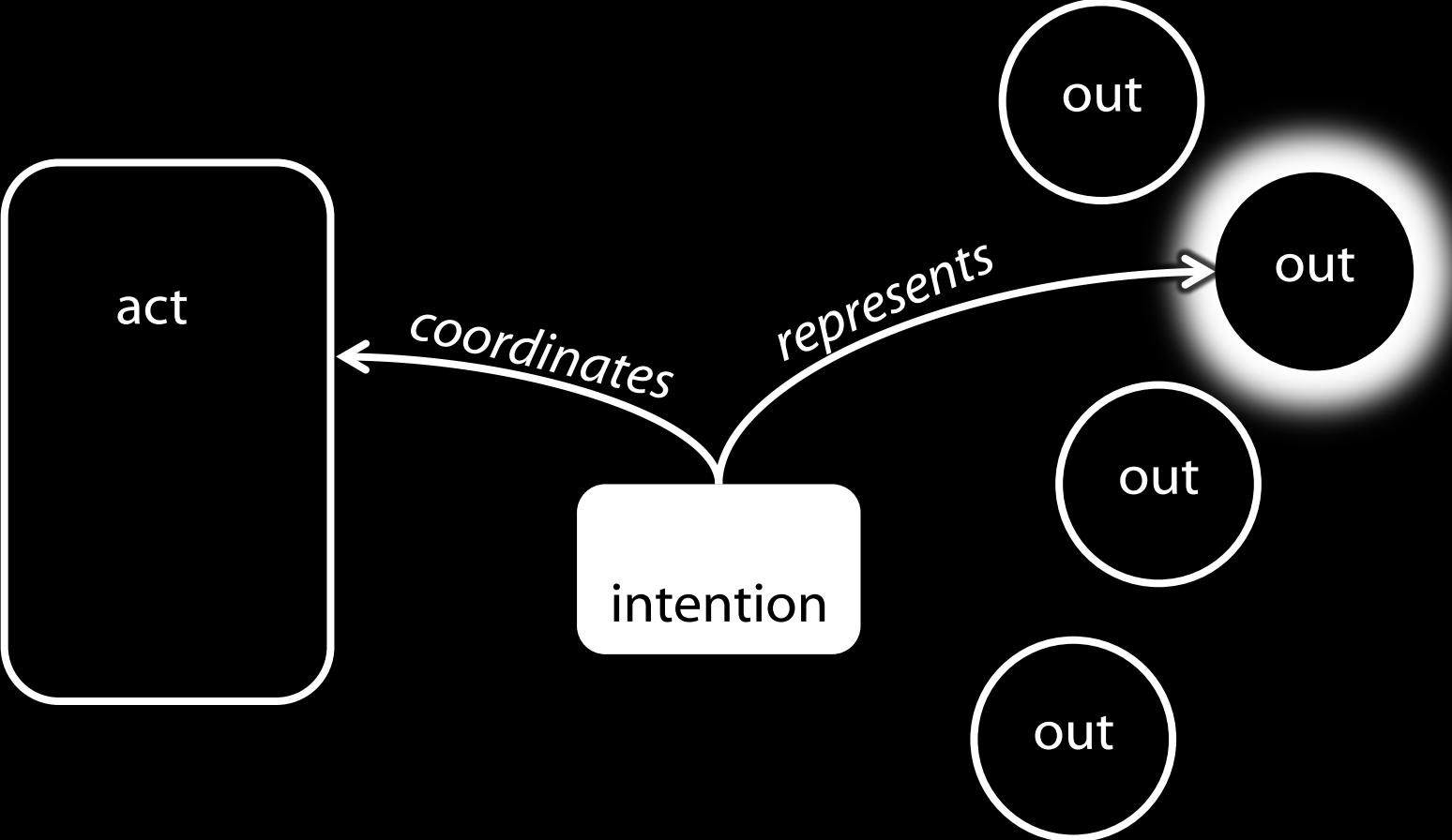


What is the relation between a purposive action and the outcome or outcomes to which it is directed?

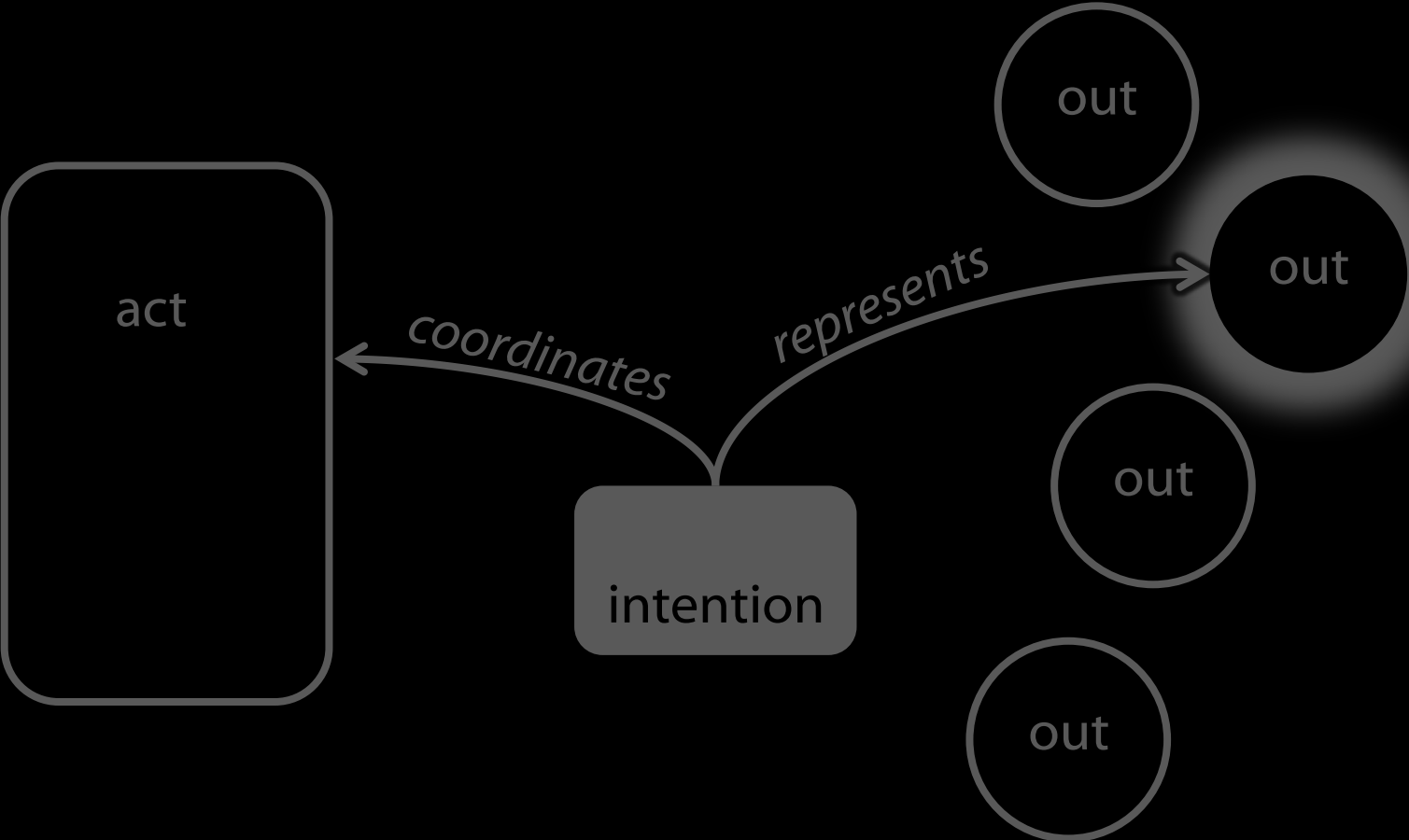
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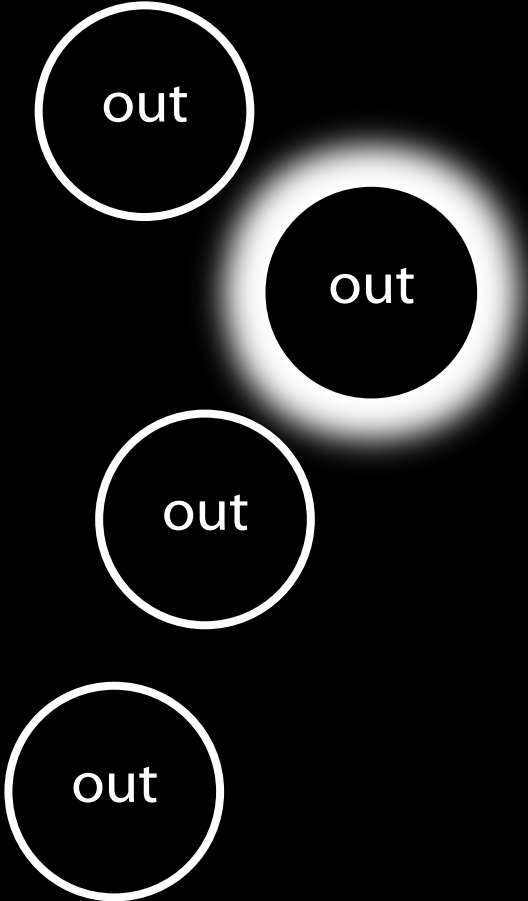
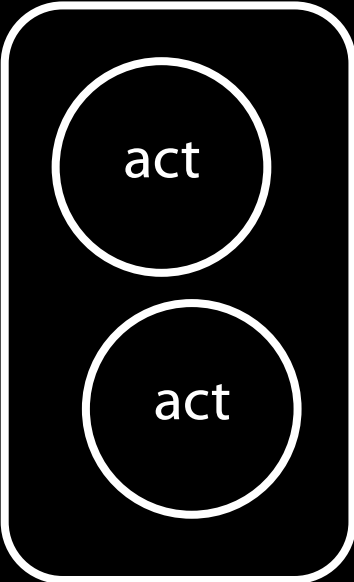
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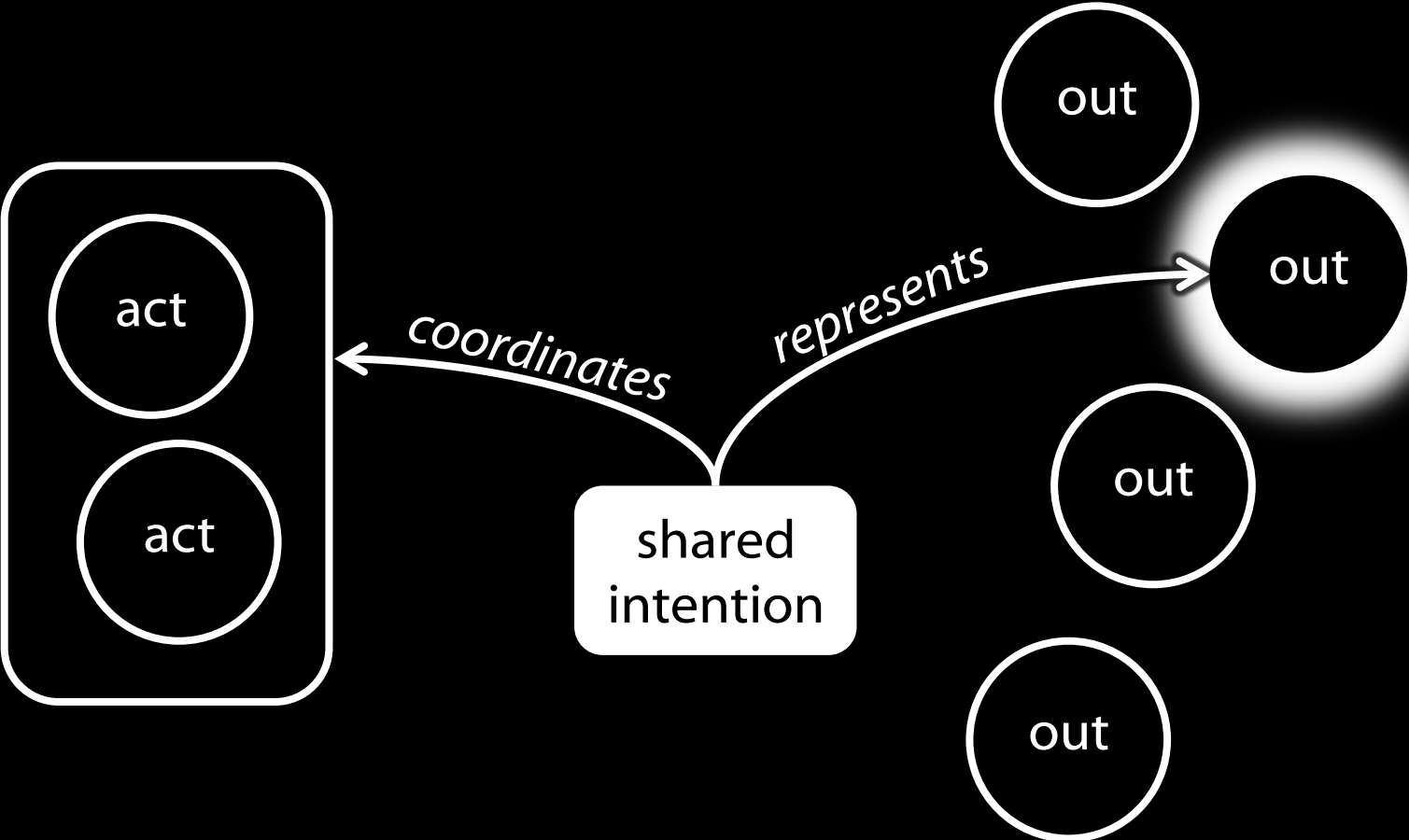
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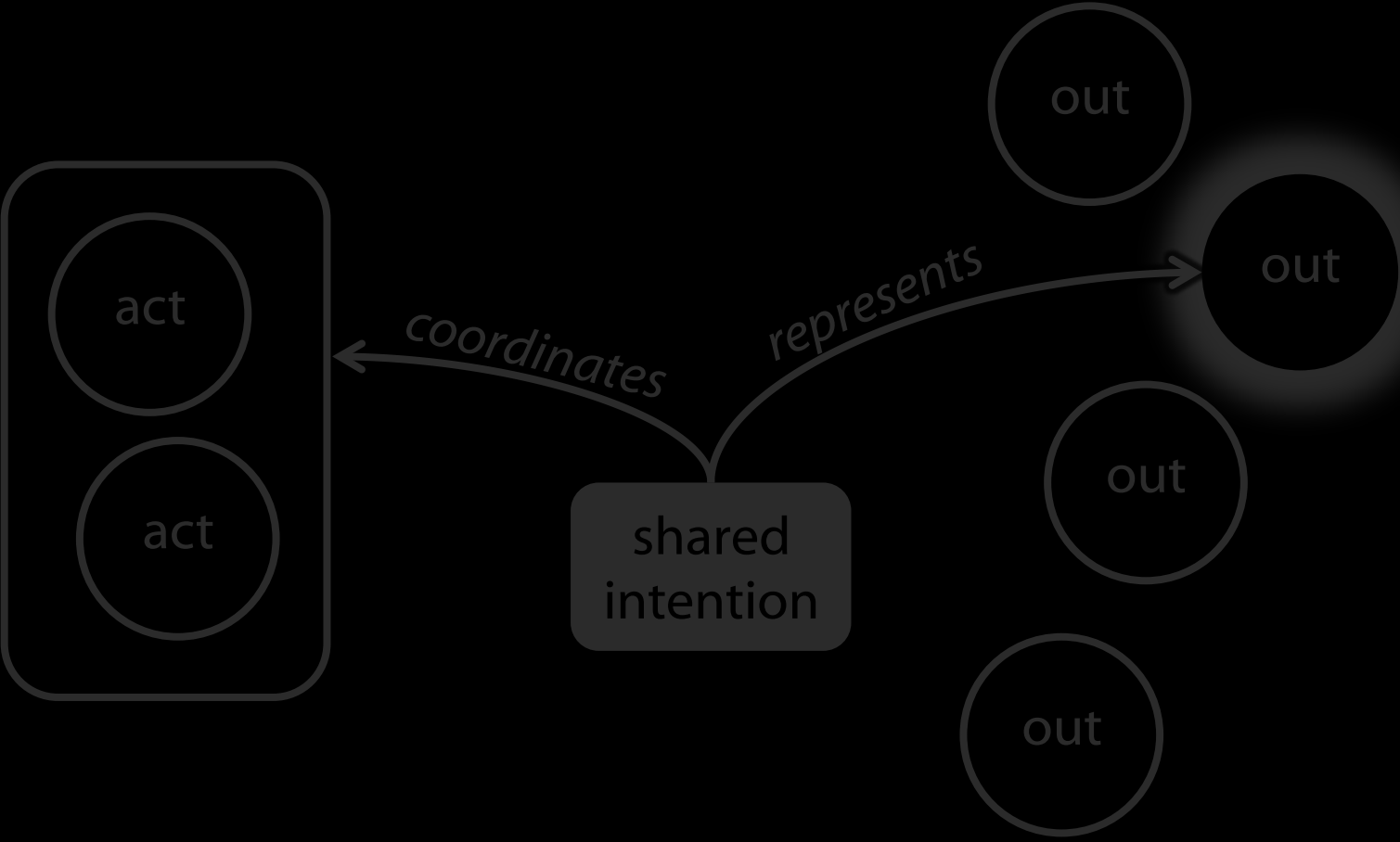
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shared intention



action
w. shared agency

intention



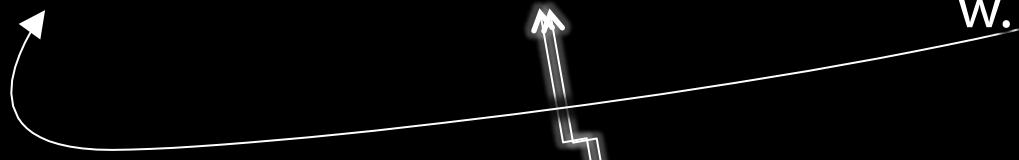
action
w. individual agency



shared intention



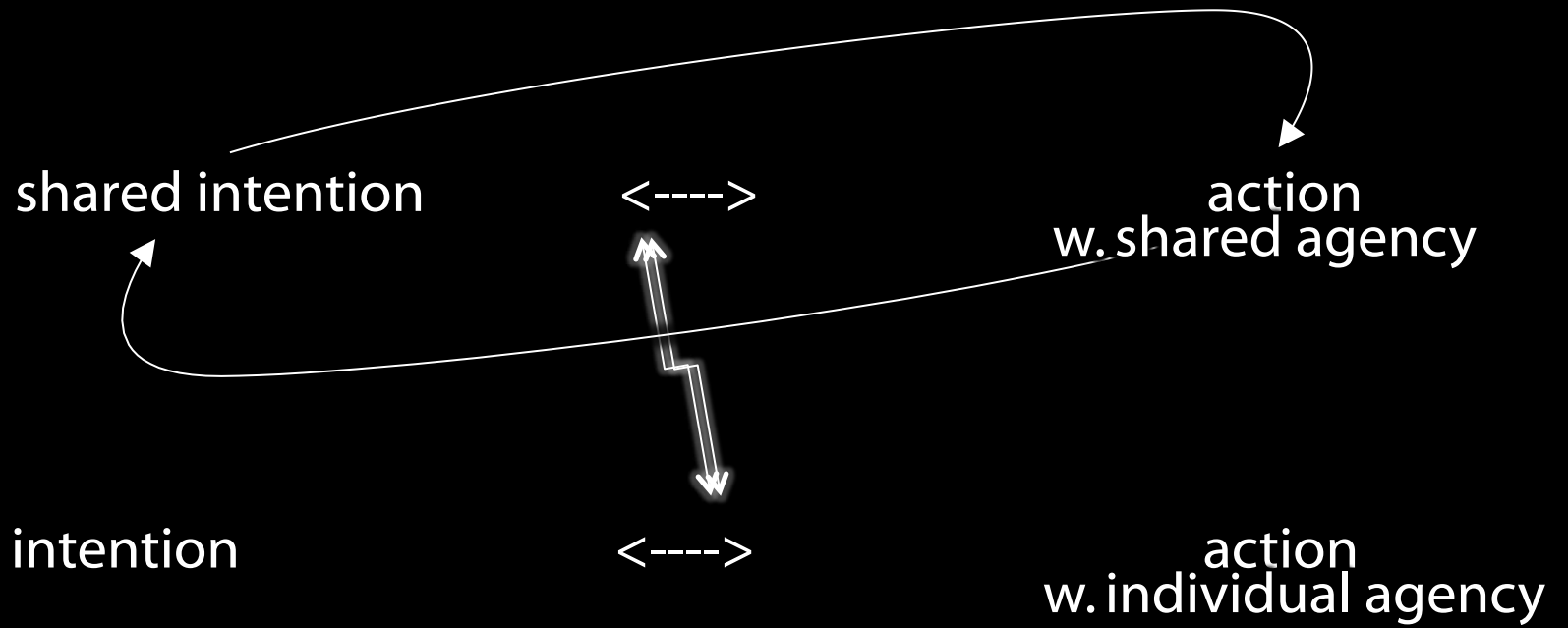
action
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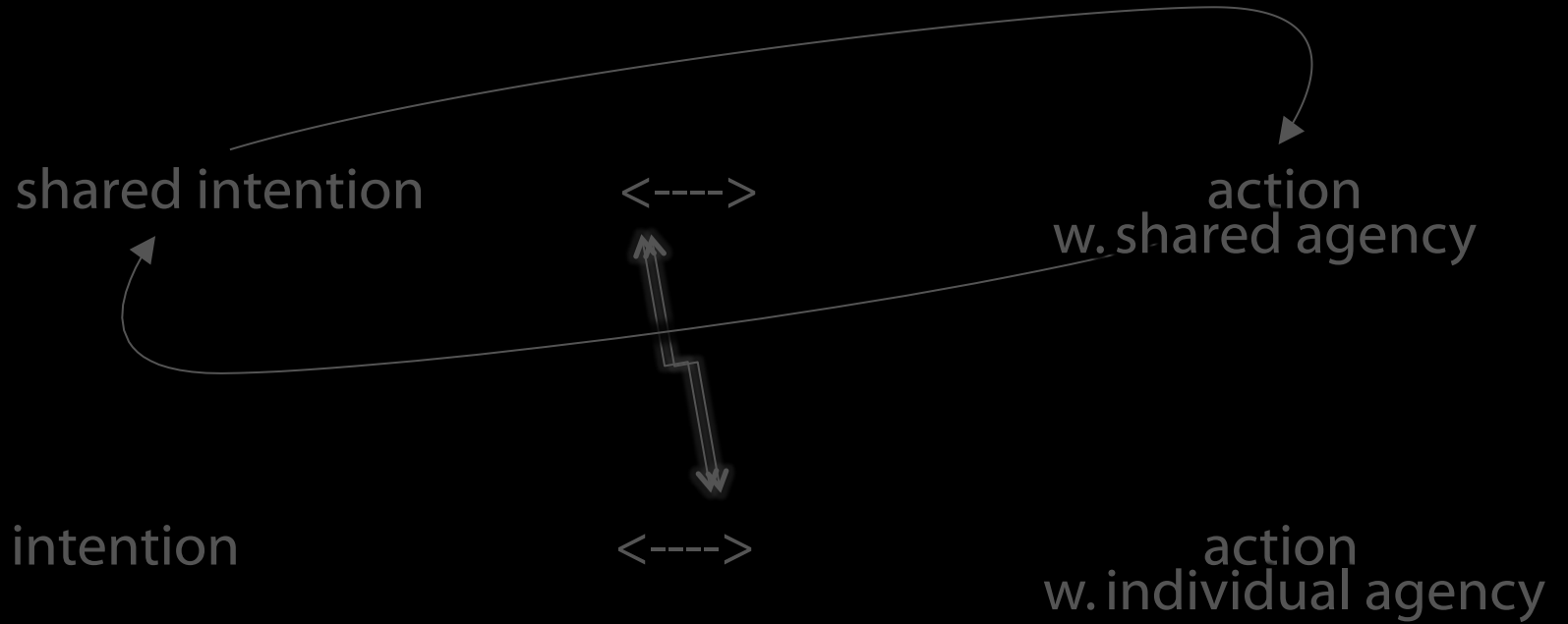
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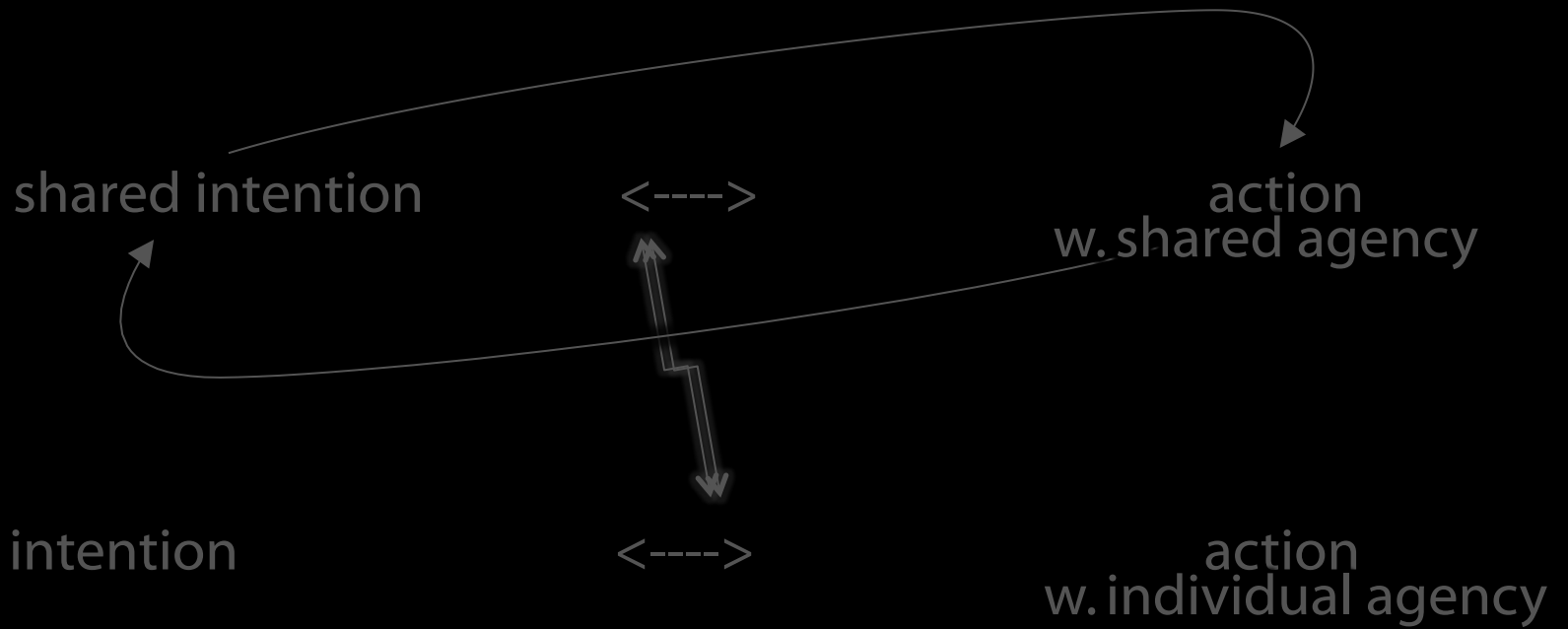
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What is shared intention?



What is shared intention?



What is shared intention?

Functional characterisation

Substantial account



What is shared intention?

Functional characterisation

shared intention serves to
(a) coordinate activities, (b)
coordinate planning and (c)
structure bargaining

Substantial account



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Functional characterisation

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

(Bratman 1993:View 4)





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1. The leading philosophical approach to shared agency

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3. (Building blocks for) an alternative approach

4. Motor representation

5. The emergence of mindreading



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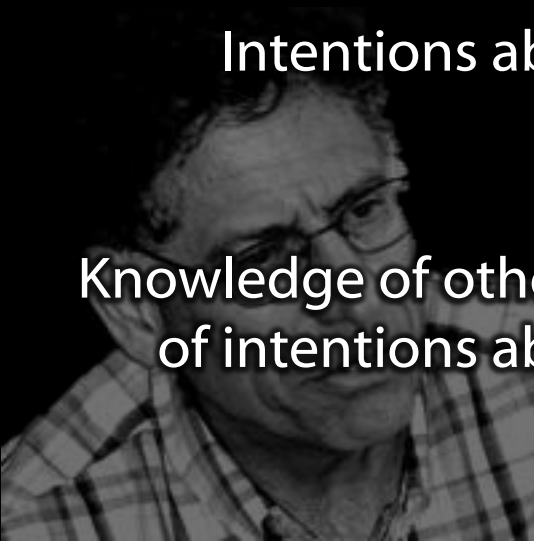
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Knowledge of others' knowledge
of intentions about intentions



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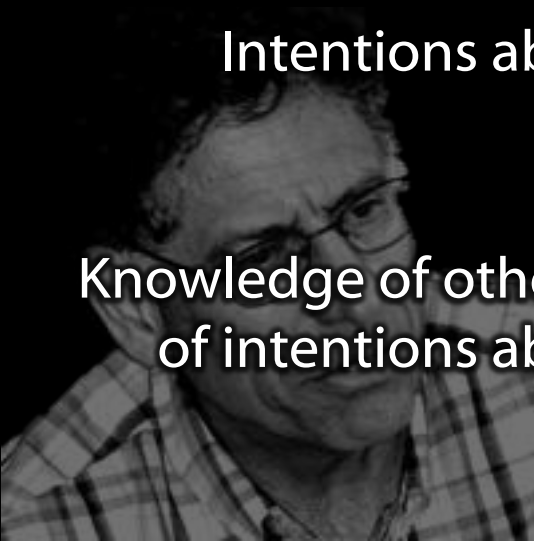
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'shared intentional agency
consists, at bottom, in
interconnected planning
agency of the participants.'

(Bratman 2011, p. 11)

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“perception, action, and cognition are grounded in social interaction”

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“human cognitive abilities ... [are] built upon social interaction”

(Sinigaglia and Sparaci 2008)



conjecture

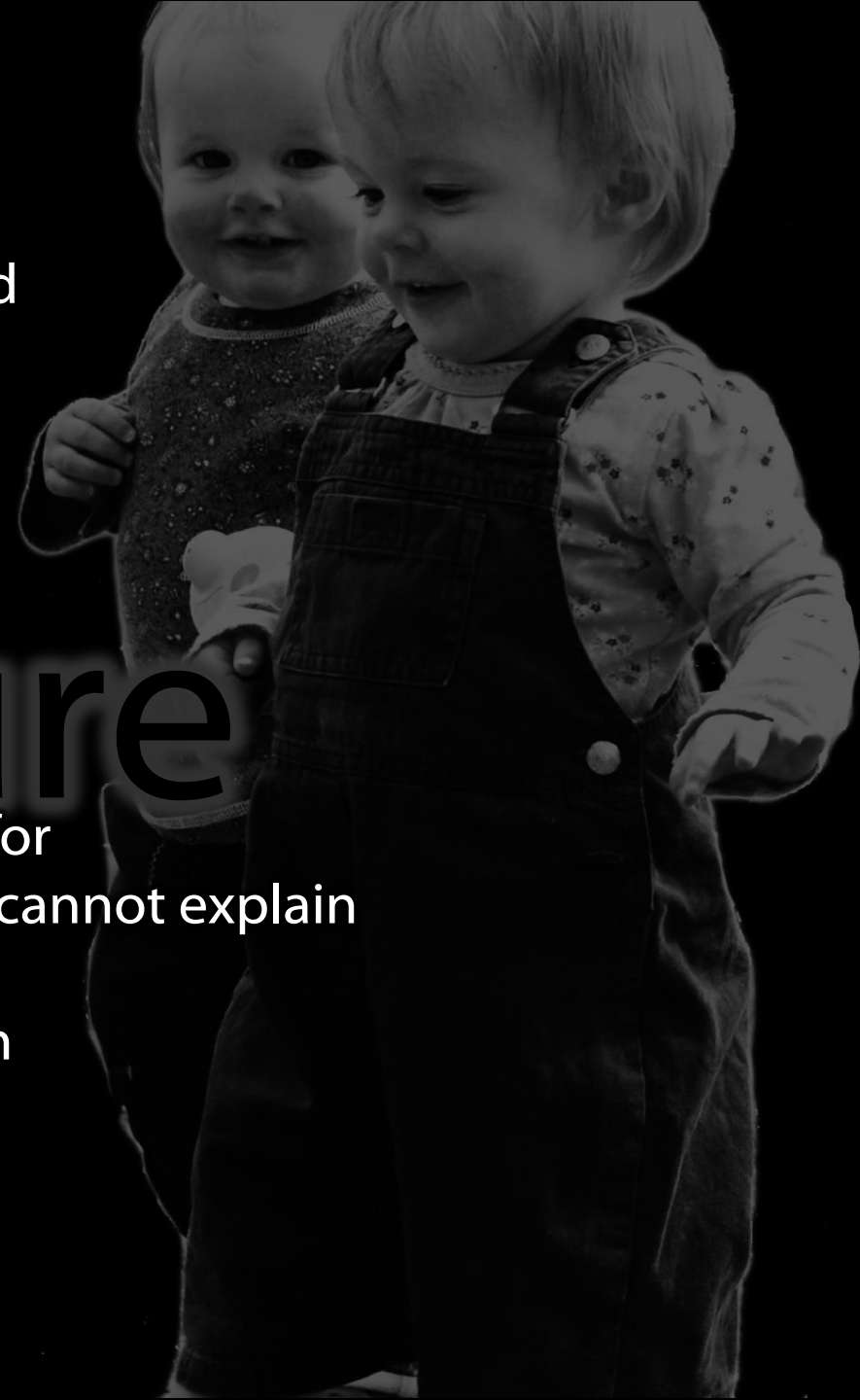
The prior existence of capacities for shared agency partially explains how sophisticated forms of mindreading emerge in evolution or development (or both)

1. All shared agency involves shared intention.

2. Shared intention requires sophisticated mindreading.

Therefore:

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shared intention



action
w. shared agency

2. Shared intention requires sophisticated mindreading.



Therefore:

intention



action
w. individual agency

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shared agency without shared intention

Joint action:
an action with two or more
agents (Ludwig 2007)

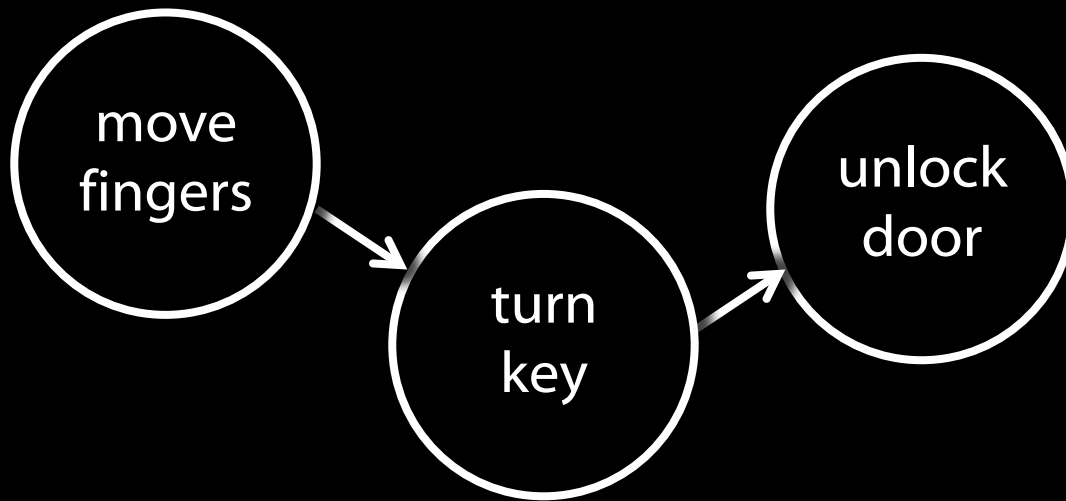
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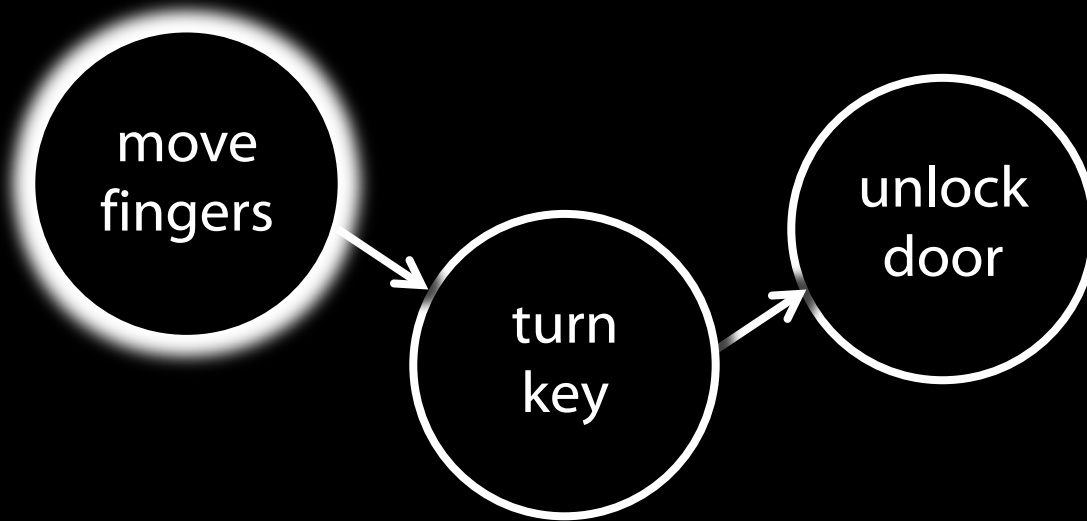
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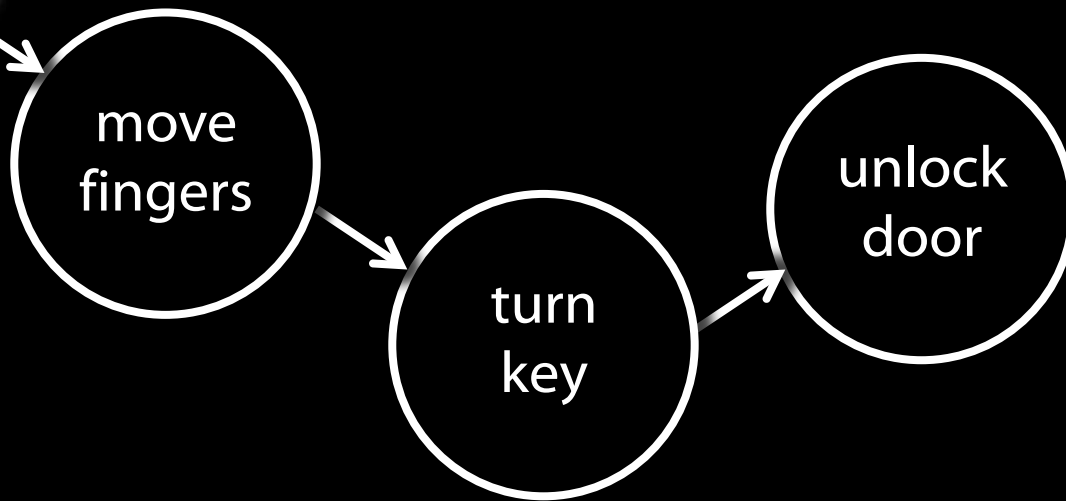
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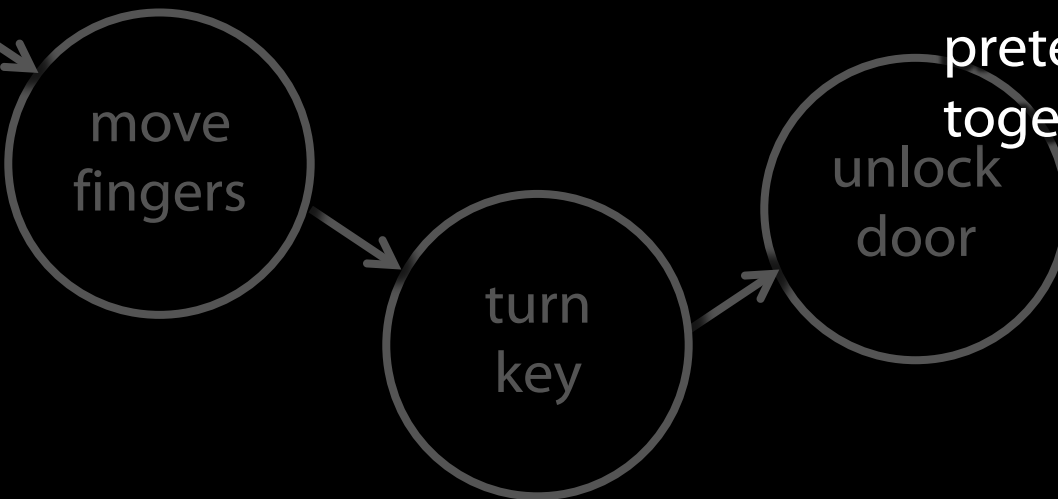
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tidying up the toys together
(Behne et al 2005)

cooperatively pulling
handles in sequence to
make a dog-puppet sing
(Brownell et al 2006)

bouncing a ball on a large
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(Tomasello & Carpenter 2007)

pretending to row a boat
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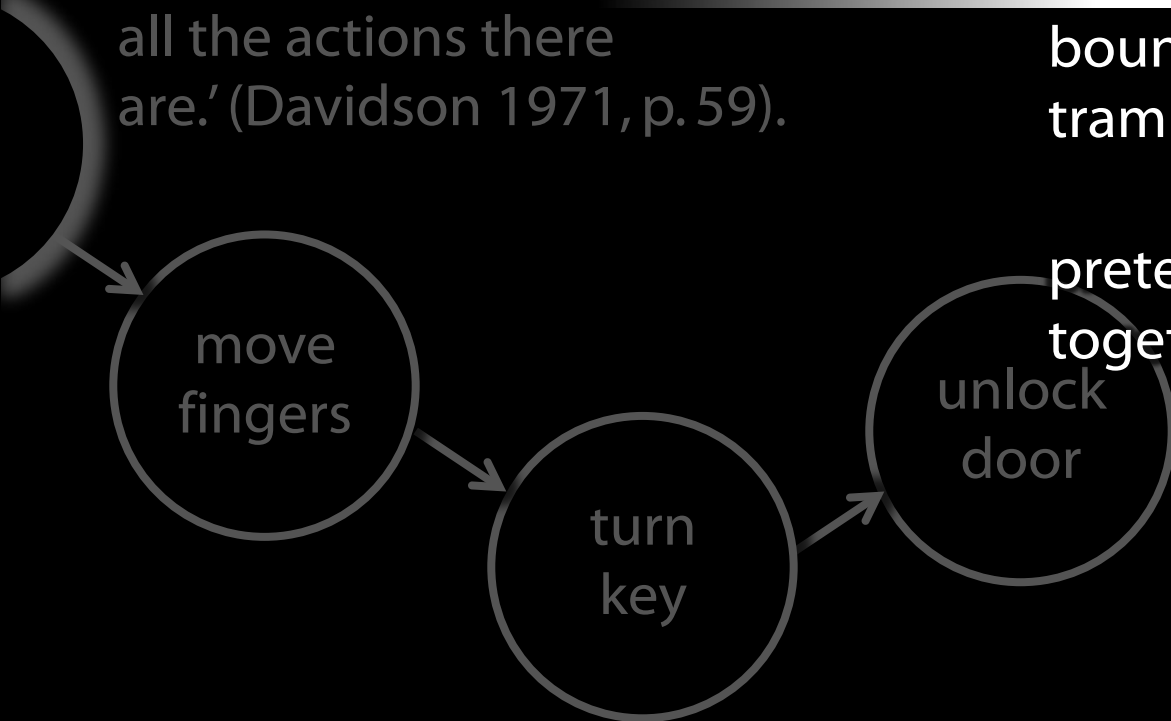
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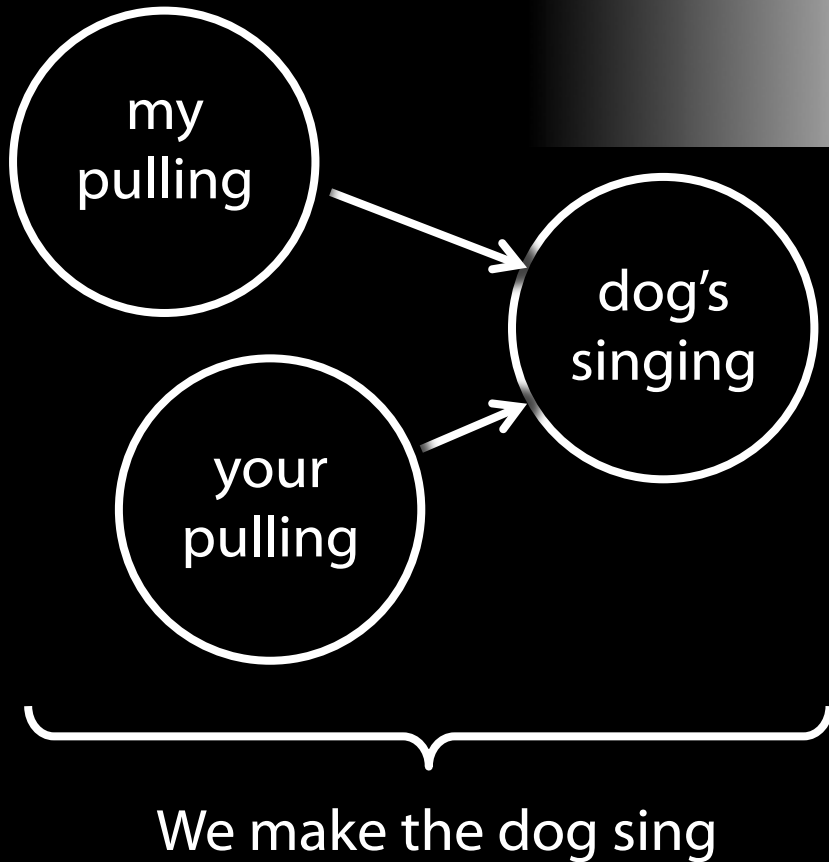
move
fingers

turn
key

unlock
door



Joint action:
an **action** with two or more
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the actions there
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3 In supposedly paradigm
cases of joint action, there
are no bodily movements
with more than one agent.

Therefore:

4 Supposedly paradigm cases
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too
narro
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Joint action:
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Joint action:
an ~~action~~-event with two or
more agents (Ludwig 2007)

Grounding

events D_1, \dots, D_n ground E , if:

D_1, \dots, D_n and E occur;

D_1, \dots, D_n are each (perhaps improper) parts of E ; and

every event that is a proper part of E but does not overlap

D_1, \dots, D_n is caused by some or all of D_1, \dots, D_n .

(Adapted from Pietroski 1998)

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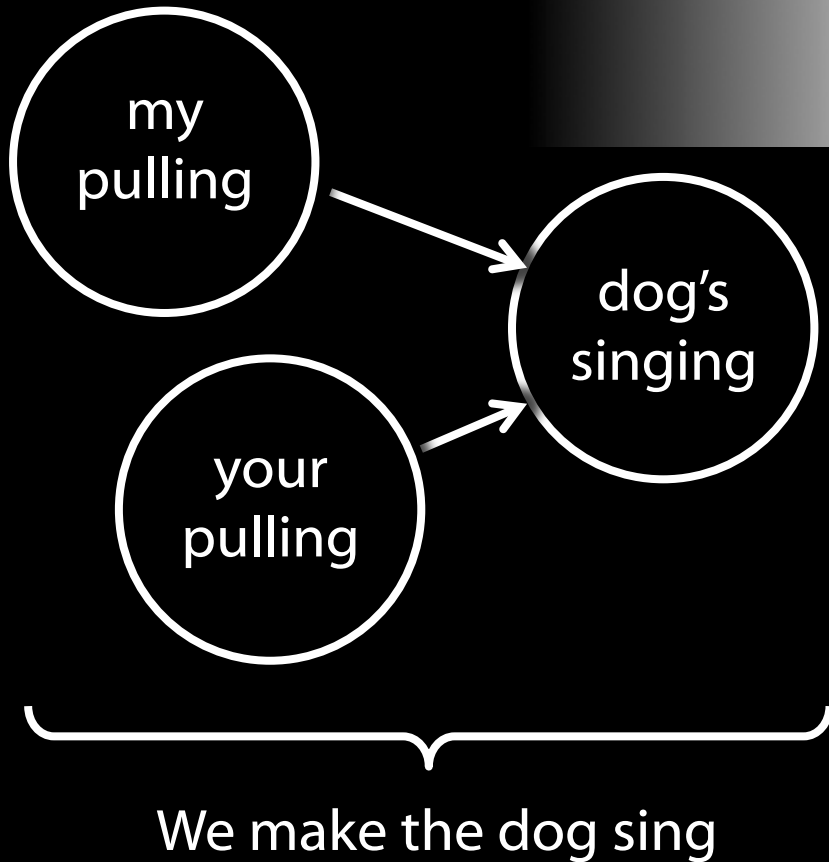
Agency

For an individual to be among the agents of an event is for there to be actions a_1, \dots, a_n which ground this event where the individual is an agent of one or more of these actions.

(Adapted from Pietroski 1998)

Joint action:
an ~~action~~-event with two or
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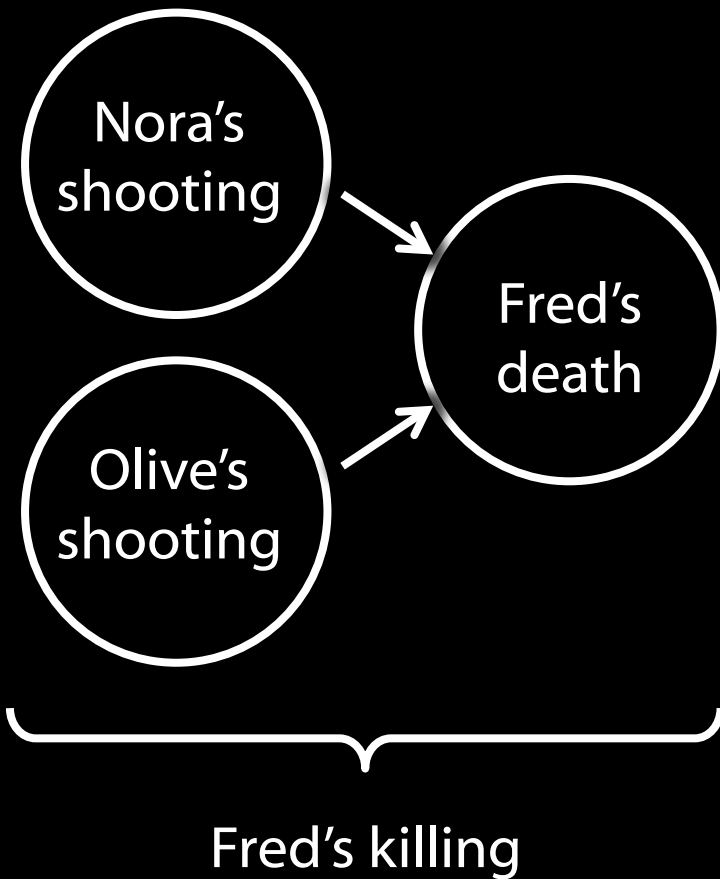
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too
broad

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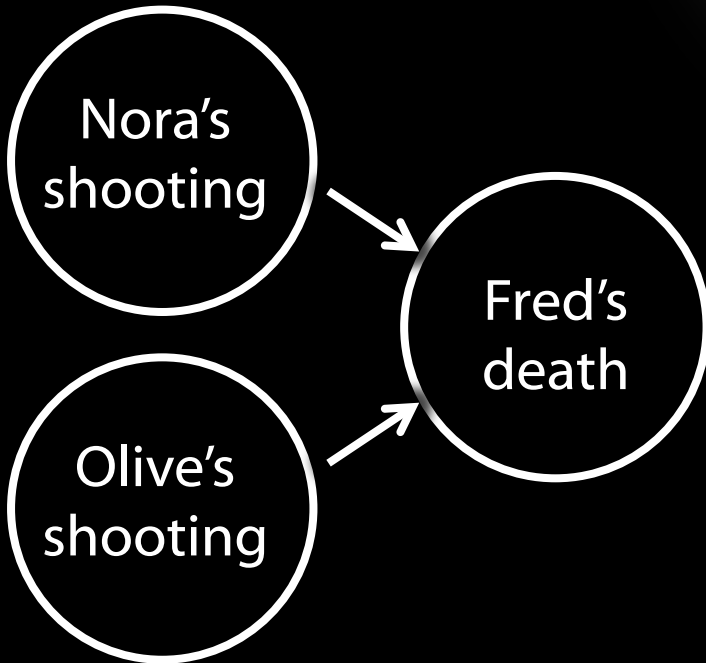
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Fred's killing