Lecture 06: Acting Together

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1. Contrast Cases and the Simple View

Question What distinguishes genuine joint actions from parallel but merely individual actions?

Aim An account of joint action must draw a line between joint actions and parallel but merely individual actions.

The Simple View : Two or more agents perform an intentional joint action exactly when there is an act-type, φ, such that each of several agents intends that they, these agents, φ together and their intentions are appropriately related to their actions.

2. Walking Together in the Tarantino Sense

'each agent does not just intend that the group perform the [...] joint action. Rather, each agent intends as well that the group perform this joint action in accordance with subplans (of the intentions in favor of the joint action) that mesh' (Bratman 1992, p. 332).

Our plans are *interconnected* just if facts about your plans feature in mine and conversely.

'shared intentional agency consists, at bottom, in interconnected planning agency of the participants' (Bratman 2011).

Bratman's claim. For you and I to have a collective/shared 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' (Bratman 1993, View 4)

2.1. Shared Intention

What distinguishes joint actions from parallel but individual actions? 'the key property of joint action lies in [...] the participants' having a [...] "shared" intention.' (Alonso 2009)

'I take a collective action to involve a collective intention.' (Gilbert 2006, p. 5)

'The sine qua non of collaborative action is a joint goal [shared intention] and a joint commitment' (Tomasello 2008, p. 181)

3. Multi-Agent Events

Events D_1, ... D_n *ground* E, if: D_1, ... D_n and E occur; D_1, ... 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, ... D_n is caused by some or all of D_1, ... D_n.

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

A joint action is an event with two or more agents.(Ludwig 2007)

4. Collective Goals

An outcome is a *collective goal* of two or more actions involving multiple agents if it is an outcome to which those actions are collectively directed.

5. Collective Goals and Motor Representations

Motor representations concern not only bodily configurations and movements but also more distal outcomes such as the grasping of a mug or the pressing of a switch (Butterfill & Sinigaglia 2014; Hamilton & Grafton 2008; Cattaneo et al. 2009).

Some motor processes are planning-like in that they involve deriving means by which the out-

comes could be brought about and in that they involve coordinating subplans (Jeannerod 2006; Zhang & Rosenbaum 2007).

Motor processes concerning actions others will perform occur in observing others act (Gangitano et al. 2001)—and even in observing several others act jointly (Manera et al. 2013)—and enables us to anticipate their actions (Ambrosini et al. 2011; Aglioti et al. 2008).

In joint action, motor processes concerning actions another will perform can occur (Kourtis et al. 2013; Meyer et al. 2011), and can inform planning for one's own actions (Vesper et al. 2013; Novembre et al. 2013; Loehr & Palmer 2011).

In some joint actions, the agents have a single representation of the whole action (not only separate representations of each agent's part) (Tsai et al. 2011; Loehr et al. 2013; Ménoret et al. 2014), and may each make a plan for both their actions (Meyer et al. 2013; Kourtis et al. 2014).

An interagential structure of motor representation:

1. there is an outcome to which a joint action could be collectively directed and in each agent there is a motor representation of this outcome;

2. these motor representations trigger planning-like processes in each agent which result in plan-like hierarchies of motor representations;

3. the plan-like hierarchy in each agent involves motor representations concerning another's actions as well as her own;

4. the plan-like hierarchies of motor representations in the agents nonaccidentally match.

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