MB/MGFM discussion of (Moll and Tomasello 2006)

I asked Michael Bratman (MB) about a problem concerning autonomous action/self-governance: standard accounts of free action require attitudes towards desires (Frankfurt[1], Velleman[2]), judgements about values (Watson) or reasons (Audi[3]), or intentions to give weight or significance to certain factors (Bratman[4]). This suggests that either self-governance emerges surprisingly late in human development or else a capacity for reflection on attitudes, values and significance emerges surprisingly early.

MB agreed this a problem, pointed me to (Jaworska 2006), and suggested that the problem arises in a sharp way in connection with the Vygotskian intelligence hypothesis:

> "the unique aspects of human cognition … were driven by, or even constituted by, social co-operation" (Moll and Tomasello 2006: 2–3).

[1] "*A* wants the desire to *X* to be the desire that moves him effectively to act" (Frankfurt 1971: 85).

[2] "What autonomy seems to require … is … the capacity for … particular higher-order motives, which would reinforce the agent's first-order motives insofar as the latter were perceived as reasons" (Velleman 2000: 13-14). "autonomy is an expression of the drive to wrap your mind around things—an expression, in particular, of that drive as directed at yourself. You govern yourself, it seems to me, when you seek to grasp yourself as part of an intelligible world and consequently gravitate toward being intelligible … It's an intellectualist view, all right. But we are intellectual creatures, and our autonomy may well be a function of our intellect" (Velleman 2000: 30-1)

[3] "an action for a reason is a discriminative response to that reason, performed in the light of it, and such that one is noninferentially disposed to attribute it to that reason" (1986: 525).

[4] "the ground of agential authority involves higher-order attitudes whose function includes the constitution and support of the temporal extension of agency" (Bratman 2001: 320), specifically. "higher-order intentions, plans, and policies about which desired ends to treat as reasons in motivationally effective deliberation" (321). "[S]uch policies concern one's deliberation and deliberative action in repeated occurrences of situations of certain types" (Bratman 2001: 322).

What follows is some of the background then my notes on a long discussion with MB, Mike Martin (mgfm), Bill Brewer (BB), Alex Kelly (AK) and Ian Philips (IP) at Eleven, 01/12/2006.

Background

From around 12-months human infants engage in a kind of shared activity that no other animals engage in. This shared activity needs to be distinguished from co-operative group activities performed by many animals such as Taï forest chimps who hunt in groups (6). To understand the Vygotskian intelligence hypothesis we need to understand how infants' shared activity differs from hunting in groups.

On the difference, Moll and Tomasello (p. 6 see also Tomasello, Carpenter, *et al.* 2005) suggest that: (i) the chimps' activity is co-ordinated but lacks 'jointness' (p. 7); (ii) the relevant notion of jointness is best understood by appeal to Bratman's notion of Shared Co-operative Activities (Bratman 1992).

We might think of Bratman's view as having three parts:

> (a) Shared Co-operative Activities are characterised by Mutual responsiveness, Commitment to the joint activity and Commitment to mutual support (Bratman 1992: 328)
>
> (b) Shared Co-operative Activities are activities performed with a shared intention that we J, which intention supports the characteristic features mentioned in (a)
>
> (c) One way to have a shared intention that we J is to have "a public, interlocking web of the intentions of the individuals"; specifically "we each intend that we J, and

we each intend that we J in accordance with and because of meshing subplans of each of our intentions that we J. [and] … this interlocking web of intentions … [is] a matter of common knowledge." (Bratman 1999: 143).

Note the full complexity of (c):

"(l)(a)(i) I intend that we J.

(l)(a)(ii) I intend that we J in accordance with and because of meshing subplans of (l)(a)(i) and (l)(b)(i).

(l)(b)(i) You intend that we J.

(l)(b)(ii) You intend that we J in accordance with and because of meshing subplans of (l)(a)(i) and (l)(b)(i).

(l)(c) The intentions in (l)(a) and in (l)(b) are not coerced by the other participant.

(l)(c) The intentions in (l)(a) and (l)(b) are minimally cooperatively stable.

(2) It is common knowledge between us that (1)."

(Bratman 1992: 338)

Moll and Tomasello persuasively argue that human infants do engage in activities with the three characteristics mentioned in (a).

This raises a problem:

For Bratman, since 12-month-old infants appear incapable of having the nested intentions mentioned in Bratman's (c), there must be another, less cognitively demanding way to have a shared intention that we J. An adequate account of Shared Co-operative Activities needs to identify what it this way is.

For Tomasello, Moll et al, since 12-month-old infants appear incapable of having the nested intentions mentioned in Bratman's (c), and since Bratman doesn't offer any other way of explaining Shared Co-operative Activity, it isn't obvious that this is the correct way to characterise the difference between infants' and chimps' activities—perhaps there's no way to explain what Shared Co-operative Activity without appealing to nested intentions that infants don't have.

Solving this problem will give us more insight into the joint activities that explain what's special about human cognition.

MB notes that this problem is closely related to the problem of autonomous action/self-governance, because he sees the solution to that problem as involving cross-temporal organisation and the solution to this problem as involving inter-personal organisation; and similar structures of intention are required in both cases.

The sort problem is more familiar in the case of communication: something along the lines of Grice's account seems to capture what it is for an activity to involve communication, but anything along these lines involves complex intentions and younger communicators appear not capable of forming such intentions. (I think this pattern repeats frequently and that it points to a deep problem with philosophical accounts of minds; so far most researchers suggest very generic strategies for addressing this sort of problem, e.g. appeals to implicit–explicit distinctions or modules.)

One complication we ignored that in various papers on shared intentionality involving Tomasello, shared intentionality is linked to (a) co-operative activities, (b) pointing plus gaze following, (c) 'understanding perspective' in the sense manifested by an infant's handing an adult an object novel to that adult, and (d) imitation. There are

several views on how these are related. In an earlier paper (a)–(d) are described as "all manifestations of a single underlying social-cognitive skill, namely, the understanding of persons as intentional agents who have a perspective on the world that can be followed into, directed, and shared"(Tomasello and Rakoczy 2003: 125). On the other hand, Moll and Tomasello (2006: 17) suggest that "participation in interactions involving shared intentionality … creates the notion of perspective." This turns out to be relevant at the end of our discussion.

Discussion

MB suggests there may be a way to get something isomorphic to the structure of interlocking intentions that he officially says constitute having a shared intention that we J.

We agree that this is challenging and that appeals to things like how explicit and intention is are likely to label rather than resolve the problem.

BB suggests that the problem is harder than it seems because we refuse to take shared intentions as primitive. Joint intentions don't need analysing into a complex pattern of psychological states any more than individual intentions do.

MB Worries that this avoids the problem by fiat. Plus it seems natural to think that shared intentions depend on individual's intentions.

MGFM offers a restatement or refinement of BB's view. This hinges on two distinctions: (1) singular vs. plural activities and (2) impersonal vs. person-specifying intentions.

(1) 'John carried the boat' describes a singular activity whereas 'John and Mary carried the boat' describes a plural activity. Plural activities aren't composites of singular activities (it's not the same as 'John carried the boat and Mary carried the boat'.)

(2) There's a linguistic difference between 'mgfm intends to mow the grass' and 'mgfm intends that mgfm mow the grass', and this linguistic difference points to a difference between two intentions. The former intention doesn't specify who will mow the grass, although it's a condition of the intention's being fulfilled that mgfm mow the grass. Moral: not all of the conditions on an intention's being fulfilled are necessarily specified in the content of that intention.

MB queries whether (2) is correct, specifically whether the linguistic difference points to a real difference between two intentions. Perhaps intending to play football always involves intending that we play football.

MB later agrees that agents can have intentions about acts without any thought as to who will perform those acts.

Assuming (2) is correct, we can have impersonal intentions about plural activities. For example, I can intend to play football without intending to play football with anyone in particular. Suppose on a foggy day I get out of bed in a dozy state—I might play football (have a noncompetitive kick around) without any awareness of who I'm playing it with. So we have to distinguish:

(1) I intend to play football

(2) I intend that we play football

MGFM suggests that MB's complex analysis of Shared Co-operative Activities is necessary for understanding (2) but

unnecessary for (1). He then offers a very simple theory of what's required for something to be joint activity:

- several people are doing it
- it's not a matter of each doing something
- they are doing it intentionally

What would require MB's more complex analysis of Shared Cooperative Activities are cases where you there is a group who wish to act with each other. A test of this would require a case where several people are engaging in an activity and I hook up with some but not others.

SB then objected that in this experiment Chimps appear to be engaging in joint actions of the type MGFM identifies (see figure below). So although MGFM might be right that there's a simple case of joint action, this isn't what the Vygotskian hypothesis invokes.

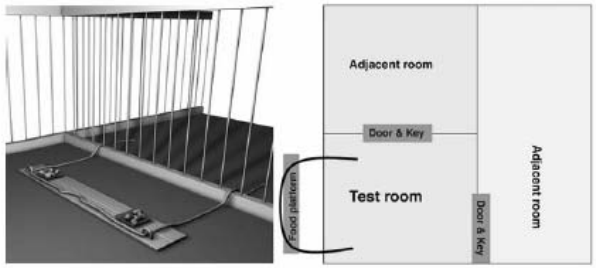

Fig. 1. Experimental setup. The baited food platform, metal loops, threaded rope extended into the test room, room layout used in the two studies, and placement of the food platform. In experiment 1, the subject was released from an adjacent room into the testing room, while the partner was "locked" in another adjacent room that only the subject could open with a key (a wooden peg) from inside the testing room. In experiment 2, the subject was released directly into the test room from a third adjacent room not represented here, while two potential partners were each locked in one of two adjacent rooms that the subject could again open with a key.

from (Melis, Hare and Tomasello 2006)

MGFM counters that in this experiment the main chimp is using other chimps as tools rather than engaging in a genuinely joint activity.

Later SB tried to invoke the synchronised patterns of diving that dolphins engage in as another potential example of

joint activity in nonhumans (partly because it seems the aim involves multiple agents). MGFM counters that this is mere synchronisation of individual activities.

So there's a difference between intending something that only happens if several people co-operate and intending a plural activity. Also, intentionally participating in a plural activity does not require co-operation or co-ordination (e.g. dozily kicking around a football in the fog).

MB: Suppose two people intend that they go to New York together, and that each plans to do this by throwing the other into the trunk of their car. One succeeds and they go to New York. Isn't this a joint activity according to the simple view MGFM offered above?

MGFM: no because the person in the trunk isn't acting. But it's true that mgfm's notion of a joint activity doesn't get at the notion of sharing or togetherness that MB's analysis of Shared Cooperative Activity aims to identify.

MB and MGFM agree that there are strategically coordinative activities where the agents are mutually responsive that don't count as joint actions. For example, walking down crowed 5th avenue. MB's view is that some extra ingredient is required to make it a joint action, and this is the complex structure of meshing intentions. MGFM holds that the basic difference is between singular and plural activities, and what's happening depends simply on which activities people are intending to perform. MB holds that for an activity to be joint requires strategic coordination, mutual responsiveness and more besides.

MGFM's distinction between singular and plural activities turns out to be subtle. For example, applauding (after a concert) can be either singular or joint activity. There's no way to tell which activity is happening just by observing the

behaviour. MGFM suggests that since a capacity for plural activities requires being able to classify activities as such, it's possible to tell whether a subject is capable of joint activity.

MB challenges the idea that plural activities are ontologically on a par with singular activities. One worry is that we're introducing fancy ontology to hide real problems. Another is that we can't understand what a joint activity is except in terms of some sort of meshing of individual's intentions.

BB replies that the plural case is no different from the singular case. In the singular case, what makes a movement an action is an intention to act. This is circular because the intention can't involve anything less than the whole action. (Suppose I intend my arm to go up and my arm goes up because I have this intention; it doesn't follow that my arm's going up was intentional. So what's required is an intention about the action itself, not about some movement or anything less than the action itself. But now there's a circle because what makes an event an action is that it's done with an intention about that very action.) Since the story about how intention relates to action is circular in the singular case, we shouldn't worry that it's circular in the plural case as well.

MB reserves the right to worry about the singular case, but the general consensus seems to be that we can't find a reason for thinking that plural activities should be treated differently from singular activities. (MGFM suggests that Frege's attitude towards quantifiers explains why philosophers are sometimes suspicious of plural activities.)

In the end MGFM/BB and MB definitely disagree but seem undecided between two related ways of disagreeing with each other:

(1) 'Different intellectual bets':

On this version, MB rejects MGFM's claim that there is a basic notion of joint action which requires nothing more than the simple theory outlined above. According to MGFM, understanding the jointness of joint activities requires only understanding the notion of a plural activity; according to MB, understanding the jointness of joint activities requires understanding a mesh of intentions.

Ultimately, this is a disagreement in metaphysics about what makes something joint. One powerful argument in favour of MGFM's view may be developmental tractability—on MGFM's but not MB's it's possible that the Vygotskian intelligence hypothesis is true (and this is a requirement for any adequate theory of the metaphysics since both sides agree that it is plausibly true).

(2) 'Pole position':

On this version, MB accepts that MGFM's notion of joint action is theoretically coherent and doesn't require further analysis. Call MB's notion 'shared action' and MGFM's 'joint action'. MB and MGFM each claim that their notion is the one required for the Vygotskian intelligence hypothesis …

MGFM says the hypothesis should be that human infants are unlike others in being interested in engaging in joint action. In itself, this does not require skills of cooperation or coordination; if it's any more cognitively demanding that engaging in singular activities this is only because it requires categories for plural activities. So the key difference could be motivational rather than cognitive. But of course given that humans are interested in joint action, they have a need for skills to coordinate and cooperate.

MB counters that MGFM's interpretation would make the Vygotskian intelligence hypothesis unexplanatory. What makes human infants special is not joint action as such but the further mutual responsiveness and mutual support that are characteristic of shared action. What's needed to understand this hypothesis is still something analogous to the complex structure of intentions MB initially used to characterise Shared Cooperative Activity.

Both agree that Vygotskian intelligence hypothesis and associated empirical research plays an important role in motivating the theories, clarifying various senses in which actions can be joint or shared, and in deciding which philosophical claims about action are true.

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