

Personal and Sub-personal Reason: The Case of Groups

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Plan

- 1 Rationality and reasoning
2. Groups without reasoning
3. Groups with reasoning

1 Simple Agents 1

The robot acting on the cylinders:

has a goal of raising cylinders to upright;

forms representations of their positions;

acts in such a way that it

realizes the goal,

according to its representations.

1 Simple Agents 2

At least it does this

within feasible limits, e.g. on table,

under favorable conditions, not near edge

We identify such circumstances at the same time as we ascribe attitudes.

This is part of seeing it as an agent.

1 Simple Agents 3

Rational standards are just desiderata of agency:
conditions supportive of agency.

These include standards governing:

attitude-to-evidence,

attitude-to-attitude,

attitude-to-action relations.

Any agential system has to pass a minimum

1 Simple Agents 4

Non-human animals go beyond the robot, like more complex counterparts.

These might

- use trial-and-error to self-improve;

- have representations about more varied objects and more varied properties;

- have more varied goals.

1 Simple Agents 5

What makes such agents simple?

They are minimally rational, or better, but by grace of nature/design, not effort.

They are not rationality-sensitive systems that act so as to improve performance.

They are sites of sub-systemic rationality; the work is done ‘sub-personally’.

1 Symbolic agents 1

Simple agents have beliefs about concrete objects and their properties.

Thus they can attend interrogatively to such objects, waiting for their attitudes to form.

Think of the dog perking up its ears, asking itself if dinner is being served.

Let the evidence be positive and belief will form, triggering action: back to sleep or...

1 Symbolic agents 2

The key limitation is that these agents cannot attend to propositions and ask questions about propositional relations.

They cannot ask themselves about support, consistency, entailment, etc., waiting for meta-propositional beliefs to form and affect their attitudes.

That is, they cannot reason.

1 Symbolic agents 3

We can reason because we use symbols.

We can take a sentence like ‘p’ or ‘if p, q’, and use it exemplify the proposition as an object to ask and think about.

Desiring to check our natural inference, we can see if, e.g., they entail ‘q’.

This will lead us to conclude ‘so, q’; and that conclusion will shape our beliefs.

1 Symbolic agents 4

Like minimal agents we have to be rational but we can fail behaviorally and still make a claim to be seen as agents.

We may not act in a way that displays rationality in inferring that q , for example.

But we can show ourselves to be agents by avowing the belief that p and if p , q , and acknowledging we should hold that q .

1 Personal and subpersonal 1

The simple agent is wholly dependent on its own nature for achieving rationality.

We can do a bit better, being able to reason so as to improve our performance.

This transcendence of nature is partial: nature has to trigger meta-propositional beliefs, and give them an effective role.

1 Personal and subpersonal 2

But the transcendence is still important.

It enables us each as an intentional system, to pursue rationality intentionally, sensitive to our record of commitment.

Reasoning is an activity of the whole system, aware of its record as a global system.

Rationality is not just the business of local subsystems operating within us.

2. The unreasoning group 1

A group will count as an agent just so far as members combine to mimic an agent.

They endorse a common set of goals, plus a method for revisiting those goals.

They endorse a common set of judgments, plus a method for updating these.

And they arrange for action to be taken when those attitudes support an initiative.

2. The unreasoning group 2

How might a group be organized so as to mimic a rational, unreasoning agent?

Assume it emerges by shared intention on the part of members to create a group.

It will be a counterpart of the simple agent iff it works with a bottom-up constitution.

2. The unreasoning group 3

The group's global performance will be a function of local role-playing efforts.

Some individuals will have special roles, triggering goal or judgment-forming events or assigning actions to representatives.

Most will be called on just to input their votes as required, whether in a general assembly or in special articulated sub-groups.

2. The unreasoning group 4

Could a group constitute a satisfactory agent and perform under such a constitution?

It turns out not.

The discursive dilemma shows that it cannot do so under a majoritarian constitution.

And related impossibility theorems show that the problem identified is general in nature.

2. The discursive dilemma 1

Suppose a group of three, A, B and C decide to operate as a group agent.

In order to pursue their goals, they will have to vote on various matters of judgment, whether at a time or over time.

Suppose then that they have to decide now on 'p', now on 'q', now on 'r', and now on whether 'p&q&r'.

2. The discursive dilemma 2

	p?	q?	r?	p&q&r?
A	No	Yes	Yes	No
B	Yes	No	Yes	No
C	Yes	yes	No	No
ABC	Yes	Yes	Yes	No.

2. The discursive dilemma 3

In order to perform as a rational agent, this group will have to modify majority view.

It will have to reject 'p' or 'q' or 'r', thereby adopting a group view rejected by most.

Or it will have to accept 'p&q&r', thereby adopting a group view rejected by all.

It cannot go just with majoritarianism.

2. More general problems 1

This is already surprising, since it involves rejecting Hobbes, Locke and Rousseau.

But there is more.

Not only will a majoritarian, bottom-up constitution not work.

Neither will a range of non-majoritarian bottom-up substitutes, short of dictatorship.

2. More general problems 2

No non-dictatorial, reliable constitution can ensure the rationality of a group agent, if it satisfies the following plausible condition.

It allows the judgments of the group on each proposition to be fixed by the members' judgments on that proposition.

This needs qualification but holds broadly.

2. More general problems 3

But could a bottom-up constitution work without satisfying this condition?

Yes, it might rely on an algorithm for detecting if existing commitments entail a commitment on any new issue.

And the constitution might dictate that it adopt the required judgment without a vote

2. More general problems 4

Such a constitution would have A-B-C adopt the judgment that $p \& q \& r$ without a vote.

But this constitution would block the group from any possibility of rethinking.

It would make it into a procrustean, unsatisfactory agent.

And so would any similar constitution.

3. Straw vote strategy 1

How might a group get over the problem?

For simplicity, consider the group in which all participate on an equal footing.

One obvious remedy would be to have a straw vote on each issue that comes up, to check on whether the verdict raises problems, and then to pick a remedy.

3. Straw vote strategy 2

Suppose A, B and C edit a journal.

Suppose they make the following judgments:

the price should be fixed for five years;

the referees should have final say-so.

And now imagine they ask whether technical articles should be accepted on equal basis, and vote as follows.

3. Straw vote strategy 3

	Price freeze?	Referee?	Technical?
A.	Yes	No	Yes
B.	No	Yes	Yes
C.	Yes	Yes	No

The strategy would have ABC search out the problem, and decide where to revise

3. Straw vote strategy 4

Under this sort of strategy the group reasons.

It sets itself to form meta-propositional judgments, asking with each verdict whether it is consistent with what went before.

And then it takes steps to let that judgment affect its commitments, restoring consistency.

3. Straw vote strategy 5

The group agent is a system that pursues rationality as a goal for itself, not just relying on the bottom-up effect of subsystems.

It acts intentionally for its own rationality, keeping track of itself in the space of reason.

The members who constitute the group agent have to think from the group viewpoint.

3. Straw vote strategy 6

But one final wrinkle.

The editorial group may decide that the issue with technical papers should be revisited.

But the relevant members may stick.

This is group ‘akrasia’: an inability of members to identify with the group as a whole.