

## Lecture 2. Minds that speak control their thought by reasoning P.Pettit

### 1. Rationality, robotic and reasoned

Putting desire aside, functional or *rational* agents must all fairly reliably display the perception-to-belief, belief-to-belief & belief-to-action patterns needed to realize purposes. But they may make these moves in a 'blind' manner, displaying a sort of robotic rationality; they may lack a belief about how the contents are linked with one another. Our robot.

Perceiving (as it were) that  $p$ , they may believe that  $p$  but not: **so**  $p$ , or *since it seems that*  $p$ ,  $p$ .  
Believing that  $p$  and if  $p$ ,  $q$ , they believe that  $q$  but not: **so**  $q$ , or *since  $p$  and if  $p$  then*  $q$ ,  $q$ .  
(Believing that  $X$  scores over  $Y$  in desiderata, they may desire  $X$ , without a belief in its appeal)  
They move rationally from input to output state by reflex, without a belief linking the contents.

This may also happen with someone who can speak, and judge/believe, say, that  $p$  & if  $p$ ,  $q$ .  
The agent may judge 'blindly', as an *idiot savant*, that  $q$ : this may just bubble up as a response. Alternatively, she may transition to the response as a result of an intentional effort: attending to the premised case, asking whether it is such as to elicit a *so- $q$*  (or *so-?*) response, and assenting to ' $q$ ' in virtue of believing that the scenario has that feature. This is reasoning.

Consider: 'Brothers and sisters I have none; but that man's father is my father's son'.  
The reasoner attends intentionally to the case premised, asking what, if anything follows; so...?  
If she judges correctly '*so*, that's his son', she displays a conclusion-belief PLUS a linking belief. The latter is about the presumptively general link between the cases and lets her now 'see'.

How can scenarios get to be targets of attention that agents can form beliefs *about* in this way?  
By language: a sentence ' $p$ ' can exemplify a situation that it is normally used to posit. Davidson.  
E.g.s (1) Q: What did he say/believe? A:  $p$ . (2) ' $p$ : that is what I believe'. (3) ' $p$ : is that really so?'.  
Judging that  $p$  & if  $p$ ,  $q$ , you can believe about that actual case that it relates to the  $q$ -possibility in such a way that, as you now also judge, it is the case that  $q$ . How related? As in: '**so**,  $q$ '.

Minds that speak will tend to reason with one another, making use of this capacity.  
They can thereby show one another that they are taking care in judgment: reasoning  $\rightarrow$  care.  
They can explain or transcend differences by sourcing them in differences re premises.  
They can criticize one another by identifying differences in general linking beliefs, and then explore and perhaps remove those differences by testing the alleged linkages in other cases. (The general lesson presumably applies to practical and suppositional reasoning as well).

### 2. Reasoning and rule-following

Wanting to explain & defend themselves in co-reasoning, they may also reason personally.  
Seeking to judge whether  $p$ , they will take care over the task by reasoning from the data:  
they will not just attend to what they perceive or believe (the data) and then...WAIT  
They will try to track a general pattern or rule revealed in the linking belief. But 3 caveats...

First, when I follow a rule in reasoning, the only targets of attention are the scenarios linked;  
as Lewis Carroll showed, the rule I follow cannot without regress be premised as a target.  
Suppose I make a linking *modus-ponens* belief a matter of judgment and cast it as a premise;  
i.e., suppose my premises expand to include the  $m-p$  principle, as well as '*if  $p$ , then  $q$* ' and ' $p$ '.  
As Carroll's Tortoise shows, I must then rely on a distinct linking belief to continue reasoning;  
I must rely on a belief or habit that takes me from the expanded premises to '*so  $q$* '.

Second, while reasoning involves rule-following, it is not over-intellectual (Broome).

- a. The activity of reasoning does not presuppose access to the concept of a reason as such.
- b. My linking belief, say in *modus ponens*, may be held in a case-by-case (*sensu diviso*) way: the content may not be accessible as an *abstractum* for judgment, let alone not premised.
- c. Reasoning may *control* updating in a *virtual* way, as the singing cowboy controls his cattle; it need only be that should the process raise any red flags, active reasoning will take over.

Third, there must be a bedrock where, if I follow rules, I do so in a basic, unanalyzed way.

Seeing something like this , I can reason from that percept(ion) to 'it's a rectangle'; and

I can use terms like 'line', 'straight', 'angle', 'four' to spell out the rule or pattern I follow.

But if I reason the whole way down, avoiding blind judgment, I must follow unanalysed rules.

Example, I see     and reason without analysis to 'they're regular shapes'

### 3. The rule-following problem

How can I reason from such a percept to a judgment? Where do I find a rule to guide me?

By presumption, I cannot be led blindly, like the *idiot savant*, to an I-know-not-why judgment.

But how can examples point me to a guiding property, since they instantiate an infinite no?

Assuming I am one of our protagonists, here is a possible genealogy of basic rule-following.

#### Stage 1

Assume the shapes dispose me to extrapolate in one way, as they might dispose even a pigeon.

The shapes could then *exemplify* that one property for me *proleptically*. So might I follow it?

No, because I could not then go wrong; my say-so would be a be-so: I would be the authority.

#### Stage 2

Assume further that you and I and others take it that there is one property exemplified for all.

You and I and others might then aspire to be guided by that commonly targeted property.

But if we diverged, wouldn't the easiest response be to drop the commonality assumption?

#### Stage 3

Assume, *plausibly*, that we operate within teaching-learning practices; evolved apprentices.

Divergence in that case would prompt in us a search for a disrupting factor on some side:

a factor that would explain, as well as possible, why one or more might have gone wrong.

We might balk, look more closely, change stance, check assumptions, even follow the majority.

#### Upshot

Let 'normal circumstances' by df lack factors fit to be cast in this way as disrupting;

inference to the best explanation, assuming a common target, would lead us to indict them.

We might each take the property exemplified as something miss-able & mistakable:

as *that* property, salient to each, that shows up in... normal circumstances (as theorists say).

And we could each be at least virtually guided by it, with reason controlling our judgment.

This genealogy offers us an appealing candidate for what bedrock reasoning involves.

The attraction of the candidate is that it would make reasoning naturalistically intelligible—

and without debunking it, à la Kripke: triangulating on one another is not just coordinating.

If the genealogy is endorsed, it would suggest that reasoning may depend on co-reasoning;

people could reason (only?) if they were *open* to triangulating on one another in checking.

Thus, not only would a communal language enable us to reason with one another;

the community would play an essential role in making even personal reasoning possible.