

There it is

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Outline

1. The rational role of perceptual states
2. Rational dynamics
3. Metaphysics
4. Into the bad
5. Into the ugly
6. Beyond good and bad
7. Beyond certainty

THE RATIONAL ROLE OF PERCEPTUAL STATES

Why perceptual states?

- Sam is a normal subject
 - Sam sees the color of a red thing
 - Sam therefore believes *I see a red thing*
- Claire is a clairvoyant
 - Claire simply believes *I see a red thing*
- Differential first-person coherence/justification:
 - Claire's belief is bizarre in a way Sam's is not
 - Sam's belief makes sense from the first-person
- What explains the difference?
 - Sam affirms something Claire does not
 - **This state of affirmation is Sam's perceptual state**

(In)articulacy

- Distinguish two varieties of affirmational state
 - *Articulate states* are the sort shared by Sam and Claire
 - *Inarticulate states* are Sam's increment over Claire
- A distinction in content and in vehicle:
 - *(In)articulate propositions* are the contents of (in)articulate states
 - *(In)articulate sentences* are the vehicles of (in)articulate propositions

Examples

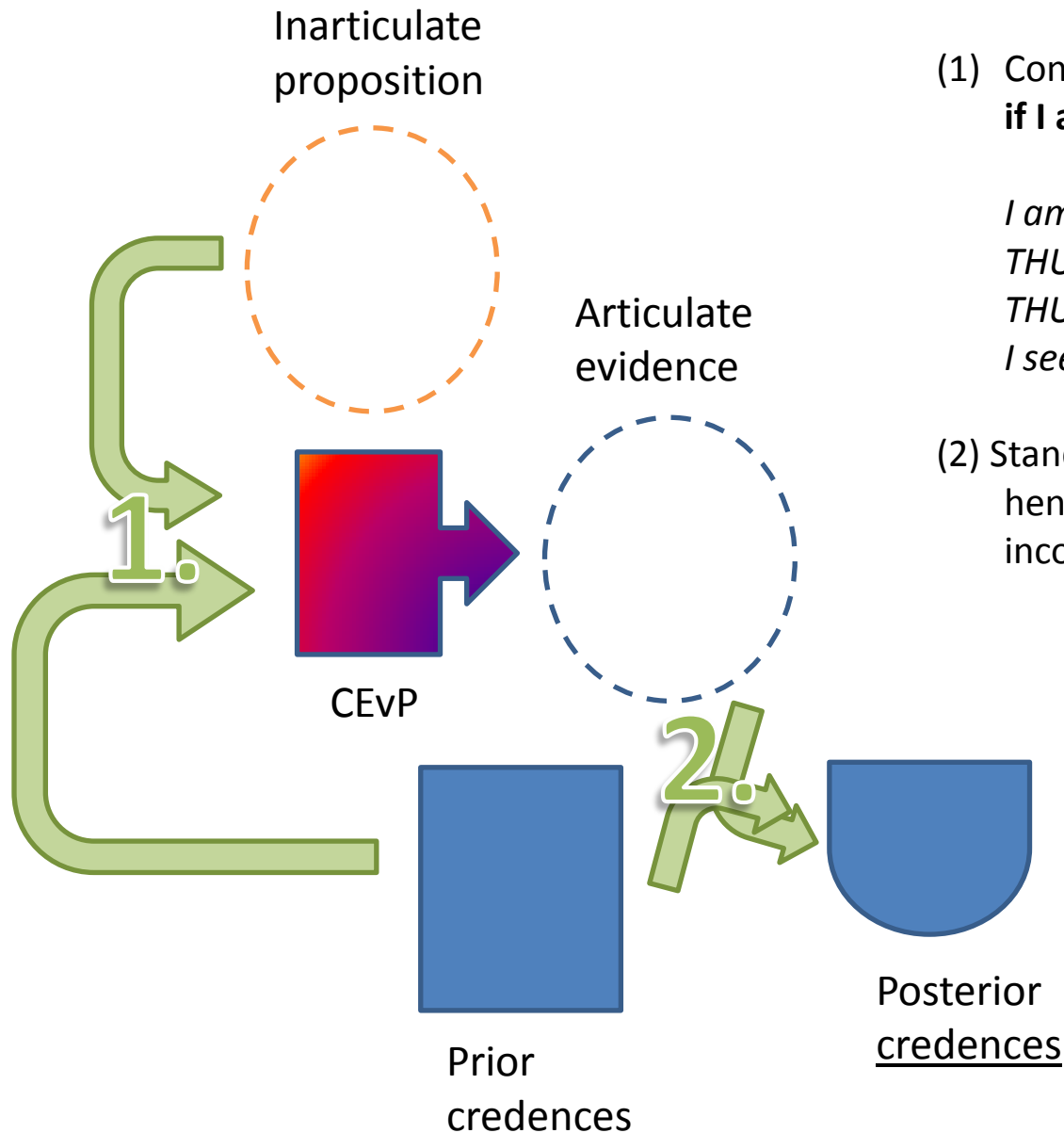
- Sam, recall, sees a red thing
 - She affirms *things are thus* [namely, that she sees a red thing]: an inarticulate proposition
 - She affirms *I see a red thing*: an articulate proposition
- Claire only affirms the latter

The role of perceptual states

- Perceptual states make the difference between Sam and Claire:
- Perceptual states justify environmentally-sensitive shifts in credential states.
- How?

I start with the picture I describe in the rest of the slides ...

RATIONAL DYNAMICS



(1) Conditional evidential policy
if I am in the good case, then
THUS iff I see a red thing

I am in the good case, so
THUS iff I see a red thing;
THUS; hence
I see a red thing

(2) Standard conditionalization:
henceforth ignore possibilities
incompatible with *I see a red thing*

That's complicated

- But you can see that perceptual states do not interact *directly* with the credential system
 - If they did, the articulate/inarticulate distinction would introduce new epistemic possibilities, and I want to avoid that
- They need to be translated into articulate propositions by 'conditional evidential policies'
- What are those???

The good case

Until further notice, assume:
we are in the good case;
all subjects and conditions are normal;
and everyone knows it

Logical justification

- A personal matter:
 - For me ...
 - *This is not not red* is equivalent to *this is red*
 - Accordingly, affirming the former makes sense of affirming the latter
 - For an intuitionist ...
 - These are not equivalent;
 - Affirming the former does not make sense of affirming the latter
 - He thinks I'm reckless, I think he's too cautious, each of us seems to himself to be A-OK

A difference in policy

- My policy is to **regard** the former propositions **as equivalent**;
- The intuitionist lacks this policy
- This difference in **logical policy** is what makes the difference in our sense of what we are justified in doing

Regard as equivalent?

- One regards P and Q as equivalent just if one can't make sense of P without Q or Q without P
- Might still be differences in 'meaning' broadly understood but this is a difference in what is *shown* rather than what is *said*: about the cognitive or non-truth-conditional significance of the two
 - Eg P is easier to use than $\sim\sim P$

Another example

- I regard Hesperus as identical to Phosphorus;
- A policy of regarding $PHI(Hesperus)$ as equivalent to $PHI(Phosphorus)$
- I can't make sense of the prospect that Hesperus traced path P thru the sky but Phosphorus didn't
- Still, *Hesperus traced path P* tends to guide the mind to the evening in a way *Phosphorus traced path P* guides the mind to the morning:
- They show what they say in different ways.

By contrast

- Someone else might regard Hesperus as distinct from Phosphorus.
- They see a need for explanations of regularities in their interaction that I don't see. (Why did Hesperus trace the first half of path P and Phosphorus trace its second half?)
- By my lights, they are making a mistake:
- Their 'Hesperus \leftrightarrow Phosphorus' is analytic but false.
 - Tho maybe room for interp: no reference to *planets* but to *planet-stages* ...
 - The discussion of the past few slides follows Agustin Rayo

Perceptual justification

- A rough story about Sam's **evidential policy**:
 - Sam regards *things are thus* [she sees red] as equivalent to *I see a red thing*
 - Note the diagram says it's a *conditional* policy: this matters for the bad case; more later
 - This is the sense in which affirmation of the former justifies affirmation of the latter
 - Sam's evidential policy justifies the latter conditionally on the former
- They *say* the same thing
 - Of course they *show* that one sees a red thing in different ways
 - Why is this incompatible with Sam's being just a still-fancier clairvoyant?

Treating as evidence

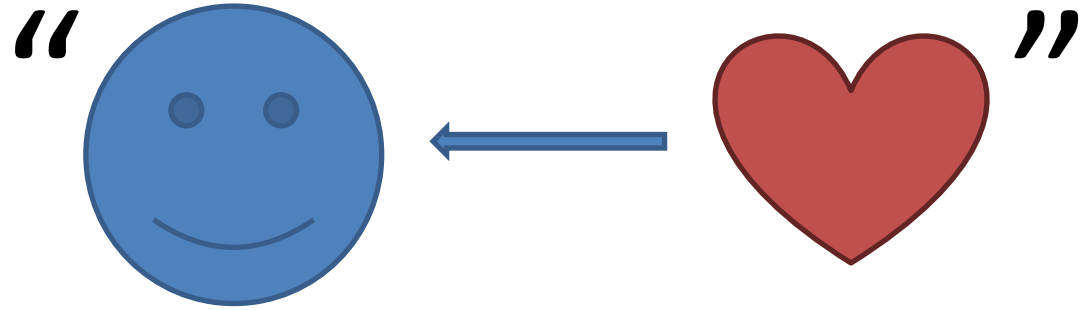
- Let's say that:
 - When one's policy is to regard inarticulate sentence S as equivalent to articulate sentence T;
 - And one affirms inarticulate sentence S;
 - And in carrying out one's policy affirms sentence T:
 - One **treats T as evidence**.
- Putting our question another way:
 - Perceptual states, via evidential policies, justify *evidence*; but what justifies *them*?
- Our answer will be: they don't need any.

Answering this question
requires that we engage in
some metaphysics of perceptual states

METAPHYSICS

- Sam's evidential policy can be described in two ways:
 - From the outside, via a 'third-person' take – how we would characterize her policy;
 - From the inside, via a 'first-person' take – how she would characterize her policy

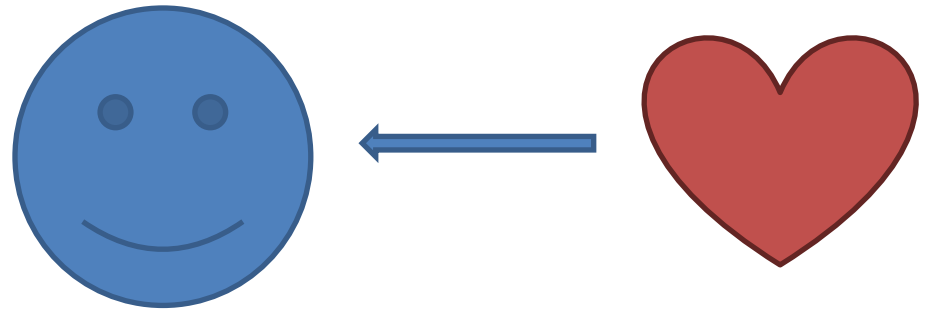
The third-
person take



is swapped with

"I see a red thing"

The first-
person take



is equivalent to

I see a red thing

Comment

- The token sentence (picture) **mentioned** in the upper half of the **upper diagram** is the objective state in which Sam sees a red thing
- The token sentence (picture) **used** in the upper half of the **lower diagram** means that, as Sam would put it, *things are thus*
 - Its content, namely, is an *inarticulate proposition*

Semantics

- A token of the open-sentence type 'S(---)' relative to person P expresses P's inarticulate affirmation of *I am in an 'S(---)'*
 - For instance, the property of seeing a red thing when instantiated in Sam expresses Sam's inarticulate affirmation of *I instantiate the property of seeing a red thing = I see a red thing*
- All actual tokens of this are therefore true;
- And, if 'S(---)' is externally constituted, its tokens ascribe to their tokeners a certain relation to the external world.

Consequences

- Direct realism
 - From the 3P, the character of the red thing itself is part of the perceptual state
 - From the 1P, the character of the red thing itself is given in the perceptual state
- Receptivity
 - The proposition is one that one affirms, and yet
 - It also contains the character of the red thing itself
 - Perhaps more importantly, it can't be false

Receptivity as exemptive

- Sam's perceptual state is externally constituted:
 - Hence in a sense it is beyond her control;
 - Moreover, it can't be false.
- How could such a thing be in need of justification?
- We regard our perceptual states as receptive in this way; which is why we don't pressure them for justification.

Digression on McDowell

- Clearly this is no coherentist position: there is a great deal of friction from externalia:
 - They constitute perceptual states, and logical policies link these in turn to evidence.
- Is this ‘the given’?
 - The contents of perceptual states are *inarticulate* in our sense – they don’t show their content in the manner of language;
 - But they are *minimally articulable* in the sense that would seem to matter for rationality: they partly constitute one’s perspective, and are thinkable qua *things are thus*.
 - Diagnosis: McDowell has conflated *articulate thinkability* with *interiority*.

INTO THE BAD

Meet Hal

- Hal is in the bad case: hallucinating in a way that makes his perceptual state 'indiscriminable' from Sam's.
- Direct realists say he and Sam have different kinds of perceptual states:
 - Say Sam's is of type R-good while Hal's is of type R-bad;
 - R-good states contain red things, R-bad states don't.
- Let's talk about Hal.

What does Hal believe?

- This depends on his prior views.
- Let's say he knows he is in the bad case:
 - We'll treat someone who is more deluded later
- In that case he will not treat 'I see a red thing' as evidence.
- Let us suppose Hal's sole evidence is 'I am in the bad case':
 - Hal regards perceptual states as *transparent*
 - Hal could say 'something looks red' but this expresses the outcome of carrying out his evidential policy under suspension of his view that he is in the bad case

Hal's evidential policy?

- Sam regards R-good as equivalent to 'I see a red thing';
- So does Hal.
- Hal regards R-bad as equivalent to 'I am in the bad case';
- So does Sam.
- More or less, anyway: this story is too simple.

A question

- Why does Hal take this occasion to treat ‘I am in the bad case’ as evidence;
- And why does Sam take this occasion to treat ‘I see a red thing’ as evidence?
- Our answer should be sensitive to two data points:
 1. Prior credences make the difference;
 2. Their perceptual states are ‘indiscriminable’

Logical uncertainty

- Maybe Ro is uncertain whether Hesperus = Phosphorus.
- I treat this not as ordinary uncertainty (partial credence) but as the failure to have a determinate credence function:
 - Ro is stuck between a system in which $H=P$ and a system in which $H \neq P$.

Conditional logical policies

- We could further imagine Ro's having a policy to resolve this uncertainty:
 - If the experts think $H=P$ then I do too; if the experts think $H \neq P$ then I do too.
- What Ro sees himself as bound to do depends on what the experts are doing.
 - This is a form of *externalism*:
 - By Ro's lights, he might be violating one of his principles even if it seems otherwise or if he has no idea whether he is
 - He should find out what the experts are doing!

Conditional evidential policies

- Let's say that Sam and Hal have the following conditional evidential policies:
 - If I am in the good case, I regard R-good as equivalent to *I see a red thing*;
 - If I am in the bad case, I regard R-bad as equivalent to *I am in the bad case*.
- No need for an evidential policy concerning R-good if in the bad case: it can't be tokened in the bad case.
- Which policy they regard as in force will depend on prior credences: certainty about the good case fires the first; certainty about the bad case fires the second.

Evidential policies and valid rules

- Consider the general form:
 - If P, I regard S as equivalent to T
- For legitimacy, such a policy must meet the following restrictions:
 - S and P are compatible; S and T are equivalent (or: S entails T – maybe we learn to extract more evidence from the same perceptual state over time)

Indiscriminability

- Now, we might imagine that if Sam and Hal were to swap credences without swapping perceptual states, they would swap the propositions they regard as evidence:
 - Sam would then regard *I am in the bad case* as evidence while Hal would regard *I see a red thing* as evidence.
- This is because R-good and R-bad are ‘indiscriminable’ for them.

Regrettable habits

- Indiscriminable how? Presumably like this:
 - **In carrying out evidential policies, in the event of a clash between prior credences and perceptual state, their habit is to mistake the actual perceptual state for the one that does not clash**
- Notice that I say *habit*: not policy. This habit is something they wish they were not doing, because it interferes with their ability to carry out their policies.

Assembling

- Here is how things are from Sam's point of view:
 1. I am certainly in the good case.
 2. My policy, when in the good case, is to treat THUS[R-good] as equivalent to *I see a red thing*.
 3. So I should treat THUS[R-good] as equivalent to *I see a red thing*.
 4. And, lo and behold, THUS[R-good].
 5. So: I see a red thing.
- This is how Sam ends up treating 'I see a red thing' as evidence.

Comments

1. This step captures Sam's prior credences.
2. This step captures Sam's conditional evidential policy.
 - Note that we need not think in terms of explicit recognition of this policy: the policy may simply take the form of a rule leading to 'primitively compelling' transitions.
3. This step captures Sam's de-conditionalized evidential policy, in light of her prior credences.
 - The same comment as above applies here.
4. This step captures Sam's affirmation of R-good.
 - Note that there is no clash here with Sam's prior credences, so the regrettable habit does not fire.
5. And this step captures Sam's treatment of *I see a red thing* as evidence.

And for Hal?

- His evidence rolls out in the exactly analogous fashion.

INTO THE UGLY

Meet Conrad

- Conrad is worse off than Hal: Conrad thinks he is in the good case but is in fact in the bad case, undergoing R-bad.
- Presumably Conrad will come to regard *I see a red thing* as evidence. Why?

Assembling

- Here is how things are from Conrad's point of view:
 1. I am certainly in the good case.
 2. My policy, when in the good case, is to treat THUS[R-good] as equivalent to *I see a red thing*.
 3. So I should treat THUS[R-good] as equivalent to *I see a red thing*.
 4. And, lo and behold, THUS[R-good].
 5. So: I see a red thing.
- This is how Conrad ends up treating 'I see a red thing' as evidence.

What happens in step 4?

- From the inside, things are to Conrad just as they are to Sam.
- Well, sort of!
- Conrad is not in R-good but rather in R-bad. He affirms a perceptual state with a distinct content from Sam's.
- But he mistakes his perceptual state for Sam's. Why? Because they are indiscriminable ...

Why Conrad goofs up

- When two states are indiscriminable for one, the following, recall, is true of one:
 - In carrying out evidential policies, in the event of a clash between prior credences and perceptual state, one's habit is to mistake the actual perceptual state for the one that does not clash
- Conrad's actual perceptual state, R-bad, clashes with his credential state in the sense that it is impossible by the lights of his credential state for him to be in R-bad: if he is in the good case, R-bad is unavailable;
- R-good is indiscriminable for Conrad from R-bad, and does not clash with his credential state;
- Accordingly, Conrad mistakenly affirms as evidence the proposition his policy requires him to affirm if his credential state is correct and he affirms R-good.

Conrad's rational fault

- Conrad *violates his own evidential policy*:
 - His policy, when in the bad case, is to regard R-bad as equivalent to 'I am in the bad case';
 - When he affirms R-bad in the bad case, he should therefore treat 'I am in the bad case' as evidence.
 - And while he does affirm R-bad in the bad case;
 - He fails to treat 'I am in the bad case' as evidence;
 - And indeed he *does* treat 'I see a red thing' as evidence, a posture completely unwarranted by the lights of his policy.
- In this sense Conrad's approach to his evidence – though exculpated – is not justified.
- The view here is therefore an *evidential externalism*.

Stepping back

- The tradition identifies evidence and perception; I distinguish them.
 - This distinction is independently motivated by the job description of perceptual states (clairvoyance)
- This distinction lets perception be infallible about externalia while belief is not:
 - The latter is a datum;
 - The former is I think crucial for grounding out justification in receptivity.
- Evidential policies link them:
 - The link transfers justification if logical policies can;
 - The link is breakable by false belief about externalia.

BEYOND GOOD AND BAD

Meet Ilya

- Ilya sees a white thing under red light; his perceptual state is of kind WR, a different kind (let us suppose) than R-good: though we may suppose these kinds to be indiscriminable.
- If Ilya is certain that the illumination is standard, his credential state clashes with the kind of his perceptual state; in this case he will react as if he is in R-good.
- But if Ilya is certain that the thing he sees is white, his credential state does not clash with the kind of his perceptual state; in this case he will react as if he is in WR.
- Perhaps Ilya's evidential policy when he is certain of seeing something white is to regard WR as equivalent to *I see something white and under red light*. In this case Ilya will treat that proposition as his evidence; good job.

Meet Tina

- Tina sees Tweedledee; her perceptual state is of kind Dee, a different kind (let us suppose) than Dum (differing merely singularly from Dee): though we may suppose these kinds to be indiscriminable.
- If Tina believes something entailing that she sees Tweedledum (if she sees either of them), her credential state clashes with the kind of her perceptual state; in this case she will react as if she is in Dum.
- But maybe she won't: in that case she might react as if she is in Dee.
- Perhaps her evidential policy given these prior credences is to regard Dee as equivalent to *I see Tweedledee*, and thereby treat that proposition as evidence.

Meet Inez

- Inverted Inez sees a green thing. Her perceptual state is of kind R-inv-good, an indiscriminable but distinct kind from R-good.
- Inez is, let us suppose, certain that she is in the ‘inverted good case’: that conditions are normal by her standards.
- Her evidential policy when certain of being in the inverted good case is to regard R-inv-good as equivalent to *I see a green thing*; she will therefore treat this proposition as her evidence.
- There is a lot more to be said about inversion but not here.

Young and Old Tycho

- Young Tycho looks to the heavens and comes away with really pathetic evidence; Old Tycho looks to the heavens and comes away with amazing evidence.
- Same kind of perceptual state, or different?
- Who knows: conditional evidential policies are a theoretical bridge between perceptual states and evidence.
- We shouldn't give in to the scholastic temptation to figure out exactly what they are like.

Slow-moving objects

- A puzzle:
 - Over a second, the minute hand looks stationary;
 - Over a minute, the minute hand looks to have moved;
 - But summing 60 stationary looks gets us a stationary look!
 - So all perception involves illusion.
- A resolution:
 - One's evidential policy matches the second-long inarticulate true proposition (content: *it is nearly stationary*) with the articulate *it is stationary*;
 - One's evidential policy matches the minute-long inarticulate proposition with the articulate *it is moving*
 - The former policy fires because of some false belief one has; purging false beliefs one would get something less committal, like *it is nearly stationary*

BEYOND CERTAINTY

Meet Val

- Val can't decide whether he is in the good case or the bad case: $C(\text{good})=.6$, let's say.
- Val is, let's suppose, in the good case, and is in R-good.
- What should he do?

Uncertainty about evidence

- Val should be uncertain what his evidence is.
- Since he is uncertain whether he is in the good case, he is uncertain which conditional evidential policy to follow. Should he follow the good case policy of treating 'I see a red thing' as evidence? Or the bad case policy of treating 'I am in the bad case' as evidence? He can't tell.
- To follow neither would be to lose information. He should follow each of them, but only part-way.

Bayesianism goes 2D

- Val is somewhat analogous to Ro:
 - Ro lacks a determinate credence system, being uncertain about a point of logic;
 - Val lacks a determinate posterior credence system, being uncertain about what to update on.
 - We might say that Val is 60% in the credence system that goes with updating on ‘I see a red thing’, 40% in the one that goes with ‘I am in the bad case’.
- Want to assign pairs of credence distributions and probabilities to subjects (or ranges and densities ...).
Technical questions:
 - What does the updating rule look like?
 - What does the decision theory look like?