

**Attending:** Giacomo Melis, Crispin Wright, Xintong Wei, Sonia Roca Royes, Peter Sullivan, Indrek Lobus, Paul Conlan, Giovanni Merlo, Carrie Ichikawa Jenkins.

**Presenting:** Xintong Wei

**Paper:** Siegel *Inference Without Reckoning*

- **Peter** suggested that the two readings of the 'because condition' are not exhaustive – why consider first personal and rationalizing as a package? **Xintong** suggested that the reckoning state is first personal. **Peter** commented that the root idea of a rationalizing explanation is one where agents present what they did as a reason for what they did. **Giacomo** suggested that the account is a self-awareness model so perhaps the first-person is built in. **Carrie** distinguished between two sorts of first personal rationalization: (1) reasons that speak for the conclusion that the subject is aware of and (2) reasons that the subject takes to speak for the conclusion.
- **Indrek** wondered what Siegel means by 'person level reasoning', as the examples do not look like e.g. Boghossian's examples of personal level reasoning. **Crispin** suggested that any inference should be capable of being articulated at personal level, so particularly in the case of the pizza example, whether this is an inference is a pressing question. **Peter** suggested that some of the features in Pizza are such that were one to become aware of them, one would disown the inference. **Giacomo** wondered why inference should be such that one could become reflectively aware of one's reasons. **Giovanni** suggested that our concern is with epistemic dependence rather than inference – that is, are we discussing the basing relation. **Crispin** suggested that this is the same question – if we could characterise the basing relation, then we could make a distinction between a belief that is based on another state and a merely causal connection between states. **Giacomo** suggested that if we run together the questions of what inference is and what basing is, we might lose out on an account of basic epistemic belief which is non-inferential. **Xintong** pointed out that in Kindness, there is nothing to rule out that the agent is responding to inappropriate features of the clerk and as such there is no epistemic dependence. **Crispin** suggested that Kindness is no good as a counterexample because it does not differentiate between inference and responding to cues.
- **Indrek** wondered whether moving to a de dicto reading of the reckoning state do we still need a causal reading of the 'because' condition?
- **Xintong** wondered whether the Kindness case is an example of evidence bypassing?  
**Giovanni** suggested that it is perhaps inappropriate to say that the presence or absence of

reckoning/awareness carves at the epistemic joints in these cases. Perhaps there are many notions of inference to be discussed. **Crispin** suggested that a picture where there are many notions of inference might be fruitful, but this is not Siegel's picture. **Paul** suggested that the narrative response would require a reckoning state. **Peter** suggested that what makes an inference is its availability to be judged against certain standards. **Giovanni** suggested that the understanding of inference as the performance of a mental action is not really engaged with in the paper. He further suggested that engaging with this carefully could make sense of the differences in normative appraisal. **Peter** suggested that if inferences are mental actions, and actions are the sort of thing the appropriateness of the question 'why?' applies. **Xintong** suggested that the narrative cases should perhaps be considered inference, and then Siegel could say that cases like (1) are the non-inference cases, and the others are bad inferences.

### Siegel 'Inference without reckoning'

## 1. Introduction

Inference:

- Personal-level reasoning
- Hallmark: conclusions drawn by reasoners *epistemically depend* on the premises from which they are drawn
- Inputs and upshots of inference are psychological states.

On Boghossian's account, inference requires a self-awareness condition:

“Person-level reasoning [is] mental action that a person performs, in which he is either aware, or can become aware, of why he is moving from some beliefs to others.” (Boghossian (2014), p. 16)

One model that satisfies self-awareness condition is what Siegel calls the *reckoning model*. On this model, drawing an inference involves:

1. the **premise-states**,
2. a **reckoning state** in which one reckons that the premise-states support the conclusion,
3. a **'because' condition** according to which one reaches a conclusion from the premise-state *because* one reckons that they support it.
  - a) *because* as first-person rationalization
  - b) *because* as a merely causal explanation

This model implies that reasoners do not infer in ignorance of what they are responding to and the features the reasoners respond to are also *reasons* for which they draw their conclusion.

A **canonical reckoning model** is one that meets the self-awareness condition. The ‘becauseal’ condition in a canonical reckoning model is a first-person rationalization, not merely causal.

The plan:

1. present putative counterexamples to self-awareness condition
2. consider non-canonical reckoning models and argue that they are poorly motivated
3. offer an alternative approach to the reckoning model of inference

## 2. Cases of inference without self-awareness

**Kindness:** The person ahead of you in line at the Post Office is finding out from the clerk about the costs of sending a package. Their exchange of information is interspersed with comments about recent changes in the postal service and the most popular stamps. As you listen you are struck with the thought that the clerk is kind. You could not identify what it is about the clerk that leads you to this thought. Nor could you identify any generalizations that link these cues to kindness. Though you don’t know it, you are responding to a combination of what she says to the customer, her forthright and friendly manner, her facial expressions, her tone of voice, and the way she handles the packages.

**Pepperoni:** Usually you eat three slices of pizza when it comes with pepperoni. But tonight, after eating one slice, you suddenly don’t want any more. Struck by your own uncharacteristic aversion, you form the belief that the pizza is yucky. Though you don’t know it, the factors include the facts that (i) the pepperoni tastes very salty to you, (ii) it looks greasy, (iii) it reminds you of someone you don’t like, who you recently learned loves pepperoni, and (iv) you have suddenly felt the force of moral arguments against eating meat. If the next bites of pepperoni were less salty, the greasy appearance turned out to be glare from the lights, you learned that your nemesis now avoids pepperoni, and the moral arguments didn’t move you, the conclusion of your inference would weaken, and so would your aversion. You haven’t classified what you see and taste as: too greasy, too salty, reminiscent of your nemesis, or the sad product of immoral practices. Nor are you consciously thinking right now about any of these things.

<b>The hallmark of inference</b>	<b>Input: premise-states</b>	<b>Output: conclusion-state</b>	<b>Epistemic dependence</b>
<b>Kindness</b>	Features of the clerk	Judgment that the clerk is kind	‘epistemic dependence is plainly evident’, though the features that the reasoner responded to might be poor ground for the conclusion.
<b>Pepperoni</b>	Features of the pizza and your mind	Judgment that the pizza is yucky	

What is epistemic dependence? Siegel introduces this notion in terms of inference:

If you infer a state with content Q (a Q-state) from a state with content P (a P-state), then your Q-state epistemically depends on your P-state. (p.1)

But epistemic dependence is supposed to be the hallmark of inference, so this isn’t very helpful. We cannot really evaluate whether **Kindness** and **Pepperoni** meet the epistemic dependence condition.

It is also unclear why these cases fail to meet the self-awareness condition, for the condition only requires that ‘one can become aware, of why he is moving from some beliefs to others’.

### 3. Non-canonical reckoning models (reckoning without self-awareness)

What would a non-canonical reckoning model for **Kindness** be like?

One infers that Q from responding to F:

Q = the proposition that the clerk is kind.

F = a cluster of features that the clerk actually has and you respond to in concluding that Q

Premise-state unawareness= one is unaware (and unable to become aware by reflection) that she registers F and attributes it to the relevant thing(s).

Response unawareness= one is unaware (and unable to become aware by reflection) that she concluded Q because she responded to F.

	Aware of Premise-state	Unaware of Premise state
Aware of Response		
Unaware of Response	Configuration 1	Configuration 2

Siegel thinks that for any reckoning models to allow the lack of self-awareness, the reckoning state must allow premise-state unawareness, and the 'because condition' must allow response unawareness. This means that:

1. a merely causal interpretation of the 'because condition' is needed
2. a *de dicto* reckoning state is needed. (S reckons that (for some G: having G supports Q))

Siegel argues that there is an internal tension between 1 and 2. So the alternative can only be a *de re* reckoning that is inaccessible.

Siegel thinks inaccessible *de re* reckoning is poorly motivated (p.9-10):

'What, if anything, does inaccessible reckoning add to the fact that you respond to features F or (i)-(iv)? It is hard to say. Given that you respond to particular features, is it necessary to posit any further structure to have an illuminating account of inference?'

#### 4. Inference without reckoning

**Response hypothesis:** inferring is a distinctive kind of response to an informational state, or to a combination of such states, that produces a conclusion.

Inferential response is a response to evidence:

'responses to evidence involve some ordinary sense in which you appreciate the force of the evidence you are responding to, even if the "appreciation" takes the form of registering support rather than a representational state, such as belief or an intuition, that the evidence rationally supports the proposition you come to believe.' (p.11)

Siegel then tries to illuminate the notion of inferential response by contrasting it with cases of transition that aren't cases of inferential response, where one:

1. fails respond to informational states

- Mental jogging:  
'...we could call a transition from informational state A to informational state B "mental jogging" when state B is not any kind of response to state A.'
- Evidence bypassing:

‘In the case where information is evidence that a subject has, she could bypass that evidence, instead of drawing inferences from it’

## 2. responds to something other than informational states

- Rhythm and rhyme: moving from P-state to Q-state because words used to express P and Q rhyme or follow a rhythmic groove.
- Association: moving to the Q-state because the P-state by associating a concept occurring in the P-state with a concept occurring in the Q-state.

‘In associative transitions, one responds to the concepts in the informational state, rather than to any truth-evaluable portion of the state’s content.’

‘In contrast, in inference, one responds to information that admits of predicative structuring.’

## 3. non-inferentially responds to informational states

- Narrative: responses to the narrative possibilities generated by the states that one is in. One constructs a narrative from a P-state using a Q-state.
- Attention: moving to the Q-state because the P-state directs your attention to a property that the Q-state is about.

Can the *response hypothesis* distinguish poor inference from non-inference?

‘According to the response hypothesis, the response to P is the locus of epistemic appraisability in inference. It’s the response to P that’s epistemically bad-making. The epistemic badness is found along a further dimension that is missing in the bypass case. Its badness is not just the negative feature of failing to be based on adequate propositional justification, or failing to take relevant evidence into account. Nor is it the generic feature of being badly based, simpliciter. Instead, the badness of the inference is located in the response. If one inferred from a blue-block experience that the block is yellow, without any assumptions that explain the disconnect between color and apparent color, that would be a poor inference.’

The *response hypothesis* offers an alternative answer to the question how the informational state can make both a causal and rational impact on the thinker without a reckoning state that registers the rational relationship between the the premise and conclusion states.

It is possible to respond rationally to an information state without a reckoning state that represents what makes that response rational *because one’s acknowledgment of rational support consists in the response, rather than taking the form of a state that represents the support relation.*

