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## Perceptual Experiences Cannot Be an Inference's Conclusion

Yuanchen Lu

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Perceptual Experiences cannot Be an Inference's Conclusion

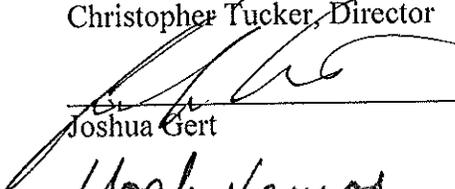
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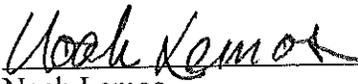
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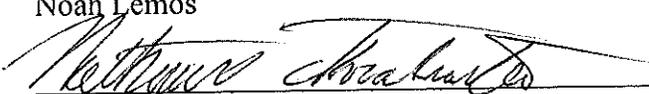
Yuanchen Lu

Accepted for Honors  
(Honors, High Honors, Highest Honors)

  
\_\_\_\_\_  
Christopher Tucker, Director

  
\_\_\_\_\_  
Joshua Gert

  
\_\_\_\_\_  
Noah Lemos

  
\_\_\_\_\_  
Nathaniel Throckmorton

Williamsburg, VA  
April 30, 2018

Yuanchen Lu

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Advisor: Professor Christopher Tucker

### Perceptual Experiences cannot Be an Inference's Conclusion

Susanna Siegel holds a view that experiences can be the conclusion of an inference. In this paper, I shall refute this claim. Siegel has to endorse a specific account of inference that allows her to make this claim. Thus, my line of reasoning is to first provide argument against Siegel's account of inference; then I propose and defend an account of inference that does not allow experiences to be the conclusion of an inference. The account of inference that I shall defend is what I call the *Sub-personal reckoning model*. This is a version of the rule-following construal of the reckoning model.

Part I provides background information. It includes section 1 and 2. In section 1, I introduce why Siegel thinks experiences can arise from inferences and motivate a discussion on accounts of inference. In (II), I present the reckoning model.

Part II presents Siegel's objection to the reckoning model. It includes section 3 and 4. In section 3, I introduce Siegel's objection to canonical model. In section 4, I introduce Siegel's objection to the non-canonical model.

Part III presents the rule-following reckoning model as a reply to Siegel's objections. It

includes section 5, 6, 7 and 8. In section 5, I introduce the rule following construal of the reckoning model. In section 6, I show why some versions of the rule-following reckoning model do not work. In section 7, I introduce the Sub-personal view of rule-following. In section 8, I describe the Sub-personal reckoning model by combining the Sub-personal view of rule-following and the reckoning model and I defend it.

Part IV compares the model that I endorse with other views and shows how it precludes experiences from being the conclusion of an inference. This part includes section 9 and 10. In section 9, I compare the Sub-personal reckoning model with Broome's Dispositional reckoning model. In section 10, I compare the Sub-personal reckoning model with Siegel's account of inference and draw the conclusion that experiences cannot be the conclusion of an inference.

## **Part I: The reckoning model as a plausible account of inference**

### **Section 1:**

In *The Rationality of Perception* (Siegel 2017), Susanna Siegel sets out to provide an answer for the epistemic hijacking of experience problem. This is how she defines epistemic hijacking:

When perceptual judgments or perceptual experiences arise from processes that give prior outlooks too much weight and fail to give proper weight to perceptual inputs (if there are any such inputs), we can say that the outlook

*hijacks* the perceptual state. In whatever mode it may occur, the notion of hijacked perception rests on two background assumptions. It assumes that there's such a thing as distinctively perceptual input to the mind. And it assumes that a principled distinction can be drawn between giving perceptual inputs proper weight and not giving them proper weight in behavior, in belief, and in perceptual experience itself.

(Siegel 2017: 5)

Siegel distinguishes between perceptual judgments and perceptual experiences. Perceptual judgment is a form of belief in which perceivers respond to the way things appear; perceptual experience is a conscious part of perception that one is responding to, when he forms his judgment. As Siegel points out, hijacking of judgment is obviously irrational. For example, suppose that John has no evidence whatsoever about tomorrow's weather but John still believes that it will rain tomorrow due to his wishful thinking. John's belief that it will rain tomorrow is clearly irrational. The hijacking of experience is more complicated. Consider the following case:

Jill meets Jack and sees Jack's face. It appears to Jill that Jack is angry. Jill suspects that Jack is angry at her. Thus Jill makes the judgment that Jack is angry. Unbeknownst to Jill, her suspicion affects the way Jack looks when she sees him.

Does Jill's perceptual experience give her reason to strengthen her suspicion that Jack is angry?—Yes, because according to her visual experience, Jack looks angry to her. But No, because her suspicion is illicitly strengthening itself, via Jill's experience. Both answers can seem plausible, and that is the problem of hijacked experience (Siegel 2017: 3).

Siegel's solution to this problem is what she calls the Rationality of Perception: both perceptual experiences and the processes they arise from can be rational or irrational. If the Rationality of perception is true, then Jill is not rational in believing that Jack is angry simply because she sees that Jack is angry. Her experience of seeing that Jack is angry is not rational because it is affected by Jill's suspicion. Therefore, it cannot rationally support Jill belief that Jack is angry. Siegel then defends the Rationality of Perception. Her argument for the Rationality of Perception is as such:

- (1) If perceptual experiences can arise from inference, then the Rationality of Perception is true.
- (2) Perceptual experiences can arise from inference.
- (3) Therefore, the Rationality of Perception is true.

(Siegel 2017: 19)

Siegel first defends (1): “when one arrives at a conclusion by inference, the conclusion's epistemic power to support subsequent beliefs, as well as its own epistemic standing, can be modulated by the inputs to the inference. Inference is an example of a process that can issue in beliefs and that can be rational or irrational” (Siegel 2017: 18). I agree with Siegel on this point

and assume it to be true in this paper.

Then Siegel needs to defend (2). One thing I should first mention is that many psychologists talk as if perception is highly inferential, but their conception of inference is often a watered down version. Philosophers' usage of the word can be quite different. In this paper I only refer to philosopher's usage of "inference" when I talk about it. I will not make efforts to clarify what psychologists take as inference.

Siegel acknowledges that it might sound strange to call any process of forming perceptual experience "inference". However, she suggests that the term "inference" does not only denote explicit deliberations, conscious rehearsals of one's reasons to others (or to oneself), or awareness of revising one's conclusions in light of reflection on other things that one believes (Siegel 2017: 17). She invites us to consider Vivek's case:

Vivek believes that people like him. He believes that, because he's vain. He expects approval, and approval is what he thinks he gets. Vivek is not the type to offer justifications for his self-assurance. He just takes it for granted. But in taking it for granted, he arrives at his presumption by irrational means. Even though Vivek didn't announce to anyone (or himself) his explicit reasons for thinking that people like him, we'd have a clue that he is, silently, reasoning...Vivek draws an inference covertly, silently, and unreflectively. He infers that people like him, from other things he believes.

(Siegel 2017: 17)

Siegel argues that perceptual experience can arise from a similarly covert, silent, and unreflective inference. This is a controversial view. At this point of discussion, Siegel needs an account of inference that supports her view that perceptual experience can arise from inference.

## **Section 2:**

What is inference? Consider the following case provided by Paul Boghossian:

On waking up one morning I recall that:

(i) It rained last night.

I combine this with my knowledge that

(ii) If it rained last night, then the streets are wet.

to conclude:

So,

(iii) The streets are wet.

(Boghossian 2014: 2)

In this case, I have the beliefs that (i) and (ii), and I infer from them that (iii). It is clearly wrong to say that the process of inference consists merely in my believing (iii) *after* I come to believe (i) and (ii). Random beliefs can occur in my mind after I come to believe (i) and (ii) but they could be totally unrelated to (i) and (ii) by a process of inference. One natural response is that the process of inference consists in my beliefs that (i) and (ii) causing me to believe (iii). However, this is not a satisfied answer because what is known as the problem of “deviant causal chains”. Alvin Plantinga gives an example: Suppose I see Aline. This causes me to believe that I see Aline, which causes me to drop the coffee I had been holding, which causes a stain on my shirt, which leads me to believe that my shirt is stained. My belief that I see Aline is part of the causal explanation for why I believe that my shirt is stained. But it is not the case that I have inferred that my shirt is stained from the fact that I see her (Plantinga 1993: 69). Premises causing conclusion seems necessary but not sufficient for an inference.

Gottlob Frege first points out that “to make a judgment because we are cognizant of other truths as providing a justification for it is known as inferring” (Frege 1979: 3). Boghossian agrees with the gist of Frege’s thought. But he points out that Frege’s idea needs improvement in two respects. First, we don’t always infer from truths. It’s enough that we take our premises to be true, that is, judge them to be true. Second, “cognizant” seems to have a successful grammar built into it. Frege’s characterization would seem to imply that one cannot reason badly: if one is reasoning, one is reasoning to a conclusion that one has justification to draw. Thus, Boghossian offers his modified version of Frege’s characterization:

S is inferring from p to q is for S to judge q *because S takes* the presumed

truth of p to provide support for q

(Boghossian 2014: 5)

This is the Reckoning Model. Boghossian emphasizes that the intuition behind the Reckoning Model is that “no causal process counts as inference, unless it consists in an attempt to arrive at a belief by figuring out what, in some suitably broad sense, is supported by other things one believes...reasoning is something we *do*, not just something that happens to us” (Boghossian 2014: 5).

## **Part II**: Siegel’s objection to the reckoning model

### **Section 3:**

Siegel points out that the reckoning model has three components: the premise-states from which one infers, a reckoning state in which one takes the premise-states to support the conclusion, and a “because” condition according to which one reaches a conclusion from the premise-states because one takes these premise-states to support the conclusion (Siegel 2017: 2). She divides the theories of the reckoning model into two categories: the canonical reckoning model and the non-canonical reckoning model. According to Siegel, the canonical reckoning model requires what Boghossian calls the Self-awareness Condition while the non-canonical reckoning model does not. The self-awareness condition says:

Self-awareness Condition: [the agent] is either aware, or can become aware

[by reflection], of why he is moving from some beliefs [or other mental states] to others.

(Boghossian 2014: 16)

Siegel first presents her objection to the canonical reckoning model. She invites us to consider two cases:

**Kindness:** the person ahead of you in line at the Post Office is talking to a clerk. As you overhear their conversation, you are struck with the thought that the clerk is kind. You are aware that 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. Unbeknownst to you, you come to have the belief that the clerk is kind *because* you respond to the clerk's various specific features of kind manner.

**Pepperoni:** After eating one slice of pepperoni pizza, you don't want any more. Struck by your own 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, and (iv) you have suddenly felt the force of moral arguments against eating meat. 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.

(Siegel 2017: 4)

Siegel argues that our intuition suggests that these two cases are processes of inference; yet they do not meet the self-awareness condition. Since the canonical reckoning model says they are not inferences because they do not meet the self-awareness condition, the canonical reckoning model is false. I agree with Siegel's claim here.

First, let's see how these two cases fail to meet the self-awareness condition. Siegel distinguishes two main ways to fail to meet the self-awareness condition: premise-state unawareness and response unawareness (Siegel 2017: 6). One is response unaware just in case he is unaware and unable to become aware by reflection that he arrives at a conclusion because he responds to certain features. One is premise-state unaware just in case he is unaware and unable to become aware by reflection that he registers certain features. Premise-state unawareness entails response unawareness. In the kindness case, the subject is aware that he registers the clerk's kind manner. But he is unaware that he reaches the belief that the clerk is kind because he registers her manner. The subject is premise-state aware and response unaware. In the pepperoni case, the subject is unaware of all the features of the pizza that he responds to. He is also unaware that he concludes that the pizza is yucky because he responds to certain features of the pizza. The subject is both premise-state unaware and response unaware. Thus, the two cases do not meet the self-awareness condition. The canonical reckoning model says they are not cases of inference.

One might argue that the agents in these two cases can meet the self-awareness condition if they can become aware of the respective facts by reflection. For example, though the agent in the kindness case is unaware that he reaches the belief that the clerk is kind because he registers the clerk's manner, he can become aware of this fact by reflection. The subject becomes aware of the becausal relationship just in case he becomes aware of a first-person rationalization of why he reaches the belief that the clerk is kind. Then, the point at issue here is whether the agent can become aware of a first-person rationalization of why he reaches the belief that the clerk is kind. To figure this out, we need to first clarify why Boghossian talks about the self-awareness condition.

Boghossian brings up the self-awareness condition to emphasize the active character of inference. He only adds the "or can become aware by reflection" clause to the self-awareness condition because he wants to accommodate the circumstances in which one is currently unaware of a mental state but can become aware of it once he engages in a quick reflection. It is not his intention to accommodate cases in which one takes tremendous efforts to dig into his own mind and to become aware of a certain mental state. If we allow reflection to include this meaning, then one can basically become aware of any mental state in his mind by reflection. Boghossian would not like this interpretation because this would weaken his emphasis on the active character of inference. This is the reason why we should not allow that the subject can become aware of a first-person rationalization of why he reaches the belief that the clerk is kind. It is understandable that one can become aware of a belief or some premise-states by reflection since it is simple and direct for one to access them. However, it is totally a different matter to become aware of a first-person rationalization. It involves a far more complicated

mental state. To become aware of such a complicated mental state, the subject needs to go through a process more thorough than a simple quick reflection. Therefore, I think Boghossian would not allow that the subject can become aware of a first-person rationalization of why he reaches the belief that the clerk is kind.

Then Siegel defends the claim that these two cases are cases of inference. She points out that both cases meet the main diagnostic of inference: epistemic dependence (Siegel 2017: 4). By epistemic dependence, Siegel means that the epistemic status of the conclusion is dependent on the epistemic status of the premises. Boghossian agrees that epistemic dependence is an essential factor of an inference: “an account of the nature of inference will eventually have to confront the question what conditions an inference must satisfy if it is to transmit the justification that a thinker has for its premises to its conclusion” (Boghossian 2014: 8). One might argue that having epistemic dependence is necessary for a mental process to be an inference but it is not a sufficient condition and so, the two cases are not necessarily cases of inference. However, I do agree with Siegel here that these two cases are inference. Although the canonical reckoning model would reject them as cases of inference, they actually have important characteristics that the reckoning model in general sets out to capture. In the kindness case, the agent responds to the clerk’s manner as the premise-states, and he reaches the belief that the clerk is kind from the premise-states because he responds to the clerk’s kind manner. More importantly, there is a subtle sense in which the agent reckons that the premise-states support the belief that the clerk is kind. Although the agent is unaware that he comes to have the belief that the clerk is kind because he responds to the clerk’s kind manner, he in fact takes the clerk’s kind manner to support this belief. This act of “taking” is exactly the reckoning state

described in the reckoning model. An agent can be unaware of his reckoning state when it is sub-conscious. This is a view that I will further develop in chapter (VII). For now, I hope I have at least explained why we would have an intuition that the mental processes in these two cases are inferences.

Then, an account of inference should either provide an explanation of why our intuition in these two cases is wrong, or allow them to be inferences. The canonical reckoning model (as we have formulated it) cannot provide such an explanation; it also fails to accommodate our intuition. Therefore, the canonical reckoning model is not a satisfactory account for inference. Studies might have explored arguments to save the canonical reckoning model from this objection in various ways, but it is not the goal of this paper to dwell on the canonical reckoning model.

#### **Section 4:**

Then Siegel considers the non-canonical reckoning model. The non-canonical reckoning model does not require the self-awareness condition. Thus, it should allow for both premise-state unawareness and response unawareness. Recall that the reckoning model has three components: the premise-states, a reckoning state, and a because condition. For the reckoning model to allow for both premise-state unawareness and response unawareness, its components need to be adjusted. The reckoning state involves the agent taking the premise-states to support the conclusion, and so it needs to allow for premise-state unawareness. The because condition, which involves the agent reaching the conclusion because of the reckoning state, needs to allow for response unawareness. (Siegel 2017: 7).

What would the becausal condition look like when it allows for response unawareness? Siegel suggests that the canonical becausal condition entails at a minimum that the premise-states figure in a correct first-person rationalization of the conclusion that the inferrer could provide: “You can explain that you conclude Q because: P. And you can explain that, because you reckon that: P supports Q” (Siegel 2017: 7). The response unawareness precludes such a first-person rationalization: when the subject is unaware that he concludes Q because of P, he of course cannot explain it. Then we need an interpretation of the becausal condition that does not entail such a first-person rationalization. Siegel gives a proposal:

Merely causal becausal: the inferrer concludes that Q because she is in a reckoning state. The fact that she reckons that P supports Q causes her to conclude Q in response to P.

(Siegel 2017: 8)

When this condition is met, then all that we mean by “the inferrer concludes Q *because* he reckons” is simply that “the inferrer’s reckoning state causes him to conclude Q”. Then he does not need any first-person rationalization of why he concludes Q since it’s only a causal relationship. Siegel argues that only a certain type of the reckoning state is compatible with the merely causal becausal condition in the kindness and pepperoni cases.

Siegel first distinguishes between two types of reckoning states: reckoning *de dicto* and reckoning *de re*:

Reckoning de dicto: S reckons that (for some G: having G supports Q).

Reckoning de re: for some F (S reckons that: having F supports Q).

(Siegel 2017: 8-9)

We can better understand this distinction with an example from W.V. Quine:

(1) Ralph believes that someone is a spy.

The above sentence could mean either of the following:

(2) Ralph believes that there are spies

Or

(3) Someone is such that Ralph believes that he is a spy.

According to Quine, the truth of (3) but not (2) would make FBI interested in Ralph (Quine 1956: 178). Sentence (2) is de dicto while sentence (3) is de re. Now, when a subject has a de dicto reckoning state that G supports Q, it means that he reckons the fact that there is some G that supports Q but he cannot specify what these G are. What the subject reckons is that the predicate “supports Q” is satisfied by some G. This kind of reckoning state allows for both

premise-state unawareness and response unawareness. The subject is not aware which specific G supports Q – he is premise-unaware; then he cannot be aware that he arrives at Q because he responds to the specific G – he is response unaware.

However, Siegel says that reckoning de dicto does not fit well with the merely causal becauseal condition:

When combined with de dicto reckoning state, then, the [merely causal] becauseal condition posits the de dicto reckoning state as the putative cause of drawing the conclusion. Here lies its mistake. The de dicto reckoning state is not proportional to the causal upshot of drawing the conclusion, and therefore lacks explanatory force. The explanatory weight is carried by the fact you respond to specific features.

(Siegel 2017: 9)

By saying this, Siegel means that the cause of the subject's drawing the conclusion Q is apparently his response to the specific G. If the subject reckons de dicto that G supports Q, he only reckons that for some G, G supports Q. He does not respond to the specific G. Therefore, the subject's de dicto reckoning state that G supports Q cannot be the cause of the subject's drawing the conclusion Q. On the other hand, recall that the general form of reckoning model says the subject S is inferring from p to q just in case he comes to the belief that q because he reckons that p supports q. If reckoning de dicto and the merely causal becauseal condition were to be together incorporated into the reckoning model, the model would then have to say that

the subject's de dicto reckoning state that G supports Q is the cause of the subject's drawing the conclusion Q. Therefore, the reckoning model that combines reckoning de dicto and merely causal becauseal condition is false.

Then Siegel suggests that the only admissible reckoning state seems to be reckoning de re. First, reckoning de re does not have the problem that reckoning de dicto has with the merely causal becauseal condition. As stated above, the cause of the subject's drawing the conclusion Q is his response to the specific G. If reckoning de re and the merely causal becauseal condition were to be together incorporated into the reckoning model, the model would say that the subject's de re reckoning state that G supports Q is the cause of the subject's drawing the conclusion Q. Since the de re reckoning state that G supports Q means that the subject reckons that some specific G supports Q, the de reckoning state is his response to the specific G. Therefore, de re reckoning is perfectly compatible with the merely causal becauseal condition in the reckoning model.

In principle, reckoning de re can also allow for premise-state unawareness and response unawareness. However, Siegel points out that for the de re reckoning model allows for premise-state unawareness and response unawareness, it must allow the reckoning state to be inaccessible. Namely, it must allow such a situation in which the subject is unaware and cannot become aware by reflection that he reckons that P supports Q (Siegel 2017: 9).

Siegel agrees that when the self-awareness condition is met, this version of the reckoning model that combines the merely causal becauseal condition and reckoning de re provides useful insights for what inference is. It can preclude the cases in which the inferrer proceeds in ignorance of what he is responding to. However, if the self-awareness condition is not met, this

model does not provide any useful insights other than the fact that the subject responds to certain features. She asks: “given that you respond to particular features, is it necessary to posit any further structure to have an illuminating account of inference? (Siegel 2017: 9-10). Here, Siegel wants to apply the Occam’s razor. She suggests that the nature of inference can be explained even without positing any structure beyond that inferring is a distinctive kind of response to informational states that produces a conclusion.

Thus far, I have presented Siegel’s objections against the canonical reckoning model, the reckoning de dicto non-canonical reckoning model, and the reckoning de re non-canonical reckoning model. She arrives at the conclusion that the reckoning model is not a satisfactory account of inference.

Recall that Siegel claims if the response unawareness precludes the first-person rationalization, then we need an interpretation of the because condition that does not entail such a first-person rationalization (Siegel 2017: 7). Then she gives the merely causal because condition as the only interpretation of the because condition that fits her specification. I want to point out that the response unawareness only precludes a person-level rationalization. One could have the response unawareness and a subconscious first-person rationalization at the same time. If we can find a version of the because condition that does not entail a person-level rationalization but a subconscious one, then the merely causal because condition is not the only way out. Such a version of the because condition will not be the same as the merely causal because condition. I argue that the rule-following account of inference can provide such a because condition for the reckoning model so that it avoids Siegel’s objection.

## **Part III**: A reply: the rule-following construal of the reckoning model

### **Section 5:**

John Broome thinks of inference in terms of following a rule:

I have arrived at necessary and sufficient conditions for a process to be one of reasoning. Reasoning is a process in which you say to yourself the contents of your premise-attitudes, you operate on them by applying a rule to construct a conclusion, which is the content of a new attitude of yours that you acquire in the process. To put it briefly and not quite accurately: reasoning is an operation on contents.

This account makes the whole of the process of active reasoning something you do. It is the activity of operating on the contents of your attitudes. For a contrast, compare the jogging model I described...That model limits your activity to saying certain propositions to yourself; you leave the rest of your reasoning to automatic processes. In my account, you are active right through to the conclusion.

(Broome 2013: 235)

These two paragraphs by Broome provide the preliminary motivations to endorse the rule-following account of inference. These motivations are further explained by Boghossian. Boghossian suggests that there are four major points that motivate this rule-following account

of inference: First, such an account captures the *active* character of inference. As I have mentioned before, an important feature of inference is that it is something we *do*, and not just something that happens to us.

Second, the rule-following account of inference fits perfectly with the reckoning model.

Let's consider Boghossian's example:

(Email Rule) Answer any email that calls for an answer immediately upon receipt!

(Boghossian 2014: 11)

It seems right to say that anyone following this rule would be treating the receipt of an email as a reason for composing an answer to it immediately. S's acting on the Email Rule explains and rationalizes S's answering the email immediately upon receiving it. If S follows the Email Rule in answering the email, it would be natural to say that he takes his receipt of the email to be a reason to answer it (Boghossian 2014: 12). The notion of following a rule incorporates the three components of the reckoning model: the premise-states, the reckoning state, and the becausal condition: the reckoning state is that the subject operates on the premises with certain rules to get a conclusion; the becausal condition is that the subject forms his conclusion because of his operation of the rules on the premises.

Third, the rule-following account captures an important aspect of our inferential abilities: our inferential abilities are general and productive. Consider the following examples:

Space-Time Inference:

If  $x$  is a Malament-Hogarth space-time, then it has no Cauchy surface.

$X$  is a Malament-Hogarth space-time.

Therefore,

$X$  doesn't have a Cauchy surface.

Rain Inference:

If it rained last night, then the streets are wet.

It rained last night.

Therefore,

The streets are wet.

(Boghossian 2014: 2-12)

One may know very little about the concepts about space-time in the Space-Time Inference but he could be very confident to say that if its premises are true, then its conclusion must be true. Also, one could acquire the above two inferences separately; in fact, an inferrer could acquire this type of inferences all together. The reason for this is clearly that they are both applications of the Modus Ponens rule.

Last but not the least, in an inference, we might be hard pressed to say exactly why, or in what respects, we take these premises to justify this conclusion (Boghossian 2014: 12). In some cases, we take some premises to support a conclusion but we only have a rough sense of how

they do so. The rule-following account of inference accommodates these cases well: we do tend to think that our thoughts can be under the influence of rules, even if we have not explicitly formulated these rules in our minds.

Broome takes an inference to be “a process in which you say to yourself the contents of your premise-attitudes [and] you operate on them by applying a rule to construct a conclusion” (Broome 2013: 235). This account obviously cannot help the reckoning model avoid Siegel’s objection. If an account of inference requires the inferrer to say to himself the contents of his premise-attitudes, then it does not allow for premise-state unawareness. Then the reckoning model that incorporates such a view requires the self-awareness condition. It would be vulnerable to the objection against the canonical reckoning model raised by Siegel. Nevertheless, a rule-following account of inference does not necessarily require “saying to yourself the contents of your premise-attitudes”. Different accounts of what rule-following is require different conditions. Thus, at this point, I shall explore accounts of following rules.

## **Section 6:**

Boghossian asks, when would we say that we are following certain rules, instead of saying that we just happen to do what is in conformity with these rules? (Boghossian 2014: 13) The answer is that we are following the rules when we do what is in conformity with these rules because of these rules. Rules are abstract objects. Boghossian points out that if the rules are to have any hope of explaining one’s behavior, it must be by virtue of the fact that his behavior is to be explained via some state of his that represents or encodes those rules (Boghossian 2014: 13). In other words, following a rule requires the subject to have an intentional state that

represents the rule. Boghossian calls this view the Intentional View of rule-following.

Let's consider the Email Rule in light of this view. For a subject who follows this rule, he must have an intentional state that represents the Email Rule. He is aware of its requirements: answer any email that calls for an answer upon receiving it. When he receives an email, he recognizes that the antecedent of the rule has been satisfied. He then comes to the conclusion that he should answer the email immediately. It seems that a process of inference is involved when one follows a rule. Boghossian argues that on the Intentional View of rule-following, rule-following requires inference:

On this Intentional construal of rule-following, then, my actively applying a rule can only be understood as a matter of my grasping what the rule requires, forming a view to the effect that its trigger conditions are satisfied, and drawing the conclusion that I must now perform the act required by its consequent. In other words, on the Intentional view of rule-following, rule-following requires inference.

(Boghossian 2014: 13)

It is worth noting that on the Intentional View, not only the act of rule-following requires inference, but also rule-following has to be explained in terms of inference. This is because inference is built into the concept of rule-following on this view. If the subject has an intentional state that represents the Email Rule, then when he follows this rule, he does it *because* he has done an inference which leads him to a conclusion that he should follow this rule under such

condition. There is no other reason why he would follow the Email Rule under such condition. Then, a problem arises when we try to incorporate the Intentional View of rule-following with the rule-following account of inference. Broome has identified this problem:

When you do some reasoning, the process may break down into some sub-processes that themselves involve reasoning. For instance, when you reason by modus ponens, you may do some reasoning in identifying what is the antecedent and what is the consequent of the conditional proposition you are reasoning with. That will require some lower-level rule-following. But if rule-following is to explain what reasoning is, eventually you must do some rule-following that does not involve reasoning.

(Broome 2014: 20-21)

The Intentional View of rule-following says that following a rule always involves inference. On the other hand, the rule-following account of inference says that inference always involves rule-following. What we desire is to provide a satisfactory explanation for inference with the Intentional view of rule-following. However, we have ended up with a regress such that there is no hope to provide an explanation for either rule-following or inference. Then this attempt fails.

Another account of rule-following explains what following a rule is simply in terms of dispositions. This is called the Dispositional View. A simple version of such a view is to say that for S to follow a rule R is for S to be disposed to conform to R under appropriately ideal

conditions. The Dispositional View is not vulnerable to the previous problem. It does not entail that following a rule always involves inference: for a subject to follow certain rules, he would only be disposed to conform to them under particular conditions and these conditions do not have to involve inference. However, this view is problematic, too. Boghossian argues that there are at least two problems with the Dispositional View:

First, our dispositions are finite, whereas the rules we follow are infinitary.

Second, the rules we follow are supposed to guide our behavior; but this element would appear to be missing from a Dispositional View. We can see this clearly if we observe that the rules we follow *explain* why we have the dispositions we have: for example, my following the Modus Ponens rule explains why I am disposed to perform the Rain inference. No such thing could be true on a Dispositional View, though, since our dispositions can't explain themselves.

(Boghossian 2014: 14)

The second problem that Boghossian mentions about is analogous to the problem of the Intentional View. On the Dispositional View, a subject follows a rule because he has a disposition to follow the rule under certain conditions. On the other hand, we have a strong natural intuition to say that the subject has a disposition to follow the rule under such conditions exactly because of the rule he follows. We would end up in a regress if we hold both the Dispositional View and our natural intuition.

One might argue that on the Dispositional View, a token instance of following a rule might be explained by the disposition to follow the rule; however, the fact that the subject has that disposition might be explained by the general validity of the rule. I don't think the latter is true. Consider the Email Rule: the subject has a disposition to follow the Email Rule not because it has a validity in some sense – this rule simply does not have any general validity. If the subject is asked why he is disposed to answer any email that calls for an answer immediately upon receipt, he would likely answer “because I follow the email rule”.

Another feature of the Dispositional View makes it even less desirable: it does not help the reckoning model avoid Siegel's objection. Recall that the reckoning model has three components: the premise-states, a reckoning state, and a becausal condition. If we incorporate the Dispositional View into the reckoning model, then we get this: a subject infers from premises to a conclusion just in case that he is disposed, upon considering the premises, to form the conclusion and he forms the conclusion because of this disposition. As Boghossian argues, “if all we mean by a thinker's applying the rule MP to the contents (1) and (2) is that the thinker is disposed, when considering such contents, to form the conclusion (3)...this will just look like regular causation of some thoughts by others” (Boghossian 2014: 15). Indeed, the idea is that we can be disposed to *associate* one thing with another without being disposed to infer the one thing from the other. Then, in the former case the subject has no rationalization of the conclusion at either person level or sub-person level. The becausal condition that the reckoning model requires then becomes the merely causal becausal condition just as Siegel has described.

## **Section 7:**

Boghossian considers an account of rule-following that is intermediate between the Intentional View and the Dispositional View: “there is a rule-encoding intentional state involved in following a rule, such a state is not consciously accessible to the thinker and is not something that he consults in figuring out what follows from the contents he believes” (Boghossian 2014: 15). Let’s call this the Sub-personal View of rule-following:

- (1) Some input states trigger a certain sub-personal mechanism within a subject;
- (2) The sub-personal mechanism activates certain sub-personal states that represent certain rules;
- (3) Then the mechanism leads the subject to perform certain behaviors based on the input states by referring to the sub-personal states that represent the rules.

As Boghossian points out, the first and foremost problem of this view is that it cannot accommodate the person-level reasoning:

No such process of [person-level] reasoning can be captured by a picture in which (a) reasoning is a matter of following rules with respect to the contents of our attitudes and (b) our following rules with respect to the contents of our attitudes is matter of automatic, subconscious, sub-personal processes moving us from certain premises to certain conclusions.

Indeed, it is highly intuitive that we are able to perform at least some inference in which we are active all the way from premises to conclusion. However, we should consider the Intentional View of rule-following again. It says that following a rule requires the subject to have an intentional state that represents the rule. For the subject to realize that he should follow a rule under a certain condition, he must first perform an inference and conclude that he should follow the rule under this condition. This inference explains why he follows the rule under this condition. This inference again needs to be explained in terms of rule-following. This regress shows us another possibility: this chain of explanations could end anywhere with a reference to the sub-personal mechanism mentioned above. Namely, any seemingly highly active inference could be explained by a sub-personal mechanism. Of course, I realize that the Intentional View of rule-following is only one view among many that is used to provide an account for inference. This kind of regress might not be a problem to other views. However, all that I want to do is to show that the Sub-personal View of rule-following might not be that counter-intuitive when combined with the reckoning model.

Can the Sub-personal View avoid the problems of the other views? Recall that the Intentional View requires an account of inference; using the Intentional View to explain inference would result in a regress. Boghossian has this doubt:

In the present context, going sub-personal presumably means identifying rule-acceptance...not with some person-level state, such as an intention, but

with some sub-personal state...Let us say that [such a state] is some sub-personal intentional [i.e. representational] state in which the rule's requirements are explicitly encoded. Then once again, it would appear that some inference (now sub-personal) will be required to figure out what the rule calls for under the circumstances. And at this point the regress will recur.

(Boghossian 2008: 498)

In fact, a critic would point out that there are two stages in the Sub-personal View process where an inference takes place: an inference takes place when the input states trigger the sub-personal mechanism, and when the mechanism leads the subject to perform behaviors according to the rules.

Let's consider the first one. What exactly is the triggering process specified in (1)? If the triggering process is simply a causal relationship, this view would just look like the Dispositional View. All I have postulated would be nothing more than a disposition labelled "the sub-personal mechanism" because in this case all it does is that it is caused by some input states and it in turn motivates the subject to perform certain behaviors. Then, one natural specification of the triggering process is this: the sub-personal mechanism of the subject recognizes the correlation between the contents of the input states and the contents of subject's states that represent the rules. This process of recognition arguably is not a process of inference. This intuition should become clear if we consider an analogy:

A little child is playing with his toys. His mother picks up an apple-shaped

toy block and puts it in front of his eyes. The child recognizes that its shape and color are similar to that of another sun-shaped toy block.

I think the triggering process of the Sub-personal View is analogous with the mental process of the child in the above case in two aspects. Both can help us understand why the triggering process is not an inference. First, both of the processes involve the subjects recognizing a correlation between two objects by identifying similarities. The subject in the triggering process of the Sub-personal View recognizes the correlation between his input states and his sub-personal states that represent the rules. The child in the above case recognizes the correlation between the apple-shaped toy block and the sun-shaped toy block by identifying their similarities in color and shape. An inference does not work in this way. An inference must have premises and a conclusion. We can consider the apple-shaped toy block and the sun-shaped toy block as premises; nevertheless, the child's recognition of the similarity between them does not appear to be a conclusion. Similarly, even if the input states of the triggering process can be considered as premises, the recognition of the input states does not seem to be a conclusion. Therefore, the triggering process is not an inference.

Second, both processes do not involve a relationship of epistemic dependence. In the child case, our intuition is that one simply cannot make a judgment about whether it is rational for the child to believe that the apple-shaped toy block looks similar to the sun-shaped toy block. The reason why we have that intuition is that the child's mental process seems to be a direct response to his seeing the apple-shaped toy block that does not involve the same level of complication as we may see in a process of inference. The same can be said for the triggering

process of the Sub-personal View, too. The triggering process is also a direct response of the sub-personal mechanism of the subject to the input states. This process is not as complicated as an inference. For this reason, this process is not an inference.

Then we should consider whether an inference takes place when the mechanism leads the subject to perform behaviors according to the rules. At first glance, this process looks a lot like an inference. One would argue that the rules and the input states are premises and how to behave is the conclusion. However, someone who holds this view does not fully understand the Sub-personal View. In stage (2), the subject's mental states that represent the rules are already motivated because of the recognition stage of (1). Therefore, in stage (3), what happens is that the mental states that represent the rules cause the sub-personal mechanism to motivate the subject such that he performs certain behaviors. This process alone is purely causal. Any process that is purely causal cannot be a process of inference. Therefore, the process in which the sub-personal mechanism leads the subject to perform behaviors according to the rules is not an inference.

Thus far, I have argued that on Sub-personal View, no single stage of the process contains inference. Therefore, no single stage of the process needs to be explained by an account of inference. The Sub-personal View does not have the regress problem of the Intentional View. Also, the Sub-personal View would not have problems analogous to those that the Dispositional View has.

Recall Boghossian's objection: "First, our dispositions are finite, whereas the rules we follow are infinitary. Second, the rules we follow are supposed to guide our behavior; but this element would appear to be missing from a Dispositional View...since our dispositions can't

explain themselves” (Boghossian 2014: 14). The first problem has no bearing on the Sub-personal View because the Sub-personal View postulates a sub-personal mechanism that could potentially process infinite rules. The Sub-personal View is also not vulnerable to the second problem. On the Sub-personal View, a subject follows a rule because his particular sub-personal mechanism is triggered by the premise-states. On the other hand, we do not have the intuition that that the premise-states of the subject trigger his sub-personal mechanism because of the rule he follows. The premise-states of the subject trigger the mechanism because the mechanism recognizes the similarity between the contents of the premise-states and the contents of subject’s states that represent the rules.

### **Section 8:**

Now let’s combine the Sub-personal View and the reckoning model. An inference would be something like this:

- (1) Some premise-states trigger a certain sub-personal mechanism within a subject;
- (2) The sub-personal mechanism activates certain sub-personal states that represent certain rules;
- (3) Then the mechanism leads the subject to form a conclusion according to the premise-states by referring to the sub-personal states that represent the rules.

Let's call this Sub-personal reckoning model. In this account, the subject's reckoning state is that his sub-personal mechanism operates on the premises with regard to the rules. In other words, the subject takes the premises to support his conclusion just in case that this particular sub-personal mechanism of his has worked in this particular way. The because condition is that the subject forms the conclusion because his sub-personal mechanism has operated on the premises with regard to the rules. The fact that his sub-personal mechanism has worked in this way provides a sub-person level rationalization for the subject to form the conclusion.

First, this is a version of the non-canonical reckoning model. Its reckoning state allows for premise-state unawareness because the reckoning state only involves the sub-personal mechanism. This mechanism does not require that the subject is aware of the premise-states of the inference. The process would be started by the premise-states triggering the mechanism. The because condition of this account allows for response unawareness. Because the inference is operated under the sub-personal mechanism, the subject would not be aware that he comes to the conclusion because the sub-personal mechanism has operated on the premise-states. Second, the because condition of this account is not a merely causal because condition. The sub-personal mechanism provides the rationalization for the conclusion that the subject forms. This would not be a person-level rationalization because the whole process works sub-consciously. Such a rationalization would be sub-personal.

Recall that Siegel has in mind two kinds of reckoning state that can allow for premise-state unawareness:

Reckoning de dicto: S reckons that (for some G: having G supports Q).

Reckoning de re: for some F (S reckons that: having F supports Q).

(Siegel 2017: 8-9)

Her argument is that reckoning de dicto does not fit well with the merely causal becauseal condition and since an adherent of the reckoning model is bound to hold the merely causal becauseal condition, he is then committed to reckoning de re as the reckoning state. I have argued for the possibility that an adherent of the reckoning model is not committed to the merely causal condition. Then I should consider both kinds of reckoning state in light of my becauseal condition for the reckoning model.

Siegel argues that reckoning de dicto does not fit well with the merely causal becauseal condition for this reason:

The non-canonical reckoning model predicts that if your reckoning state is de dicto, then you draw the conclusion because you reckon de dicto that some features or other support the conclusion. That prediction goes against a central feature of the [kindness and pepperoni] cases, which is that there are specific features you're responding to in drawing the conclusion. You are in the de dicto reckoning state because you are responding to the specific features that by hypothesis move you to the conclusion. Your reaching the conclusion is explained by that response, not by the de dicto reckoning state

(Siegel 2017: 8-9)

A reckoning state in the Sub-personal reckoning model is that the sub-personal mechanism operates on the premises with regard to the rules. In principle, this reckoning state can be de dicto. In this case, a group of features G is the premise state. Each feature in G is not identified by the subject on a person level. However, the subject has a personal level awareness that G as a whole relates to some rules. This person level awareness, along with the recognition of the sub-personal mechanism that the specific features in G correspond to certain sub-personal rule-representing mental states, activates these rule-representing mental states. Then the mechanism leads the subject to a conclusion. It seems that the reckoning de dicto is a stronger reckoning state than what is required for the Sub-personal reckoning model. It adds to the sub-personal reckoning state a person level awareness that in a general sense G corresponds to some rules. Therefore, the reckoning de dicto in this case is a combination of a person level awareness that G corresponds to some rules and a sub-personal operation upon the specific contents of G with the rule-representing states. Then, the reckoning model's prediction that the subject draws the conclusion because he reckons de dicto does not go against the intuition in the kindness and pepperoni cases. On this interpretation, in these two cases the subject responds to a group of specific features in a general sense and at the same time his sub-personal mechanism operates on these specific contents of this group of features. The reckoning de dicto is not explained by the response to the specific contents alone. Therefore, the subject's reaching the conclusion is not just explained by the response; it is explained by the de dicto reckoning state.

The Sub-personal reckoning model also allows for reckoning de re. It seems perfectly natural to say that the subject reckons de re just in case that his sub-personal mechanism

operates on some premise-states with regard to certain rules and the subject forms the conclusion because of that. Siegel argues that on the reckoning model, any de re reckoning “must be inaccessible, when there is premise-state unawareness or response unawareness” (Siegel 2017: 9). I agree with Siegel on this point. On the Sub-personal reckoning model, the subject is clearly unaware of the fact that his sub-personal mechanism operates on the premise-states when he is not even aware of the premise-states or his response to the premise-states. However, I do not agree with Siegel’s view that when the de re reckoning is inaccessible, the reckoning model does not add any insights to the fact that the subject responds to certain features. I argue that there are at least two useful insights that the Sub-personal reckoning model can provide even if the de re reckoning is inaccessible.

First, the Sub-personal reckoning model can explain why our intuition suggests that an inference must have an active character. As Siegel points out, if an account of inference only says that an inference is a response to certain features, then it does not capture our intuition that an inference is something we do, not something that happens to us. However, the Sub-personal reckoning model is not such an account. This model explains the active character of inference by appealing to a certain sub-personal mechanism of the subject. Though the subject’s de re reckon is inaccessible, the operation of this mechanism is still something that the subject does. He just doesn’t do it on a person level. Second, the Sub-personal reckoning model points to the specific kind of response that the inference belongs to; namely, it says that inference is a process in which the subject’s sub-personal mechanism operates on some premise-states with regard to certain rules and the subject forms the conclusion because of that. It explains inference by appealing to a specific type of action: following a rule. Whether or not de re reckoning is

inaccessible has no bearing on this point.

## **Part IV**: Comparisons with other views and the conclusion

### **Section 9:**

Broome endorses a version of the Dispositional View. In this chapter, I shall compare the Sub-personal reckoning model and Broome's Dispositional View. Recall that Boghossian's main objection against the Dispositional View is that it makes no difference between inference and mere causation. Broome holds that "it is not true in general that, if one of your beliefs is caused by others as a result of a disposition of yours, that makes the process look like mere causation" (Broome 2014: 20). Broome defends this view by appealing to the notions of "seeming right" and "being right". In this context, as Broome suggests, being right means correctly following a rule, and seeming right means that it seems to the subject that he has correctly followed a rule.

Broome argues that "it is seeming right that distinguishes following a rule [on Dispositional View] from mere causation" (Broome 2014: 21). When an act seems right to a subject, it does so in relation to a particular rule. For example, when a subject shouts out "three", his act seems right relative to the rule that says shouting out an odd number. This act does not seem right relative to the Modus Ponens rule. This fact suggests that seeming right must involve a way of identifying different rules to the subject himself. Since on the Dispositional View, following a rule is a matter of disposition, then seeming right must involving a way of identifying different dispositions. Moreover, when an act seems right to a subject, there is a

comparison between the act and the rule. Therefore, seeming right has a double content consisting of the act and a particular rule. Because a subject has the attitude of seeming right towards his act, this gives it a personal endorsement (Broome 2014: 22). Then there is an active character in the attitude of seeming right.

On the other hand, according to Broome, “[seeming right] either consists in, or is manifested by, a complex disposition. It is not a feeling or a phenomenal state, though it may be associated with one” (Broome 2014: 22). In other words, because seeming right is an attitude that has a content of the act and a corresponding rule and because seeming right consists in a complex disposition, this type of complex disposition is not mere causation.

This view looks similar to the Sub-personal reckoning model in two respects. First, both rely upon an innate function of human being that performs a special role. Broome suggests that the attitude of seeming right has a double content consisting of the act and a particular rule and this is what distinguishes a certain type of disposition from causation. The Sub-personal reckoning model says that the operation of the sub-personal mechanism is to lead the subject to perform an act in accordance with certain rule-representing states and this is what distinguishes rule-following from mere causation. Second, both involve sub-personal causal processes. Broome recognizes that “it is sub-personal causal processes that determine what seems right to you” (Broome 2014: 23). On the other hand, as I have already argued, the stage (3) of the Sub-personal reckoning model is a sub-personal causal process.

In a way, these two views are compatible. According to the Sub-personal reckoning model, the sub-personal mechanism recognizes that the premise-states corresponds to certain rule-representing states of the subject and then operates on them according to certain rules. One

could argue that as this recognition takes place, the sub-personal mechanism generates an attitude of seeming right. This attitude has the content of the rules and a certain act in accordance to the rules. This attitude of seeming right is a medium that the sub-personal mechanism generates and the mechanism utilizes it to motivate the subject's actions.

In light of this comparison, we can clearly see that what Broome's Dispositional View requires is more than a simple disposition. The disposition must include an attitude of seeming right to account for the active character of inference. Then it is a stronger version of the simple Dispositional View. On the other hand, the Sub-personal View requires an intentional state that is less than a person level one so that it can avoid the regress problem. It is a weaker version of the Intentional View. Broome's Dispositional view and the Sub-personal view stem from opposite starting points but work towards one direction. I think that is why these two views can be complementary to each other.

### **Section 10:**

In this chapter, I shall compare the Sub-personal reckoning model with Siegel's account of inference. Siegel's account of inference is the Response Hypothesis: "inferring is a distinctive kind of response to an informational state, or to a combination of such states that produces a conclusion" (Siegel 2017: 10). A natural question that follows is this: how is an inferential response to informational states distinctive from other kinds of response? Here is how Siegel accounts for it:

If you see someone in the room walk through an exit, normally you'll believe

they are not in the room anymore. This is an automatic adjustment of belief in response to changing perceptions. [Inferential responses] are often less automatic when it takes some effort to recall the relevant facts (how far are you from your destination? How many miles per gallon does the car get?) and to think the matter through. In both cases, [inferential responses] involve some ordinary sense in which you appreciate the force of the [premise-states] you are responding to, even if the “appreciation” takes the form of registering support rather than a representational state.

Clearly Siegel agrees with the basic intuition of inference that the inferrer has to actively participate in the process. However, she does not go so far to say that this active participation of the subject is a reckoning state. Then she attempts to show the distinctiveness of the inferential response by comparing it with other kinds of non-inferential responses. According to her, there are three general types of non-inferential response: “failures to respond to informational states; responses to something other than informational states; and non-inferential responses to informational states” (Siegel 2017: 11).

Here is one case of failure to respond to informational states:

Suppose that after looking in three rooms for your passport, you form the belief that it isn't anywhere else in the house. The mere sequence of searching and then forming the belief does not settle what kind of response the belief is to the information you got from searching, if it is any response at all. You

could form the belief spontaneously, without its being any sort of response to the information you got from looking – not even an epistemically poor response in which you jump to the conclusion that your passport is lost.

(Siegel 2017: 11)

In this case, the subject's mind is simply moving from one set of states to another. Broome calls the transition from informational A to informational state B “mental jogging” when state B is not any kind of response to state A. According to Siegel, the difference between an inference and mental jogging is well captured by the idea that the subject is responding to information in inference, but is not responding to it in any way in the above case (Siegel 2017: 13).

Here is one case of responding to non-informational states:

Suppose you say to yourself silently that sixteen people fit in the room. If you went on to hear yourself think that there are sixteen days till the next full moon, you might end up making this transition because these sentences rhyme and follow a rhythm. In the guise of inner speech, the second thought would be a response to the rhythm and sound of the first innerly spoken thought.

(Siegel 2017: 13)

Clearly, the subject's response in this case is not an inference. The subject responds to the rhythm and his inner thought but neither of them is an informational state.

Here is one case of non-inferential response to informational states:

For instance, thinking that it is dark outside might make you imagine that you could turn on the sky by switching on a giant lightbulb. The image of tugging a chain to turn on the sky, in turn, makes you remember turning on your lamp, and finding that the bulb was burned out. You then recall that you need to buy lightbulbs. The transition in your mind from the dark-outside thought to the need-lightbulbs-thought exploits what one knows about light bulbs, darkness, and light.

(Siegel 2017: 13)

Siegel interprets the response in this case as a response to narrative possibilities. Even though it is a response to informational states, it is not an inferential response. Siegel also talks about another case in which the response is not inferential. However, I think Siegel's efforts in this particular part is not enough to yield the result that she wants. Here she wants to identify the distinctiveness of inferential response by comparing inferential response to informational states and non-inferential response to informational states. She has made several comparisons but she never comes up with a specific explanation of how an inferential response is distinctive. She simply asserts that the distinctiveness of the inferential response is found by pointing at the differences between inferential responses and other kinds of responses.

In a way, the Sub-personal reckoning model can respect Siegel's response hypothesis. After all, the operation of the sub-personal mechanism is a distinctive response to the premise-

states. Since the sub-personal mechanism requires a triggering process, it can be added that non-informational states would fail to trigger the sub-personal mechanism and that informational states would sometimes fail to trigger the sub-personal mechanism. Then in principle, the Sub-personal reckoning model can successfully preclude the three general types of non-inferential responses. In this way, the Sub-personal reckoning model is able to accommodate Siegel's response hypothesis perfectly. However, the Sub-personal reckoning model can provide more insights about inference than the response hypothesis can. The former gives a specific account of how an inferential response is distinctive.

Recall that Siegel seeks an account of inference that allows experiences to be a conclusion of an inference. As she might argue, the response hypothesis supports this view because it doesn't include any principle that would exclude experiences from being a conclusion of an inference. However, if we take this view in light of the Sub-personal reckoning model, we would get a different result. Recall that the Sub-personal reckoning model says that a subject is inferring just in case that a certain sub-personal mechanism of his operates on the some premise-states with regard to corresponding rule-representing states of his and he draws a conclusion because of this fact. If an experience could be the conclusion of an inference, then the subject should have at least some state that represents rules which yield experiences as a conclusion. This entails that there is at least some rule that yields experiences as a conclusion.

Of course, people often say that experiences are generated with operations conforming to some rules. For example, the light hits the lawn and gets reflected into a subject's eyes. The light goes through the lens and reaches the retina. The brain follows a certain set of rules to transform the information caught by the retina into perceptual experiences of the subject. I

think people talk in this way only because they do not have in mind a clear meaning of “rules”. In the above case, the so-called “rules” are not represented either consciously or subconsciously because the entire process is completely causal. As Boghossian has suggested, “if the rules are to have any hope of explaining one’s behavior, it must be by virtue of the fact that his behavior is to be explained via some state of his that represents or encodes those rules” (Boghossian 2014: 13). If the “rules” are not represented, how are they supposed to explain the process going on in the above case? Apparently, the subject is not following any rules during this process. He is only going through a causal sequence that goes step by step like dominos. This case shows that although people talk as if there are rules that generate experiences, they only refer to a causal sequence rather than real rules. In this sense, any rule-following construal of inference would prevent the possibility that inference can generate experience. Therefore, the Sub-personal reckoning model implies that experiences cannot be the conclusion of an inference. Siegel’s response hypothesis allows experiences to be the conclusion of an inference because it oversimplifies what an inference is.

Now, let’s go back to Siegel’s argument for the Rationality of Perception:

- (1) If perceptual experiences can arise from inference, then the Rationality of Perception is true.
- (2) Perceptual experiences can arise from inference.
- (3) Therefore, the Rationality of Perception is true.

(Siegel 2017: 19)

So far, I have argued for an account of inference that does not allow perceptual experiences to

be the conclusion of an inference. If my account of inference is true, then (2) is false. Siegel's argument for the Rationality of Perception then fails. This of course does not mean the Rationality of Perception is false, but I do hope I have presented reasonable doubts on it. Recall that the Rationality of Perception says that both perceptual experiences and the processes they arise from can be rational or irrational. If this view is false, then we need to find another way to solve the problem of hijacked experience mentioned in Chapter (I).

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