WHY THERE IS NO COGNITIVE PHENOMENOLOGY

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1. INTRODUCTION AND VARIATION OF THE COGNITIVE PHENOMENOLOGY THEORY

Some philosophers believe that our thinking, understanding, and such cognitive states influence our experience and the phenomenology of the experience. They argue that in addition to our sensory perception, our cognitive acts have a distinctive proprietary cognitive phenomenology. They argue that in experiences involving cognitive acts such as thinking or understanding, if we remove all sensory aspects—like perception or sensory phenomenology—what remains is the cognitive phenomenology itself, which gives these experiences their distinctive character.

However, some other philosophers hold a position against the cognitive phenomenology theory. They believe all the phenomenology of thinking or understanding can be reduced to sensory phenomenology. All the so-called "cognitive phenomenology" is sensory. In Siewert's terminology, we choose between "variation" and "reducibility." (Siewert, 2001 pp. 248) If we support variation idea, we support the cognitive phenomenology; if we support reducibility idea, we deny the cognitive phenomenology.

However, I believe that actually we can neither support the variation idea nor the reducibility idea. To deny the reducibility does not indicate the success of variation, and vice versa. I want to argue that both reducibility and variation idea are not successful.

At first, I will introduce three kinds of cognitive phenomenology theories. The strong version of the cognitive phenomenology theory argues that whether the subject is in cognitive states with certain content is determined by cognitive phenomenology. (Pitt, 2004; Horgan and Tienson, 2002). Similarly, some philosophers (Klausen, 2008; Shields, 2011) argue that cognitive phenomenology is essential to the cognitive attitudinal type and at least partially

constitutively influences the content of the cognitive state.

The weak version argues that there is no determined relation between cognitive phenomenology and the content of the cognitive state, but the content of the cognitive state requires cognitive phenomenology. (Strawson, 2008; Fung, 2023) And then, there might be the weakest idea arguing that cognitive phenomenology is only accidental to the cognitive attitudinal state and the content of the cognitive state. Except for the weakest theory, the strong and weak theories believe that cognitive phenomenology has an important role in deciding which cognitive state we are undergoing. Cognitive phenomenology is logically prior to the cognitive state and its content.

In the following sections, I will present two arguments in support of weak cognitive phenomenology and demonstrate their shortcomings. The first concerns the richness and intensity of experience, and the second addresses the so-called machine problem. I will then argue that the strong cognitive phenomenology view not only fails to resolve these issues but also faces its own significant challenges.

2. THE ARGUMENT FROM INTERESTS: RICHNESS AND INTENSITY

Philosophers like Galen Strawson and Christopher Shields both introduce the attitudinal content of cognitive states to support cognitive phenomenology. They believe that the sole sensory feeling or the sensory phenomenology cannot explain some of our conscious feelings like the "interestedness-feeling." For Strawson, merely sensory feelings cannot explain the richness of the experience of understanding. (And such understanding makes the subject to have certain kind of attitude towards the cognitive content) For Shields, the intensity of the attitudinal phenomenology indicates the existence of the cognitive phenomenology.

At first, let us focus on Strawson's richness idea. Strawson believes that experience in real life is extremely rich:

> "On the no-cognitive-experience view, variety in experience comes only from variety in colors, sounds, and so on, together with variation in the degree of intensity of other feelings such as the interestedness-feeling or curiosity-feeling. This is, certainly, a lot of variety, a great deal of richness of experience, if you like, but these riches are desperate poverty when placed next to the astonishing variety that I and 99.9999999 per cent of humanity know that experience can have and does have on account of the fact that it involves experience of different thoughts and ideas" (Strawson, 2011. pp.300.)

Following Strawson's idea, merely sensory feelings can give us abundant experience. However, these experiences are much less rich than real-life experiences. "The no-cognitive-experiencers cannot say that when we read there is an experiential difference between Hamlet-content-flavoured interestedness and excitement and Othello-content-flavoured interestedness and excitement, or Catch 22-content-flavoured interestedness and excitement."(Strawson, 2011. pp.301.) So, according to Strawson, if we deny cognitive phenomenology, we deny there can be non-sensory experiential differences in our rich attitudes towards different interesting works of literature. The rich attitudes in real life should be expressed through non-sensory cognitive qualitative characters. We can construct Strawson's idea in such a way:

Premise 1: Experiential phenomenology should be qualitative phenomenology;

Premise 2: The richness of different experiences should be explained and accessed through qualitative phenomenology;

Premise 3: Sensory experiential phenomenology is not as rich as real-life experiential phenomenology;

Conclusion: Thus, there is non-sensory experiential phenomenology: namely, cognitive phenomenology.

I doubt premise 2. The richness of the different experiences need not be explained and accessed through qualitative phenomenology. I borrow the term "qualitative" from Shields. He argues that:

> "I am characterizing the quality of curiosity, and assuming, as I do, that there is something which is what it is like to be curious, or, less cumbersomely, that curiosity is a certain way. I am assuming, that is, that curiosity has a qualitative feel. Further, since it is one of the propositional attitudes, curiosity is a cognitive state.1 Hence, when I ask what it is like to be curious, I am equally assuming that some cognitive states are qualitative." (Shields, 2011)

Thus, for "qualitative character" or "qualitative phenomenology", I simply refer to what it is like to have certain cognitive state. If qualitative phenomenology should explain the richness of different experiences, then the subject enjoys rich experiences by consciously having such different qualitative phenomenology. However, even without consciously having

qualitative phenomenology, the subject can still enjoy the richness of experiences. We may consider such a case: a person, A, was required to read two different books. The first book tells a good story about high school students' friendship and makes A experience strong emotional feelings. She cries and laughs many times for the character's story: their misunderstanding and finally reunion. The second book has a more serious topic, and A does not have much qualitative experience when reading it. She just sighs. Someone says, "Reading the first book must bring you rich experiences!" "Yes. But the second book brings me a much richer experience than reading the first book." A may reply that reading the second book makes her think about lots of bizarre questions. Like what is to be a moral person; whether it is possible to find the ultimate goodness... But the first book only tells a good but simple story. Thus, though A does not have much qualitative phenomenology in reading the second book, she has a richer reading experience.

It seems no different from Strawson's "experience of different thoughts and ideas." However, the key idea is that no qualitative phenomenology necessarily accompanies these thoughts and ideas. It is not that the subject consciously has qualitative phenomenology and then enjoys such thoughts and ideas. (Imagine this case: the subject neither comments on the reading experience nor reports any particular feeling about it. She does not express anything directly related to the experience. Or, she does not have the related feelings. However, the absence of reported feeling does not necessarily mean that her experience lacked richness. When prompted with relevant questions, she is able to provide answers that indicate a rich and detailed experience. Thus, the lack of an overt qualitative impression does not exclude the presence of a rich cognitive experience.) The subject just produces these thoughts and ideas through what they say (or their inner speech) The experience does not become richer out of the richer qualitative phenomenology, but the richer content. The content is the essence that makes the experience richer, not the qualitative phenomenology. We can even suppose there

is plenty of qualitative phenomenology or cognitive phenomenology in the mentioned reading case. In that case, this qualitative character still cannot guarantee the richness of the experience: it is possible that plenty of qualitative characters are accompanied by the same content. (like understanding the same mathematical proposition with different qualitative characters) In such a situation, we cannot say there are differences in experiential richness compared to sensory feelings.

However, the strong view of cognitive phenomenology would argue that cognitive phenomenology determines the experiential content and makes the subject able to distinguish the different states, so different content cannot accompany the same phenomenology. I will give an answer to this objection in the later section.[2]

Let us turn to Shields's intensity argument. Shields mentions the intensity of interests and

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[2] Actually Strawson himself disputes the strong view.

> "Consider a couple of my philosophical 'Twins' again, my Instant Twin and my Perfect Twin Earth Twin. By hypothesis, they are having exactly the same cognitive-experiential and sensory-experiential experience as I am, qualitatively speaking, as I think about the River Cherwell ('r1') and the Humpback Bridge ('b1'). But my Perfect Twin Earth Twin is thinking about a different river and bridge from the ones I'm thinking about (he is thinking about 'r2' and 'b2'), and my Instant Twin is not thinking about any actual bridge or river at all. We are all by hypothesis in exactly the same cognitive-experiential state, qualitatively speaking, a state- type I'll call [RB/X], where 'RB' is short for river/bridge experience of the RiverCherwellish/Humpback Bridgeish qualitative type, while 'X' marks the precise way in which my Twins and I are now having such experience; but we're all in different cognitive states." (Strawson, 2011. pp. 305) Strawson distinguishes the cognitive states on the different referents and relies on the semantic externalism view. However, some philosophers, like David Pitt will deny the externalism view while holding the strong determination idea. This problem concerns the debate between the internalism and externalism which I will not focus on here.

believes that it indicates the non-sensory qualitative character of interests. “the qualitative character of my p-states behaves like the qualitative character of my non-p q-states.” and “The only or best explanation ... is that the qualitative characters of p and non-p mental states are qualitative in the same way.” (Shields, 2011. pp.231) Shields further mentions that the denial of the qualitative character of the p-states “seems to implicate both in a further denial of the phenomena: sometimes my curiosity is intense, and sometimes it is waning.” (Shields, 2011. pp.231-232)

Thus, according to Shields, the cognitive states (or the p-states) have a cognitive qualitative character, and it is such qualitative character that makes the subject consciously have (and know) the different intensity of the same attitude. However, I believe that denying the qualitative characteristics of the “p-states” does not implicate the denial of the intensity of the subject’s attitude. Could we “feel” that we are really interested in a certain problem even if there are no qualitative characters? I believe that we can. How am I really interested in a question? If I do not get the answer, I will think about it repeatedly, and I cannot eat and sleep well. The intensity of the attitude is gained through the experience. Even without any qualitative characters, these experiences can indicate the subject’s interest in the problem.

Someone may doubt: “We do have the qualitative character when feeling interested in something, and it is not rational to completely deny the existence of qualitative characters in the “cognitive experience”. Besides, it seems we can say we are more interested in one thing than another without consciously referring to the past experience. Then, we require the conscious qualitative cognitive phenomenology to explain why we can know our own cognitive states.”

I do not deny qualitative characters can accompany the cognitive states. Strong emotional, sensory qualitative character/phenomenology can accompany the cognitive states. But it is not

necessarily that the strongest sensory feelings will accompany the most intense attitude; qualitative character cannot determine the intensity of the attitudes.

Secondly, I must address the question of what enables subjects to recognize their attitudinal intensity without consciously referring to past experiences (namely, without the involvement of cognitive phenomenology): the influence of past experiences is not necessarily instantiated by conscious reference. As a disposition, this past experience influences the subject to produce certain cognitive states and expressions, such as 'this is more interesting than that.' I believe that this is obvious. For example, I learned how to behave properly in different situations since childhood. For instance, my parents always taught me to greet acquaintances when I met them. And when I fail to do that they will criticize me. Almost 20 years have passed, and I do not need to refer to my parents' criticism and my sadness in my childhood when I behaved appropriately and greeted my friends nowadays. I definitely do not refer to my past experience of learning such behavior when conducting it now. The past experience's influence does not need to be conscious.

Besides, even if we assume the existence of “attitudinal, cognitive phenomenology,” it cannot sufficiently inform us of what cognitive state we are in. We definitely can imagine a person who claims that she is in a “very interesting state” (out of the “very interesting” cognitive phenomenology), but she does not show further behaviors to indicate her interest. Then, it is not sufficient for us to conclude that she is in an intensively interested state by her claim (and the related cognitive phenomenology). Thus, the intensity argument is not successful in supporting the cognitive phenomenology theory.

In summary, this section has introduced two arguments in support of the weak version of cognitive phenomenology. However, both fail. The richness and intensity of experience do not depend on cognitive phenomenology; even in its absence, we can still account for these

features of experience.

3. THE ARGUMENT FROM EXPERIENCE: THE MACHINE PROBLEM

Strawson argues that without cognitive phenomenology, there is no difference between an experience bearer and a machine:

> "On the no-cognitive-experience view... we (a) non-consciously and sub-experientially register some conceptual content, in a way that is, on the no-cognitive-experience view, and so far as phenomenological goings-on are concerned, no different from the way in which machines can be said to register conceptual content. This then causes in us (b) a certain sort of sense/feeling experience, a certain quantum of interestedness-feeling, say—experience which involves no experience of the specific content of the registered content." (Strawson, 2011. pp.300)

According to Strawson, without the participation of cognitive phenomenology, the subject will not consciously understand anything. The subject is influenced by the unconscious subpersonal mental process, producing the sensory occurring phenomenology. And it is the sensory phenomenology that indicates the subject's understanding. Under such circumstances, the subject in the non-cognitive phenomenology theory does not differ from an experienceless machine except for possessing sensory feelings. And it will follow that the experienceless machine can also understand. That is not a well-accepted conclusion. But I want to argue that the machine case is not successful.

In the cognitive phenomenology theory, the occurring conscious cognitive phenomenology constitutes the subject's understanding. "Cognitive phenomenology is not something that one needs to notice in addition to what one already notices about thought." (Anderson, 2016. pp.197) It is part of the conscious thought. The subject's consciously grasping of cognitive phenomenology can be reinterpreted as:

1. Cognitive phenomenology occurs

2. The subject consciously has cognitive phenomenology.

Thus, we can find cognitive phenomenology's logical priority: the subject must have conscious cognitive phenomenology (as cognitive phenomenology is a kind of consciousness), then consciously possess the related cognitive states or the conscious thought. When given the input, an experienceless machine will produce an output through the unconscious process. However, for an experiential subject, like us, when perceiving an input, the subject will consciously experience the cognitive phenomenology and then be able to produce an output, such as speaking. However, does cognitive phenomenology really contribute to the difference between an experienceless machine and an experiential subject? I really doubt it.

We can consider such a case: two students are solving a mathematical problem. For example, they are asked to demonstrate one asked proposition by using the Peano axioms. They each believe that they understand the question. For the sake of argument, (assuming the truth of cognitive phenomenology theory) we can assume that they possess the same cognitive phenomenology. However, they may solve the question in a different way: one is right, but the other is completely wrong. The wrong student thinks that he understands the Peano

axioms and makes a good demonstration. Under such a situation, they definitely possess different cognitive content while keeping the same cognitive phenomenology. Thus, the conscious possession of cognitive phenomenology does not determine the cognitive content.[3] Then, the different cognitive contents indicate that they are produced by the unconscious subpersonal mental process. Besides, the wrong student possesses the same "understanding" of cognitive phenomenology as the right student, but we cannot say that he really understands the question. It signifies that merely possessing the cognitive phenomenology does not sufficiently indicate real understanding.

How about the right student? He consciously possesses the same cognitive phenomenology. However, as previously argued, this alone cannot account for his genuine understanding. Instead, his understanding is explained by the presence of the appropriate cognitive content—what we might call "correct understanding"—which is not constituted by cognitive phenomenology. This suggests that the phenomenology does not play an essential explanatory role in understanding. Accordingly, even in the absence of cognitive phenomenology, it is the cognitive content that determines the subject's state of understanding. The subjects, without grasping any conscious cognitive phenomenology, can still understand. This understanding is indicated by instantiating the subpersonal unconscious cognitive content, like successfully solving a problem. The merely subpersonal unconscious content can explain the understanding. And there is no obvious difference between a subject's subpersonal unconscious mental process and a machine's innate process.

Someone might argue that, though the two students have different cognitive content, the same cognitive phenomenology indicates that they also share at least some part of the same

[3] It is worth mentioning that Strawson in some ways denies the determine relation between cognitive content and cognitive phenomenology. However, Strawson denies the token determine relation between the cognitive content and cognitive phenomenology, he supports the type cognitive phenomenology theory. Then, according to Strawson, cognitive phenomenology still partly determines the cognitive state (also the content) .

cognitive content. If this content partly indicates understanding, then cognitive phenomenology also participates in such a process. There is no doubt that, in this circumstance, there will not be a complete understanding without the part of cognitive content accompanied by cognitive phenomenology. But as we have argued above, merely the cognitive phenomenology and the accompanying content cannot explain the real understanding; the subject must possess the other cognitive content part (which is the product of some subpersonal unconscious process). What if the subject's brain process changes a little, and the subject does not enjoy cognitive phenomenology? The original unconscious cognitive content need not be influenced. The cognitive phenomenology accompanied content will lose its conscious qualitative character. But its unconscious part remains. The occurring cognitive phenomenology is the product of some unconscious mental process; even if it loses its qualitative character, the subpersonal process concerning the content part remains. Thus, without the qualitative character, though the subject's conscious realization about the understanding is influenced, the behavior instantiating the understanding is not influenced so much: I do not see any reason the subject will not be able to solve the mathematical problem without the qualitative character. Thus, the subject's understanding is not ruined without the existence of cognitive phenomenology.

Someone might ask then what constitutes the differences between an experienceless machine and an experiential subject? This is not the focus of my paper. But I can give a brief answer to this question. I believe that the consciousness and intentionality can distinguish the machine from an experiential subject. It is quite easy to say that a machine does not possess consciousness, but we do. However, according to Strawson, without cognitive phenomenology, consciousness is just the product of subpersonal unconscious process, just like the machine. Thus, it cannot explain the essential difference between the machine and us. However, even the consciousness cannot explain the difference successfully, there is still the

intentionality. For intentionality, I conceptualize it as the subject's directness towards the object. For us, the experiential subject, we can possess such a directness towards the intentional object. But a machine does not intend anything. Namely, a machine cannot be intentional.

Briefly, we can raise two objections to Strawson's point about the machine: At first, we don't need cognitive phenomenology to explain the difference between a machine and a conscious understanding being: consciousness and intentionality can do this on their own. Second, even if there were cognitive phenomenology, this cannot suffice for understanding, because there can be illusions of understanding: it is possible for two subjects to share the same cognitive phenomenology, but in fact do not understand. Thus, cognitive phenomenology cannot explain the essential difference between the experienceless machine and the experiential subject. Therefore this does not support the cognitive phenomenology theory.

However, this problem might be avoided by adopting the strongest version of the cognitive phenomenology theory, according to which cognitive content is entirely determined by cognitive phenomenology. Yet, as assumed in this section, it is possible for subjects to have different cognitive contents while sharing the same cognitive phenomenology. Demonstrating the flaw in this stronger view will be the focus of the next section.

4. THE FALLACY OF THE INDIVIDUATIVE AND DISTINCTIVE PROPERTIES OF THE STRONG VIEW

In the last section, I argued that weak cognitive phenomenology fails: the content of our thoughts can explain the richness of our experience, but the qualitative character (namely, the

phenomenological character) cannot explain the experiential richness. The content of cognitive states can explain our understanding, while phenomenology is not sufficient to explain it: it is fine for different subjects to share the same cognitive phenomenology, but this is consistent with some of them not having understanding. But if we move to the strong view of cognitive phenomenology, the above problems fade. For the strong cognitive phenomenology theory, the content of cognitive states is necessarily related to the specific cognitive phenomenology. David Pitt points out that "the phenomenology character of a conscious occurrent thought (type) is individuative: that is, in virtue of its having the phenomenal properties it has, it's a thought with a specific intentional content." (Pitt, 2011) Namely, it is impossible for different subjects to share the same content of their cognitive states, but possess different phenomenology, and verse visa.

Pitt argues that cognitive phenomenology possesses these three properties: it is proprietary, distinctive, and individuative:

> "the phenomenology of occurrent conscious thought is proprietary: it's a sui generis sort of phenomenology ... the conscious occurrence of any of the more familiar sorts of phenomenal properties is neither necessary nor sufficient for the occurrence of conscious thought ... is distinctive: that is, distinct thought types have distinct cognitive phenomenal properties. I believe this because I believe that distinct conscious occurrent thoughts are introspectively discriminable not only from other types of conscious states, but from each other. Finally ... is individuative: that is, in virtue of its having the phenomenal properties it has, it's a thought (as opposed to some other kind of mental state) with a specific intentional content." (Pitt, 2011. pp.141)

However, is the strong version of cognitive phenomenology successful? I doubt it. One essential idea for the strong cognitive phenomenology theory is that conscious thoughts possess their own cognitive phenomenology. Namely, the content of the cognitive state is instantiated by the specific cognitive phenomenology. I believe that we can divide the idea into two parts: First, the content of the cognitive state must be revealed and received by the subject through cognitive phenomenology. Second, cognitive phenomenology must be different from other phenomenology, along with the differences in content. However, I doubt both of these claims of the strong cognitive phenomenology theory.

For the supporters of strong cognitive phenomenology theory, like Pitt, conscious thoughts "cannot be identified with any other sort of conscious states, since it is possible for any such to occur in the absence of thought." (Pitt, 2011) Since "conscious thoughts" are conscious and can differ from other conscious states (we can have different thoughts, or seeing is different from hearing...), the subject will possess distinctive phenomenology associated with the conscious thoughts. Namely, conscious thoughts are identified with specific conscious phenomenology. And thus, the content of certain cognitive states is identified with specific conscious phenomenology. The supporters of this idea will argue that when the subject undergoes certain kinds of cognitive states (with certain content), the subject can instantiate the cognitive states through having conscious phenomenology. For they believe that the subject has conscious cognitive phenomenology while possessing the related cognitive state. (And the cognitive phenomenology is part of the cognitive state) Conscious thoughts have conscious phenomenology. When the subject is thinking "today has good weather," she has the conscious thought "today has good weather" and the certain cognitive phenomenology of "today has good weather" is occurring. (And she knows that she possesses the conscious thought about today's good weather) Certain cognitive phenomenology forms a specific

relation with the subject's conscious thoughts; namely, the conscious thought with specific content is identified with certain conscious cognitive phenomenology.

However, I doubt it. Even if we admit cognitive phenomenology, cognitive phenomenology cannot always be identified with conscious thought. We can consider the case of "confusing thoughts." By "confusing thoughts," I refer to the case that the subject cannot neatly clarify her thoughts. For instance, I am thinking about what I had for yesterday's breakfast, but I cannot remember it quite clearly. "I think that I had eggs for breakfast... wait a second, I am wrong about it, and I think I ate one sandwich... No, that is not yesterday's breakfast, I think I ate eggs. Well, I cannot remember it clearly, I am not sure what I had for yesterday's breakfast."

We can divide and analyze the expressed thought according to the strong cognitive phenomenology theory. When I say, "I think that I had eggs for breakfast," I possess the conscious thought that "had eggs for yesterday's breakfast," and it is signified by the specific cognitive phenomenology of "had eggs for yesterday's breakfast." Then, I switched to the idea that "I am wrong about it, and I had a sandwich." With this conscious thought, I should possess the cognitive phenomenology of "had a sandwich for breakfast." But I changed my thoughts again and turned back to the conscious thought and cognitive phenomenology of "had eggs for yesterday's breakfast." And finally, I say that, "I cannot remember it clearly, I am not sure..." Now I should have the conscious thought and the same cognitive phenomenology that "I am confused about what I had for breakfast." Thus, the expressed sentence reveals different conscious thoughts and different cognitive phenomenologies.

However, we can analyze the expressed thoughts in another way: treat it as a whole thought of "I am confused about what I had for yesterday's breakfast." In this way, I have the conscious thought that "I am confused about what I had for yesterday's breakfast," and the

solely cognitive phenomenology of “being confused about the breakfast.” It is possible to argue that the confusing thought about the breakfast is identical to the combination of the unstable, changing thoughts of “had eggs,” “had a sandwich,” and “being confused about that question.” The same is true with cognitive phenomenology. The whole cognitive phenomenology is just the combination of the different cognitive phenomenologies in the sequence. And thus, even under the different explanatory way, the subject still possesses the same conscious thought and the same cognitive phenomenology. For we do not want the same conscious thoughts be accompanied by the different cognitive phenomenology. However, if we follow the strong view of cognitive phenomenology, the confusing thought case will lead to trouble.

To make the argument more clear, here I will call it a "different ordering thought case:” the different order of sequence of thoughts which can combine a unitary, whole thought. Suppose we believe that the whole cognitive phenomenology is just the combination of the different cognitive phenomenologies in the sequence. In that case, the cognitive phenomenology of “ being confused about what I had for yesterday’s breakfast” is the combination of cognitive phenomenology of "I had eggs," “I am wrong, I actually had a sandwich," and “I cannot remember clearly, and I am confused.” However, the sequence order of the thoughts' changing matter. The subset cognitive phenomenology’s combination sequence order differs, and the whole cognitive phenomenology differs.

Analogically, the phenomenology of vision differs if the subject sees the same objects in different sequences. However, even if the subset cognitive phenomenology consists of the whole cognitive phenomenology in different sequences, the conscious thought will be the same: the subject is confused about what she had for yesterday’s breakfast. Then, according to the strong view of cognitive phenomenology theory, the same conscious thoughts should possess the same cognitive phenomenology. Thus, we have a contradiction: the sequence of

the subset cognitive phenomenology influences the whole cognitive phenomenology, but the sequence of subset cognitive phenomenology does not influence the conscious thought and its content. The possible objection can be that with the different sequences of cognitive phenomenology, it will be the different conscious thoughts. But it is hard to believe that "I like A, but I do not like B" is a different conscious thought from "I do not like B, but I like A."

In conclusion, about the different ordering of thought cases, we imagine thought A and thought B. And thought A and B, thought (A + B), can be treated as one single thought. (Just as the discussed confusing thought case.) According to the strong cognitive phenomenology theory, thought A can have its own cognitive phenomenology P, while thought B has cognitive phenomenology Q. And the whole cognitive phenomenology of thought (A + B) should be (P + Q). If we make them in a different order, making it thought (B + A), its cognitive phenomenology should be (Q + P). Then, a contradiction appears: thought (A + B) should be the same as thought (B + A), then they should possess the same cognitive phenomenology. But (P + Q) is different from (Q + P). This is obvious: it seems different to have phenomenology P and then phenomenology Q, compared to having phenomenology Q and then phenomenology P.

Here, the case of the "different ordering thought case" illustrates a situation where cognitive phenomenology might fail: while the subset sequencing thought can be treated as a distinctive conscious thought, the combination of them can be treated as a unity. The case of different ordering thoughts works only if the various confused thoughts can be combined to signify a unified confused thought. For instance, combined thoughts like "I think that I had eggs for breakfast... wait a second, I am wrong about it, and I think I ate one sandwich... No, that is not yesterday's breakfast, I think I ate eggs. Well, I cannot remember it clearly, I am not sure what I had for yesterday's breakfast." This can be treated as one single thought "I

am confused about what I had for yesterday's breakfast." The crucial part of the case lies in the possibility of combining sequencing different thoughts into one unified thought.

Supporters of the strong view of cognitive phenomenology theory can argue that the subject can possess different conscious thoughts and different cognitive phenomenologies at the same time. If so, when the subject says, "I think that I had eggs for yesterday's breakfast," she can possess the conscious thought of "had eggs for breakfast" and also the conscious thought of "being confused about yesterday's breakfast." The same applies to the cognitive phenomenology. But this is not a successful response: we do not possess another conscious thought while we are having certain conscious thoughts. Consider sensory phenomenology. It is possible for a subject to see a picture as a duck and as a rabbit at another time. But when the subject sees it as a rabbit, she cannot see it as a duck. Analogically, when the subject possesses one conscious thought and the related cognitive phenomenology, another conscious thought and cognitive phenomenology will not occur at that time. Besides, according to the cognitive phenomenology theory, if a subject has conscious thoughts, she will know it. However, in this reply, the subject does not know that she is possessing the different thoughts.

There might be a further objection that it is only the difference in the sequence of the linguistic expression. And the linguistic expression's sequence does not influence the content of conscious thought and cognitive phenomenology. When discussing the sequence of the linguistic expression of the conscious thoughts and the "real conscious thoughts," it seems that we are appealed to the distinction between the semantic intention and the subjective (or speaker's) intention. The semantic intention refers to the meaning of the language determined by the conventional usage of words, like "I think I had eggs for yesterday's breakfast," which means what is expressed by the words themselves. The subjective (or speaker's) intention refers to the subject's own intention, namely, the subject's real intention and meaning of the words. It does not necessarily accord with the original meaning of the words, like the

expression “I had eggs for yesterday’s breakfast” can actually express the subject’s thoughts that “I am confused about what I had for yesterday’s breakfast.” The subject’s expression of thoughts can be different from her real intention.

With this distinction, someone can argue that when the subject says, “Oh, I think I had the eggs for yesterday’s breakfast...” and is interrupted, what he subjectively wants to express is confused thoughts. The confused idea “I am not sure what I had for yesterday’s breakfast” lies in the explicitly expressed sentence “I think I had eggs.” However, this is not always the case: the sequence of the linguistic expression can influence the subject’s acquisition of what she is thinking about; namely, the subject can be wrong about what she is thinking about.

For instance, if I am interrupted only after I say: “Oh, I think I have the eggs for yesterday’s breakfast...” The occurring cognitive phenomenology is still that I am confused about what I had for yesterday’s breakfast, and the content of my conscious thought should be the “confusing content,” but what I take to be the conscious thought is that “I had eggs for yesterday’s breakfast.” That is possible in our daily conversation and thoughts: I am so interrupted that I lose what I thought. Then, what I have expressed is taken as what I am thinking, namely, conscious thought.

The case can be interpreted more clearly in this way: suppose I am not interrupted when I am thinking and expressing what I had for yesterday’s breakfast. Then, I can sufficiently express my thoughts: “It seems I had eggs... Maybe I had sandwiches. Ah, I think I had eggs. No, no, I am not quite sure.” In this case, my words express my thoughts: I am confused about what I had for yesterday’s breakfast. And that is also what I mean to express. However, we can consider this case again. But this time, suppose that I am interrupted only after I say: “Oh, I think I have the eggs for yesterday’s breakfast..” I should have the same thoughts and the same cognitive phenomenology, namely, “I am confused about what I had.” (That is what we

suppose in this comparison) Because I am interrupted so much that I lose what I originally thought, and the confused thought stops. The interrupted incomplete cognitive phenomenology does not tell us what the content of conscious thought is. (And I have argued above that the interrupted incomplete cognitive phenomenology should not be the cognitive phenomenology of "I had eggs.") And what I take to be my conscious thought relies on what I have expressed.

According to the strong cognitive phenomenology theory, to be able to express the idea voluntarily, the subject needs to possess the related cognitive phenomenology, namely, the conscious phenomenology that "I had eggs for yesterday's breakfast." In such cases, the conscious thoughts and cognitive phenomenology diverge. However, for the strong cognitive phenomenology theory, cognitive phenomenology identifies the conscious thought, namely, the subject cannot be wrong about what she is having as the conscious thought. I have argued against this.

Thus, if we follow the strong cognitive phenomenology theory, we can detect from some everyday cases that the assumed existing cognitive phenomenology does not necessarily identify certain specific conscious thoughts. We do not have enough ground to argue that conscious thoughts have distinctive, individuative cognitive conscious phenomenology. The cases of "confusing thoughts" and "different ordering thoughts" imply difficulties in the strong cognitive phenomenology theory: if we treat "confusing thought" as a unitary conscious thought, it is hard to find an individuative and distinctive conscious cognitive phenomenology, the one-to-one relation between cognitive phenomenology and cognitive content break: same thought can possess different cognitive phenomenology; If we believe that different order of thoughts does not make sense, then, the subject can be wrong about her own conscious thoughts even possessing cognitive phenomenology, namely, the cognitive phenomenology does not necessarily identify conscious thoughts. Thus, there is no determine

relation between the cognitive phenomenology and cognitive state's content.

In conclusion, this strong cognitive phenomenology theory holds that cognitive phenomenology is individuative and proprietary: each distinct conscious cognitive state or content is accompanied by a unique, irreducible phenomenology. I challenge this view by discussing cases about confusing thoughts and different orderings of thought. I argue that, even if we accept the existence of conscious cognitive phenomenology, it is still possible for subjects to be mistaken about their own conscious cognitive states or contents. This undermines the supposed one-to-one, individuative relationship between conscious cognitive phenomenology and cognitive content. Therefore, I conclude that the strong cognitive phenomenology theory also fails.

5.WHY APPEAL TO COGNITIVE PHENOMENOLOGY?

Cognitive phenomenology theory appeals to many philosophers. But why do they believe it? For different cognitive phenomenology theory supporters, cognitive phenomenology at least partly determines our cognitive experience. Without cognitive phenomenology, a subject's cognitive experience is not complete, and the subject cannot know their undergoing cognitive state and cognitive experience. At the very least, cognitive phenomenology is necessary for self-knowledge of related experiences and states.

Pitt claims that:

> "Our difference concerns, rather, how beliefs about experience are formed. ...My claim is that, whether or not there are beliefs about experience formed in this way, we can also voluntarily form beliefs about experiences on the basis of active introspection, and that this presupposes that we have some way of identifying and distinguishing them from each other, qua conscious." (Pitt, 2011. pp.150-151)

He further claims that:

> "computational mechanism... need for distinctive cognitive phenomenology. For, unless I know what the mechanism has 'said' - if, so to speak, the message that has magically appeared on the 'belief - board' isn't legible, or I don't know what it means - I won't know what state I'm in." (Pitt, 2011. pp.151)

I think the quoted passage can explain why some philosophers appeal to cognitive phenomenology theory to explain our grasp of "cognitive experience." For subjects to know their own cognitive experiences — that is, their conscious thoughts — they must consciously grasp certain entities. These conscious entities partially constitute the basis (or cause) for their self-knowledge. If we accept the truth of physicalism about the mind, then the subpersonal computational mechanisms are the ultimate cause of this self-knowledge. However, as Pitt argues, proponents of cognitive phenomenology maintain that computational mechanisms alone are insufficient to account for a subject's awareness of their own cognitive experiences and conscious cognitive states. In this view, cognitive phenomenology is required as an intermediary between the physical basis and the subject's conscious access. This intermediary also plays a causal role in the expression of conscious thoughts: without it, it is unclear how subjects could generate or articulate their conscious thoughts. To produce thoughts, the subject must consciously grasp something — and cognitive phenomenology provides the medium for doing so.

The case of unsymbolized thinking can explain this view. Unsymbolized thinking is "the experience of an explicit, differentiated thought that does not include the experience of words, images, or any other symbols." (Hurlburt&Akhter,2008. pp.1366) This kind of thinking happens under situations like "participants go about their normal lives and are instructed to attend to, take notes about, and later report on the experiences they were having when a

random beep goes off." (Krempel, 2023. pp.608) It happens like this:

> "One example is the experience reported by Abigail, who said she was wondering whether her friend Julio would be driving his car or his pickup truck when giving her a ride that afternoon. Another example is that of Evelyn, who was watching a commercial for NetZero, an internet company, and 'wondered how much cheaper that is than Cox Cable'. These thoughts were reportedly experienced with no words or images." (Krempel, 2023. pp.608)

Krempel argues that "...It is thus simpler to assume that subjects report unsymbolized thoughts because that is what they were experiencing, and not because they were trying to make sense of their behavior." (Krempel, 2023. pp.612) The subjects do not talk to themself about what they are thinking about before the beep, but they can give a concrete answer of what they are thinking about after the beep and when asked.

The "unsymbolized thinking" case indicates the relation between cognitive phenomenology and the expression of our conscious thoughts: according to cognitive phenomenology theory, the occurring cognitive phenomenology enables the subject to express conscious thoughts. Thus, the expressions of conscious thoughts, like words and behaviors, are partly caused by cognitive phenomenology. Namely, cognitive phenomenology is necessary for the expression of conscious thoughts.

However, it is doubtful that cognitive phenomenology is necessary for the expression of conscious thoughts. As I have argued above in the machine problem, even if we assume the existence of cognitive phenomenology, it is unnecessary to explain the subject's expression and behavior: the subject's understanding directly relies on the subpersonal mechanism. The same can be applied to the expressions and behaviors that instantiate the "conscious thoughts."

However, cognitive phenomenology theorists can reply that without cognitive phenomenology, the subject would only possess sensory phenomenology. If we talk explicitly and have an inner voice... all these cases only show the sensory elements. Without cognitive phenomenology, the subject can only know how these things appear to us in a sensory way. Namely, the subject does not know its cognitive content. For cognitive phenomenology theory, without cognitive phenomenology, there is no real knowledge of "cognitive content." Also, cognitive phenomenology is conscious. Thus, the subject must consciously know the content of conscious thoughts. When the subject expresses her thoughts, we will say that she knows her thoughts' content. Cognitive phenomenology exists as a knowable object. However, it is not necessary for the subject to know her cognitive content (for example, having conscious thoughts) through the knowable phenomenal objects. If a subject can express her thoughts in any way voluntarily, it is hard to deny the acquisition of her thoughts. Also, it is reasonable to argue that only if the subject knows something can she express it as conscious thoughts. However, it is not the case that "knowing" must appear as conscious phenomenology, and then the subject can express her cognitive content.

Consider a case: I am thinking about a complicated philosophical problem of whether there is cognitive phenomenology. Suddenly, someone asked me if I could give him a cup of water. I reacted to his request and got him a cup of water. Meanwhile, I am still thinking about philosophical problems. Because I am continuing to think about the philosophical problem, the occurring conscious phenomenology should indicate the content of the philosophical problem. However, as I successfully react to other people's requests, no one can deny that I understand the request. Then, I am also in a cognitive state with its content of understanding the request of getting him water. And if I act according to the request, it is unreasonable to say that I do not know what I am doing, even if I do not possess conscious thoughts about getting water.

In conclusion, for cognitive phenomenology theorists, cognitive phenomenology can explain how subjects know their cognitive experience and cognitive states, and it helps explain the real cognitive content of cognitive states and cognitive experience. There lies a principle: something exists as a graspable object. The subject gets access to the object and knows it. However, this principle is not always necessary: for instance, there is not necessary true that Pegasus exist then we can know something about it. The Pegasus can be purely descriptive or sensory related, but not something distinctive being Pegasus. I can form a linguistic or image description of Pegasus, but it does not necessitate the individuative and proprietary Pegasus entity.

6. IS SENSORY PHENOMENOLOGY THEORY SUCCESSFUL?

6.1 two versions of reducibility theories

In the previous sections, I have argued that some attempts to argue for cognitive phenomenology theory fail. According to the weak cognitive phenomenology theory, it is not necessary to explain a subject's cognitive state and its content through cognitive phenomenology. Even if we assume the existence of cognitive phenomenology, weak cognitive phenomenology remains problematic. As for the strong cognitive phenomenology theory, we can find cases that challenge the key idea of strong cognitive phenomenology: the subject can be wrong about what she is consciously thinking despite possessing distinctive and individuative cognitive phenomenology.

Thus, I believe that cognitive phenomenology is not capable of answering their own questions. It is neither necessary nor sufficient to explain a subject's cognitive states and content through these phenomenologies, and cognitive phenomenology cannot successfully

explain a subject's self-knowledge of their cognitive states and content. Following Siewert's terminology, the "variation" idea fails. Then, it is natural for us to examine the opposite reducibility idea: all the phenomenology of cognitive states can be reduced to the sensory phenomenology. Since the opposite variation idea fails, should we hold the reducibility position?

First, I need to distinguish two kinds of reducibility ideas: the strong and weak reducibility theories. The strong reducibility theory refers to the idea that all the relevant key properties of cognitive phenomenology theory would remain after reducibility. Namely, the sensory phenomenology of cognitive states would possess the key properties of the reduced cognitive phenomenology. As I mentioned in the previous section, both strong and weak views of cognitive phenomenology argue that cognitive phenomenology plays a role in enabling the subject's self-knowledge of the content of cognitive states and indicating the subject's cognitive grasp of that content. Namely, the subject cannot know her cognitive state and its content without conscious cognitive phenomenology. And conscious cognitive phenomenology at least partly indicates the subject's cognitive grasp. For instance, possessing the conscious cognitive phenomenology of understanding French partly constitutes the subject's understanding of French. If she does not possess the cognitive phenomenology, she does not understand the French. Thus, sensory phenomenology should also possess these two properties. Thus, the strong reducibility theory requires the cognitive states related sensory phenomenology to enable the subject to know its cognitive states and content, and indicate the subject's cognitive grasp of the content.

As for the weak reducibility theory, it only requires the cognitive-related conscious phenomenologies to be sensory. I believe that Jesse Prinz offers a good example of the weak reducibility theory. Prinz defines weak reducibility theory below:

> "Restrictivism (Prinz uses the terminology "restrictivism" and "expansionism," and these two ideas are roughly similar to the "reducibility" and "variation." And it is not my task to explain the delicate difference here) is true if and only if, for every vehicle with qualitative character, there could be a qualitatively identical vehicle that has only sensory content." (Prinz, 2011, pp. 176)

By vehicle, Prinz means the token particulars that have representational content. And the quality refers to "how it feels when it is conscious - what philosophers sometimes call phenomenal character." (Prinz, 2011, pp. 175) To interpret the weak reducibility theory, it only requires the conscious phenomenology should always be sensory. And importantly, there can be sensory-only phenomenology. Or, pure sensory phenomenology. The cognitive states and content can relate with the sensory phenomenology, and the sensory phenomenology can play the role of informing the subject of her own cognitive content. However, it does not constitute cognitive content. What is important is not how the cognitive states appear to the subject, but "whether it feels different than sensory activity." And according to the reducibility theory, all conscious phenomenology should be sensory. In weak reducibility theory, the cognitive state can influence sensory phenomenology through the "top-down" influence:

> "concepts can be conscious, because, in occurrent acts of conceptualization, we use the high-level representations that are stored in long-term memory to construct temporary mental images of what our concepts represent. These temporary images can be conscious because imagery can be generated using intermediate-level representations. I think we should regard images generated from long-term conceptual memory as occurrent tokens of the stored concepts used to generate them. Thus, I think that concepts can be conscious, and, in this sense, there is such a thing as cognitive phenomenology." (Prinz, 2011, pp.181)

According to the weak reducibility theory, the cognitive state (like the "concept") can cause sensory phenomenology through the subpersonal mental mechanism. Since sensory phenomenology is related to cognitive states, it can be called cognitive phenomenology, and cognitive phenomenology can be reduced to sensory phenomenology.

I have introduced two versions of reducibility theories. I believe that both theory involves their own fallacy. In the following sections, I will point out their fallacy and disadvantages. First, I will introduce two arguments against the reducibility theory: the case of imageless thoughts and the case of languageless thoughts. I will also mention the reply of the reducibility theorists to these arguments. However, their replies do not satisfy the requirement of strong reducibility theory, and the weak reducibility theory needs further consideration regarding the relation between cognitive states and sensory states.

6.2 some objections to reducibility theory and their replies

Here I will introduce two cases against the reducibility theory: the case of imageless thoughts and the case of languageless thoughts. (I brought them from Prinz's 2011 paper.) Each case is introduced for the cognitive phenomenology theorist to dent the reducibility theory, and reducibility theorists have their own replies.

6.2.1 the case of imageless thoughts

It is a common idea that a mental image often accompanies thought. For example, when a subject imagines Pegasus, she can imagine a picture of Pegasus as a white horse with two bird-like wings. However, it is also common to argue that the thought can exist without the

mental image. For example, it is highly possible that the person who claims that they can vividly imagine something cannot report the delicate facts, like the number of books on the imagined bookshelf. Thus, it is reasonable to argue that when people believe that they possess mental images, they are actually using the linguistic description, which can leave some details. However, the reducibility can reply that the images are blurred themselves.

Another argument is that the object of the thought is not the image. The image may change while the thought is about the same object. Thus, if we assume that the "object of thought" or the "content of thought" can exist prior to the related mental image, then it is possible that thoughts can exist without the mental image. What is the "object of thought?" (or content of thought) This term refers to the entity that our thoughts are directed to.

The key assumption of this idea is that there exists a prior content of the object of thought. Then, it means that the entity that our thoughts are directed exists before our thoughts. The entity exists prior, then the subject can possess the thoughts. Analogically, only if there is a cup before us can we grasp it. However, we can argue that this "prior object of thought" does not exist. The object of thought does not necessarily assume the existence of the prior object of thought. The "object of thought" indicates that our thoughts are directed to something, like the thoughts of "I am thirsty" is directed to my particular bodily state. And to say thoughts are directed to a particular token state can be rephrased as thoughts possess a particular content. Namely, we can say that "the object of thoughts" means the content of thought: the thought is about something. But to argue the thoughts possess a particular content does not require the existence of the "prior object of thoughts." For example, the stored concepts can cause the subject to linguistically express something through the subpersonal mental mechanism. The sounds and linguistic words produced can indicate the content of thoughts. Similarly, Prinz mentions that:

> "...a complex set of norms and expectations... may affect phenomenology. For example, if someone who isn't chair tries to take control, witnesses may feel annoyed or outraged. But, the totality of these complex expectations and norms will not be brought fully into consciousness at each moment. The verbal label ('that person is chair') can serve as a mental shorthand, consolidating a complex concept into a single sound ('chair'). Words serve as placeholders for ideas that cannot be experienced all at once, and, through habit, inner speech becomes a way of registering complex thoughts in consciousness." (Prinz, 2011, pp. 186)

The norms and expectations exist as the unconscious background of thoughts, and these mental entities do not exist as mental objects. (Thus, there no need to be the prior object) But these ideas can be instantiated through linguistic expressions.

6.2.2 the case of languageless thoughts

The previous section also mentions that, even without a mental image, the thoughts may be accompanied by "verbal imagery," namely, linguistically expressed words. (it can be expressed explicitly or exist as inner speech) Then, a further argument against the reducibility theory is the possibility of cases involving "languageless thoughts." The subject can possess the thoughts and know it even without the verbal imagery. Thoughts often suddenly occur to the subject "in a way that doesn't seem like the inner rehearsal of words or construction of images." For instance, the subject suddenly realizes that he left his briefcase at home while he was driving to work.

But this "sudden realization" cannot convince reducibility theorists. For example, Prinz offers doubts on the introspection of the subject's experience:

> "First of all, from introspection alone it's far from obvious that there is any conscious thought prior to the sentences we utter in rapid conversation. We simply hear ourselves replying to our interlocutors. And in the case of sudden realizations, it's far from obvious that the phenomenology outstrips imagery and inner speech." (Prinz, 2011, pp.188)

In our daily experience, it is almost impossible to introspect the exact sequence of the assumed conscious thoughts and the expressed words. It is fine to argue that the subject possesses conscious thoughts and conscious phenomenology because of possessing explicitly or implicitly expressed sentences.

But the deniers of reducibility theory can further argue that conscious thoughts are not necessarily accompanied by linguistic expression. One instance is the case where subjects can change their interpretation of words after learning them. If a person does not understand French, "il y a" would be a strange character composition, but after learning, he can know its meaning. The interpretation of the words changes, while the deniers of reducibility theory believe that the sensory element remains the same, as what we see is the same words.

Reducibility theorists can argue that sensory phenomenology changes. One argument can be the change in the attention-aspects. Bence Nanay distinguish the "pre-attentive state" and the "post-attentive state," as we need to apply our "attention ability" to what we see so that we can perceive properties from objects or recognize something. In the "pre-attention" case, the same thing is represented to us and "forms the same image" on our retina. Since we have the same "image" of an object, it seems that then we will obtain the same properties about the appearance of the object. However, when we have attention to the object we see or perceive, we will pay more attention to some properties of the image of the object, or we first notice these properties rather than others. Nanay mentions the case of observing pine trees:

> "After I have familiarized myself with various features of pine trees, when I see the pine tree I am likely to attend to different features than the ones I attended to before. I will attend to, say, the shape of the pine cones, the color of the foliage, the diversity of the ways the needles are bundled in fascicles, etc. I have not attended to any of these features before, as, according to the example, I didn't know much about any of them: I was just looking at a tree without knowing much about the specifics of pine trees." (Nanay, 2011, pp.)

To explain the interpretation case, we can argue that without knowing French, "il y a" would only be the strange composition of four irrelevant characters. The subject pays similar attention to the four separate characters. However, after learning French, the subject will not pay attention to each single character, but he will focus on the words as a unit. Thus, though the sensory elements remain the same, as the same things are reflected on the subject's retina, the whole sensory phenomenology changes. Namely, the "pre-attentive state' keeps the same, but the "post-attentive state" changes.

6.3 Do the above responses support the reducibility theory?

In the previous two sections, I introduced the arguments against reducibility theory and the possible reducibility theorists replies. Although I sympathize with these replies, I believe they do not support the reducibility theory effectively. These replies do not satisfy the key properties of the strong reducibility theory, as we can only gain access to sensory-related phenomenology, making it difficult to distinguish between cognitive states and sensory states within the weak reducibility theory, since all sensory states seem to involve cognitive elements.

The mentioned replies to the case of imageless thoughts and languageless case both reply on the subpersonal mental mechanism. In the case of imageless thoughts, the mental causal process produces verbal imagery, namely, linguistic expressions; and in the case of languageless thoughts, the mental causal process influences the subject's attentive condition. The subpersonal mental mechanism mentioned above, namely, the mental causal process, only sufficiently indicates the relation that some kinds of complex subpersonal mental processes cause certain sensory phenomena. Or, we can say that some cognitive states cause the sensory phenomena.

However, the casual relation does not indicate (a fortiori does not guarantee) that the subject can get access to the causation by consciously having the sensory phenomena. For instance, my anger may be triggered by someone's improper behavior (as I have the norm that this is wrong). But what I am necessarily conscious of is my anger, not my dissatisfaction about such improper behavior. And it is possible that I am not even realizing that I am dissatisfied with such behavior and possessing such norm.

However, according to the strong reducibility theory, subjects should get access to their cognitive states and cognitive content through the sensory phenomenon. This essential property of strong reducibility theory is not satisfied by the previously mentioned replies that rely on the subpersonal mental mechanisms. It is a similar condition to the property that the subject should show in the real cognitive grasp of the cognitive content: we can only directly get access to the sensory-related phenomenology. By the caused sensory phenomena, what subjects directly know is their sensory states, but not the cognitive states. Although subjects can infer from sensory phenomena what their current cognitive states are, this inference is not necessarily true, and it is not directly knowable to the subjects themselves. Thus, the mentioned replies to the disputers of the reducibility theory do not necessarily support the strong reducibility theory.

Then, let us examine the weak reducibility theory. The weak reducibility theory only requires the conscious phenomenology to be all sensory. And there should be pure sensory phenomenology. This requirement is compatible with the above replies to the counterarguments against the reducibility theory. However, I believe that there is one question that requires further clarification: the distinction between cognitive states and sensory states. And this question threatens the existence of "pure sensory phenomenology."

In the above arguments, sensory phenomenology requires subpersonal mental processes to cause the sensory phenomena. Or, the sensory phenomena are the subpersonal mental processes' instantiation. Additionally, the "cognitive states," such as hidden, knowable social norms or expectations (as presented in the previous case), influence the sensory state through a top-down process, whereby certain "cognitive" subpersonal mental processes cause changes in the sensory state. Thus, we can infer that:

i) Sensory phenomena are partly dependent on subpersonal mental processes;

ii) Cognitive states are instantiated by the subpersonal mental process.

Two states are dependent on the subpersonal processes, and their output is partly intertwined; thus, I believe that it is possible that the cognitive state and sensory state are intertwined. For instance, unconscious expectations can influence a subject's sensory phenomena. The complex subpersonal mental processes instantiate the influence. (Suppose that we admit physicalism.) Since "social expectations" are typically regarded as cognitive constructs, we can consider the expectation-related mental processes cognitive processes. And the "cognitive processes" are instantiated on the conscious level: they result in the change of the sensory phenomena. Under such circumstances, one important thing to note is that these cognitive mental processes can include those directly related to sensory phenomena.

The cognitive processes can influence the sensory phenomena, namely, influence the sensory phenomena-causing processes, or some of these cognitive processes are part of the sensory phenomena-causing process. (If A directly causes Q, P can influence Q, then I think at least part of P is part of A, or part of P can influence A.[4]) Thus, the cognitive processes at least can be part of the ultimate cause of the sensory phenomena. Since we can treat both cognitive processes and sensory processes as part of the cause of sensory phenomenology, it remains an important problem to separate these processes into two distinct categories.

And with the participation of cognitive processes, it is reasonable to argue that sensory phenomenology includes something cognitive. Then, it would be problematic to argue that all conscious phenomenology is sensory, as the top-down processes indicate the cognitive states' participation, and the sensory phenomenal change indicates the instantiation of cognitive states. (As cognitive phenomenology is not necessary for the instantiation of cognitive states) Thus, although I agree that there is no proprietary, individuative, and distinctive cognitive phenomenology, the weak reducibility theory's argument that all conscious phenomenology is sensory requires additional arguments. The claim that all conscious phenomenology is sensory does not preclude the possibility that cognitive states participate in or influence sensory states. The ambiguity between sensory states and cognitive states makes the statement that all conscious phenomenology is sensory also ambiguous. Although some philosophers, like Prinz, can argue that the weak reducibility theory only requires that there can be pure sensory conscious phenomenology, the ambiguity between sensory states and cognitive states raises doubts about whether there exists "pure sensory content." As I argued before, the top-down processes of sensory and cognitive states are intertwined, it is hard to clearly distinguish them.

In conclusion, I have sympathy with the sensory phenomenology theory. However, I

[4] This is not an a priori principle. However, due to the passage limits, I apply it directly.

believe neither strong nor weak reducibility theory can successfully answer the question of how subjects can know and grasp their cognitive states and contents. In the case of imageless thoughts and the case of languageless thoughts, the reducibility theorists' reply does not satisfy the requirement of strong reducibility theory; and the weak reducibility theory needs further consideration about the relation between the cognitive states and sensory states. The requirement of "pure sensory phenomenology" is doubtful. And the further problem would be that, if there is no cognitive phenomenology and pure sensory phenomenology, what is the conscious phenomenology of cognitive states?

7. THE CONCEPT OF CONSCIOUS COGNITIVE STATE IS PROBLEMATIC

In the preceding sections, I have argued that neither the cognitive phenomenology theory nor the sensory phenomenology theory is successful. However, if one seeks to argue that neither type of conscious phenomenology can adequately explain how subjects know and grasp their conscious cognitive states (such as conscious thoughts), then the very concept of a "conscious cognitive state" must be called into question. This concept presupposes that subjects have access to their cognitive states in a conscious manner—specifically, through conscious phenomenology. In other words, by undergoing either sensory phenomenology or cognitive phenomenology, the subject is thereby in a conscious cognitive state. To have conscious phenomenology, on this view, is to have conscious cognitive states.

However, as I have argued in the previous sections, the theory of conscious phenomenology is unconvincing. The existence of cognitive phenomenology is highly questionable, and sensory phenomenology fails to adequately explain how subjects can access

and know their conscious cognitive states. Therefore, we cannot gain access to or knowledge of conscious cognitive states through conscious phenomenology. Of course, one might be aware of the presence of sensory experiences and infer from them the existence of corresponding cognitive states. Yet in such cases, the subject does not directly access or know these cognitive states. Conscious cognitive states, by definition, refer to mental entities that are directly accessible and knowable by the subject: according to the cognitive phenomenology theory, to be in a conscious cognitive state is to undergo cognitive phenomenology; according to the sensory phenomenology theory, it is to undergo sensory phenomenology. And these conscious phenomenologies are part of the "conscious cognitive state." However, if neither form of phenomenology can account for such direct access, the notion of conscious cognitive states becomes deeply problematic.

If we deny the existence of cognitive phenomenology and argue that sensory phenomenology is not necessary to explain conscious cognitive states, then the very foundation of the notion of a conscious cognitive state is undermined:

P1: If a mental state is conscious, then it must be grasped by the subject through conscious phenomenology.

P2: Conscious cognitive states cannot be accessed or known through conscious phenomenology.

C: Therefore, conscious cognitive states are not conscious.

Thus, rejecting both cognitive phenomenology and sensory phenomenology leads to a further implication: the rejection of the very concept of the "conscious cognitive state." I contend that this concept is problematic. Due to limitations of space, I will briefly outline my reasoning as to why the concept of a conscious cognitive state should be called into question.

What is the concept of a “conscious cognitive state”? When subjects engage in cognitive activities such as thinking, understanding, or imagining, they are in particular cognitive states. These cognitive states are assumed to be directly accessible and knowable to the subject at the conscious level. While it may be reasonable to argue that certain aspects of these cognitive states remain unconscious, these unconscious components are not considered entirely separate from the conscious ones. Rather, both the conscious and unconscious elements together constitute what is referred to as a conscious cognitive state, forming an individuated mental entity.

This entity allows the subject to distinguish conscious cognitive states from other types of mental phenomena—such as purely sensory experiences or qualia—and to grasp and recognize the individuated conscious cognitive state as such. In other words, by being in a conscious cognitive state, the subject not only undergoes the relevant cognitive process but also becomes aware of it and understands its content. The subject is presumed to first possess the conscious cognitive state and then, through conscious phenomenology, becomes aware of its content.

For example, if I am in a conscious cognitive state involving a thought about proposition P, I am not merely thinking about P; I am consciously thinking about P and aware that I am doing so. In this case, I possess the mental substance of "consciously thinking about P," which is taken to be both accessible and knowable in virtue of its conscious nature.

However, the assumption of such a mental substance is problematic. These supposed mental substances are thought to represent the content of our cognitive states—such as what one is thinking about. Yet, as I have argued earlier, I reject the existence of individuative cognitive phenomenology. What we are consciously aware of, I contend, is limited to sensory-related phenomenology. Subjects perceive sensory elements—such as language,

imagery, and other perceptual representations—which serve as indicators or tokens of their "cognitive content." Based on these sensory cues, the subject may infer that they are in a particular cognitive state. However, the presence of a sensory token indicating cognitive content does not entail the prior existence of a mental substance such as "consciously thinking about P."

To clarify this distinction, we can differentiate two modes of describing the relationship between cognitive states and sensory tokens of cognitive content:

> Mental Substance First: A mental substance corresponding to the cognitive state exists prior to and causes the appearance of a sensory token of its content. The subject consciously possesses and grasps this mental substance, and thereby also accesses the associated sensory token.

> Sensory Token First: The subject consciously experiences and grasps the sensory token of cognitive content, and subsequently infers the existence of an underlying mental substance corresponding to the cognitive state—despite having no direct access to it.

The second explanation is the position I adopt in this paper. That is, what "goes on" in thinking—unlike what is manifest in its expression (whether articulated or not)—is not a sequential array of clearly delineated stages or phrases in a process of thought. In short, we have, one might say, the form of thinking, but not its substance. What is available to us, as

subjects, are sensory-related expressions—such as mental imagery, language, or other perceptual representations. These expressions provide a phenomenological trace or surface-level description of our cognitive activity: they show how we think or how we engage in a cognitive process.

For example, when I consider how I work through a mathematical proof, I can present my notes, diagrams, or written steps of reasoning. I do not deny that unconscious mental processes may underlie and cause these expressive behaviors. However, these underlying processes should not be identified with a substantial mental entity such as "thinking about something." It is plausible that unconscious mental mechanisms generate behavior and expressions that can be described as "thinking about P." But this does not warrant positing the existence of a mental substance—namely, a fully-formed conscious state of "thinking about P"—as the direct cause of such expressions.

In short, I maintain that the concept of a "conscious cognitive state" is problematic. It presupposes the first model of explanation (mental substance first), wherein a substantial mental state exists prior to and gives rise to the conscious manifestations of thought. In contrast, I argue that the second model (sensory token first)—where conscious access is limited to sensory tokens, and any inference about underlying cognitive states remains indirect—is more coherent and philosophically defensible.

8. CONCLUSION

In this thesis, I primarily argue that the theory of cognitive phenomenology fails. Moreover, I contend that rejecting cognitive phenomenology does not necessitate accepting the sensory phenomenology theory (i.e., the reducibility view).

I begin by addressing the theory of weak cognitive phenomenology, which holds that cognitive phenomenology is real but not proprietary. I examine supporting arguments, such as Strawson's rich experience argument and Shields' intensity argument. I argue that both are unconvincing. Rich experience can occur in the absence of conscious cognitive phenomenology, and the intensity of phenomenological experience can be explained through the subjects' observable behavior without positing a distinct cognitive phenomenology. Strawson further introduces the "machine problem," asserting that only cognitive phenomenology can explain the experiential difference between humans and experienceless machines. However, I argue that under the weak cognitive phenomenology framework, this distinction is not sufficiently accounted for.

Next, I turn to the theory of strong cognitive phenomenology, as outlined by authors such as Pitt. This view holds that cognitive phenomenology is individuative and proprietary: each distinct conscious cognitive state or content is accompanied by a unique, irreducible phenomenology. I challenge this view by discussing the confusing thought case and cases involving different orderings of thought. I argue that, even if we accept the existence of conscious cognitive phenomenology, it is still possible for subjects to be mistaken about their own conscious cognitive states or contents. This undermines the supposed one-to-one, individuative relationship between conscious cognitive phenomenology and cognitive content. Therefore, I conclude that the strong cognitive phenomenology theory also fails.

I suggest that the underlying motivation behind many philosophers' defense of cognitive phenomenology lies in the assumption that in order for subjects to know and grasp their own cognitive states and contents, there must be an introspectively accessible object—namely, conscious cognitive phenomenology. However, I challenge the legitimacy of this assumption. It is not a self-evident or axiomatic principle that cognitive self-knowledge requires a phenomenally graspable substance.

Following this, I argue that the failure of cognitive phenomenology theory does not compel us to embrace sensory phenomenology theory, or the reducibility theory. In particular, I examine cases of imageless and languageless thought, where no clear sensory phenomenology accompanies the cognitive state. These cases pose problems for the strong reducibility thesis, which claims that all conscious cognition reduces to sensory phenomenology. Even the weak version of reducibility, which assumes the existence of "pure sensory phenomenology," remains problematic, as it relies on an unclear distinction between purely sensory and purely cognitive elements—one that demands further argumentation.

Finally, I consider a broader implication: the problematic nature of the concept of the "conscious cognitive state" (e.g., conscious thought). If both cognitive and sensory phenomenology theories fail, then it becomes doubtful that such cognitive states are truly conscious in a direct, introspectively accessible way. Instead, I propose that subjects infer the existence of cognitive states from sensory-related elements—such as mental imagery or internal linguistic representations—rather than directly accessing or grasping them as conscious mental substances.

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