

**A Critical Assessment of the Higher Order**  
**Thought Theory of Consciousness.**

**BY**

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### **Abstract**

*David Rosenthal's higher-order thought theory is a theory of state consciousness. The HOT theory posits that a form of higher-order awareness is required for a subject to be conscious of the mental states they bear. Higher-order awareness on this theory takes the form of a thought. The driving force behind the theory is the intuition that a conscious state is a state that a subject is aware of themselves as being in. The wide intrinsicity view advocated by Rocco Gennaro and 'complex' self-representationalism advocated by Uriah Kriegel are contemporary alternatives to Rosenthal's HOT theory. The central thesis presented in this dissertation argues that, despite objections presented by both Gennaro and Kriegel, we are not given sufficient reason to abandon Rosenthal's HOT theory.*

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## **A Critical Assessment of the Higher Order Thought Theory of Consciousness.**

The central thesis presented in this dissertation argues that two contemporary theories of consciousness are not at an advantage over David Rosenthal's higher order thought theory of consciousness. These theories are Rocco Gennaro's wide intrinsicity view and Uriah Kriegel's 'complex' self-representational theory of consciousness. Both Gennaro and Kriegel have presented objections aimed at higher-order theories of consciousness, with a view to establish that their own theories of consciousness are superior than that of Rosenthal's HOT theory of consciousness. Both Gennaro and Kriegel claim that their theories are more adept to dealing with the objections they present over the HOT theory. In this dissertation, I explore the theories of consciousness advocated by Gennaro and Kriegel with a view to show that these are not superior theories of consciousness. I do not wish to argue that Rosenthal's HOT theory of conscious is superior. My intention is to show that both Gennaro and Kriegel fail to give us sufficient reason to abandon Rosenthal's HOT theories. This dissertation is made up of five sections. The first section explicates Rosenthal's HOT theory of consciousness. I analyse common objections of misrepresentation and targetless HOTs to give an account of how Rosenthal's nuanced position deals with these objections. It is through doing this that we will be able to show that the claims of a superior theory from Gennaro or Kriegel are not well-founded. The second section presents Rocco Gennaro's wide intrinsicity view (WIV). It is once we understand how Gennaro construes the structure of consciousness on his theory, which is outlined in this paper, that we can move onto the objections that he presents which is the focus of the third section. Gennaro contends that the WIV is better suited to deal with objections of the 'problem of the rock,' misrepresentation and targetless higher-order states, than Rosenthal's HOT theory. In the third section, I will show how Gennaro's responses cannot adequately render the WIV invulnerable to these objections. The fourth section will move away from the WIV and focus on the 'complex' self-representational theory of Uriah Kriegel. In the fourth section I will expound how consciousness is

construed on Kriegel's theory of consciousness. This will lead onto the fifth section, where I analyse the objections Kriegel presents against the HOT theory. Throughout these five sections I will argue that, those of us who are persuaded by Rosenthal's HOT theory, are not given sufficient reason to abandon the HOT theory by either Gennaro or Kriegel. I shall now move onto the first section which presents Rosenthal's HOT theory.

### **Rosenthal's Higher-Order Thought Theory of Consciousness**

The focus of this section is to lay out Rosenthal's version of HOT theory. I will explain how the theory works and what the intentions are of those who advocate the theory. To do this, I shall present the conditions that are accepted by those who advocate a Rosenthalian view. Through doing this, how consciousness is viewed by Rosenthal and advocates of a Rosenthalian theory will become clear. I will elucidate why HOT theory is a favourable theory and why it has been accepted as one of the major theories of consciousness. Following this, I will present some of the objections given against the HOT theory and then present how Rosenthal responds to these objections. The overall aim of the section is to present a clear picture of what needs to be accepted for Rosenthal's version of HOT to be sound and guarantee that the theory stands firm against what have been considered as substantial worries about the theory. By the end of this section I will show why Rosenthal's HOT theory is a plausible theory of consciousness.

HOT theory posits that a form of higher-order awareness, which takes the form of a thought, is directed at the first-order mental states which a subject bears. Higher-order awareness is a necessity for consciousness, as it is only when the subject is aware of a certain mental state that the subject is conscious of it. This idea has been neatly labelled as the Transitivity Principle and shows how HOT theory explains state consciousness in transitive consciousness terms. For Rosenthal, first-order mental states have either an intentional or a qualitative aspect to them that exists regardless of whether that state is conscious or not. If a first-order state that has a qualitative aspect comes into consciousness, what results is what is generally considered as phenomenal consciousness. Rosenthal

does not use this term as he believes that it is too terminologically loaded. However, when we talk of conscious qualitative states, the result is the same. The subject has an experience that has a qualitative feel to it. This is also referred to as the what-it-is-likeness of an experience. If a first-order state has an intentional aspect, such as a thought and this comes into consciousness, the subject is aware of the content of this intentional state. On the HOT theory, consciousness is not an intrinsic property but an extrinsic property of mental states. Thus a first order state cannot possess the property of being conscious without there being something other, like another mental state, involved in the process of the first-order state coming into consciousness. This is why it is a requirement for the first-order state to be represented by a higher-order thought. To draw a crude analogy, the higher order thought acts as a spotlight in a dark field. What the spotlight is directed at is what the subject consciously experiences. This is because the spotlight is analogous to a HOT that makes the subject aware of specific first-order states. That which remains in darkness is unexperienced as the subject is not aware of being the bearer of that state. Therefore, on the HOT theory, consciousness cannot be an intrinsic property to all mental states. Rosenthal doesn't think consciousness can be an intrinsic property of conscious states. So all theories of consciousness that construe consciousness as an intrinsic property are wrongheaded, for Rosenthal. He takes the definition of intrinsic property to be "if something's having it does not consist, even in part, in that thing's bearing some relation to something else."<sup>1</sup> His argument is that it is only if consciousness is an extrinsic property that a theory will have an articulated structure. If this structure is not in place then consciousness is simple and unanalysable. If this is the case, argues Rosenthal, then we would not be able to progress our understanding of the mind. Rosenthal takes this as reason enough to regard consciousness as an extrinsic property of mental states.

Rosenthal's understanding of mental qualities differs from what he calls consciousness-based theories of mental qualities. He argues that the consciousness based approach restricts our understanding of

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<sup>1</sup> Rosenthal, D.M., (1997) – Page 736

mental qualities to only first person access to what we are conscious of. Opposing this, Rosenthal advocates a perceptual-based approach in which mental qualities occur in conscious and non-conscious perceiving.<sup>2</sup> As this is the case, there is a quality-space for all the perceptual properties that exist. This quality-space can be thought of as a web that connects existing perceptual properties. The perceptual properties group together like loose families. The perceptual property of red would be closer to the property of orange over green. There is also a quality-space for mental qualities and this interacts with the quality-space of perceptual properties. Rosenthal states of the interaction between the two that “quality-space theory does not establish correspondence between the two spaces by comparing them. Rather, it extrapolates from the quality space of perceptible properties to determine the space of the corresponding mental qualities.”<sup>3</sup> What Rosenthal is saying here is that for every environmental difference that we can discriminate there are corresponding mental qualities. It is through differing mental qualities that one distinguishes between worldly states. It is not the case that the mental qualities are determined by the perceptual properties due to there being a resemblance between the two qualities. To reiterate the importance of viewing mental qualities in this way, consciousness is not necessary for one to have first-order states that have mental qualities.

Alongside the notion that consciousness is an extrinsic property of mental states, there are three important conditions that need to be elucidated. It is clear that on HOT theories the higher-order state is usually unconscious in nature. Rosenthal stated this when first formulating his version of HOT theory.<sup>4</sup> He argues that if we are to follow the Cartesian idea that all mental states are conscious, the idea that another state makes the lower order state conscious would lead to a vicious regress. Rosenthal would say that consciousness consists in, in normal circumstances, the first- order state being represented by a HOT, at which point the subject becomes aware that they are currently in that first-order state. It is possible for the HOT to become conscious through being represented by another

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<sup>2</sup> Rosenthal, D.M., (2010)

<sup>3</sup> Rosenthal, D.M., (2010) – Page 378

<sup>4</sup> Rosenthal, D.M., (1986)

unconscious HOT or a third-order thought. For Rosenthal, this is what happens when we introspect about being in a certain state. An example of this is if I were looking at a strawberry. A first-order state would be 'RED' and the higher-order thought would be 'I'M IN A RED PERCEPTUAL STATE'. The third-order state would be making the subject aware of their conscious experience, so would be along the lines of 'I'M IN A STATE THAT'S MAKING CONSCIOUS A RED PERCEPTUAL STATE.' Alongside the HOT generally being unconscious, it is also a condition that the presence of a first-order state cannot seem to be caused by an inference. This is a stipulation that Rosenthal puts in place to rule out the possibility of conscious inferences. This is to avoid the notion that one's unconscious motives become conscious when the subject realises why they did X or Y, through psychoanalysis. It is also the case that one's awareness of their first-order state should not seem causally mediated. It may in fact be mediated but it cannot seem to the subject to be that way. When one tastes a strawberry, the experience seems to be caused directly by eating the strawberry. In this sense the experience is immediate to us. Another condition is the HOT has to assert to the subject that they are in a certain first-order state. In other words, the attitude toward the first-order state must be assertive. It would seem strange if the attitude towards the first-order state is one of doubting. If the HOT doubts that the subject is in state X, the subject could not know what states they bear. In being assertoric, the HOT tells the subject that they bear state X. These are the conditions that are central to holding the HOT theory. The conjunction of these conditions describes what consciousness consists in for Rosenthal. In order to certify that the HOT theory is a plausible theory, it depends on how it captures the explanandum. The explanandum for the HOT theory is consciousness. In other words, it needs to be stated how well the theory explicates consciousness itself.

The idea that a mental state's being conscious requires the subject's awareness of themselves as being in that mental state has an intuitive appeal. In having a conscious experience, say you are tasting a strawberry, we would find it strange to say that you were having this experience without any awareness. More precisely, it would be strange to consider yourself as completely unaware of bearing a certain mental state, if you were consciously experiencing the first-order content of that mental



state. One of the central features of Rosenthal's HOT theory is explaining intransitive state consciousness in transitive terms. In other words, Rosenthal's HOT theory explains how we get from an unconscious mental state to a conscious mental state in terms of the subject being aware of bearing certain mental states. It is important to note that this intuitive appeal is one of the main reasons that people are drawn to Rosenthal's HOT. To gain more insight in the mechanics of the theory, the next step is to analyse some of the objections aimed at the theory. It is through doing this that I will be able to present the full, nuanced position that Rosenthal advocates. The responses to the objections will bring out aspects of the theory that I did not initially state, as the theory has been adapted over the years. This is to be expected considering that Rosenthal first proposed the theory, nearly three decades ago, in 1986. I shall first consider the objection of misrepresentation and then move onto targetless higher-order thoughts later in the section.

The objection of misrepresentation is well rehearsed in the literature.<sup>5</sup> It was originally raised against higher-order accounts in general but I shall be focusing on the impact it has on HOT theories. The problem of misrepresentation questions what the subject experiences when the first-order state and a higher-order state differ in content. Thus, the 'misrepresentation' occurs between the first-order state and the higher order thought that is supposed to represent it. As stated above it is only when a first order state is represented to the subject, by a HOT, that they experience the content of the first-order state. The objection presses situations where the HOT misrepresents the first-order state. Imagine that I am bearing a first-order state of BLUE but the accompanying HOT's content is RED. Advocates of the HOT theory are forced to decide which state determines the content of the subject's experience. If one answers that it is the first order state that determines the content of the experience then we are left wondering why HOTs need to be in a theory of consciousness at all. On the other hand, if the HOT determines the content of the subject's experience, then the role of the first-order state comes into question. A clear and concise example of the objection was put forward by Karen

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<sup>5</sup> Neander, K., (1998), Balog, K., (2000) and Levine, J., (2001) and most recently Block, N., (2011)

Neander.<sup>6</sup> Adapting the example slightly, we take a situation in which three people are currently having a conscious experience of perceiving green. Subject (A) is the genuine bearer of a first order state of perceiving green. Subject (B) is the bearer of a first order state of perceiving red and Subject (C) currently has no first-order state at all. Subject (A) has the right kind of higher-order representation and becomes aware that they are seeing a patch of the colour green. Each of the subjects reports that they are having a conscious experience of perceiving the colour green. The purpose of the example is to explore how the HOT theorist can explain situations in which the HOT differs from the first-order state or when there is no first-order state present. Subject (B) is a case where a HOT is misrepresenting the target state that the subject bears. Subject (C) is a case where a HOT is representing that the subject bears a certain mental state, which does not exist.

Rosenthal's response to this is that the occurrence of misrepresentation or targetless HOTs is a rare but natural phenomena that is to be expected on occasion. He argues that these phenomena do not put the theory at any disadvantage but at an advantage as the theory can explain why subjects report having a conscious experience, regardless of the mental states they genuinely bear. Rosenthal argues that the higher order thought determines the content of what the subject is conscious of. He claims that "what it is like for one to be in a state is a matter of how it is for one to be in that state, that is, how one is subjectively aware of oneself as being in the state. So the HOT one has of being in a state will determine what it is like for one to be in it."<sup>7</sup> In unpacking this, we can see that Rosenthal is arguing that what one is conscious of is whatever is represented by the HOT. For Rosenthal, a conscious mental state simply is a matter of how things appear. This subjective mental appearance is solely determined by the HOT, as what is represented by the HOT goes into the subject's stream of consciousness.

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<sup>6</sup> Neander, K., (1998)

<sup>7</sup> Rosenthal, D.M., (2012) – Page 10

The resolution of the objectionable aspect in the experiences of subject (B) is the same as subject (C). I shall still take each subject separately to show what can be gleaned from Rosenthal's response to the objection. For subject (B) we have a person who is having a conscious experience of green even though they are not the bearer of a first-order state that has the content GREEN. The first-order state that they are bearing is that of a red percept. Nonetheless, as subject (B) has a HOT that represents them to bear a first-order state with the content GREEN, they are having a conscious experience of seeing green. One may press this and ask how we can know that every conscious experience, which are the contents of our HOTs, does not differ from the first-order states that we bear. For this to be a possibility it would require a major cognitive malfunction. In the nigh on impossible event that this may occur we can presume that Rosenthal's answer would be that as long as the subject has HOTs they would still have a subjective mental appearance.

This ties in neatly with how Rosenthal responds to the objection of targetless HOTs. This is the phenomena that we have for subject (C). The subject is having a conscious experience of perceiving green yet there is no first-order state present, meaning that there is no existing target state for the HOT to represent. Claiming that the subject is having an experience of green with no first-order state present has the potential to render the HOT theory absurd or too abstract to take seriously. Ned Block has recently applied pressure on this potential wound by arguing that targetless HOTs show a damning incoherence in the theory. In order for the HOT theory to explain subject (C)'s experience and come out unscathed it must explain how targetless HOTs are possible and disprove that this leads to Block's proposed incoherence. The incoherence that Block ascribes to the HOT theory is between what he deems to be necessary and sufficient conditions. He contends that the HOT theory is "holding both that an appropriate higher order thought is sufficient for a conscious state and that being the object of an appropriate higher order thought is necessary for a conscious state."<sup>8</sup> Block is arguing that in instances of targetless HOTs both conditions cannot be satisfied, yet both are central claims of the

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<sup>8</sup> Block, B., (2011). Page 447

theory. On the necessary condition, if there is no first-order state we only have one state. We can stipulate that the HOT is not subject to being an object of a further HOT as would be a case of introspection for Rosenthal. It also is the case that the HOT cannot represent itself. On Rosenthal's HOT theory, in instances of a lone HOT without an existing first-order mental state, there would still be consciousness. The subject would still have a conscious experience. Block is arguing that there is an incoherence if a lone HOT suffices for consciousness by the sufficient condition, but this conflicts with what the necessary condition says, which has it that the HOT must have a target, which it doesn't in this case. Thus if there is only one state the necessary condition cannot be satisfied. I shall first explain how Rosenthal explains the existence of HOTs and then expound his answer to Block's claim of incoherence.

There are two possible ways of answering Block's claim of an incoherence regarding the existence of targetless HOTs. These rest on whether the HOT theory one holds is relational or non-relational. The relational HOT theory holds that a relation between an existent first-order state and the right kind of higher order representation is necessary for consciousness. Subject (C) could not have a conscious experience on a relational HOT theory, as there could not be a conscious experience if the first-order state is missing. This means that the relational HOT could not be a target for Block's claim of incoherence as targetless HOTs cannot result in a conscious experience for the subject. Rosenthal holds the other option of a non-relational account. The non-relational account holds that what is required for consciousness is the right kind of higher-order representation. They argue that an existent first-order state is not a necessary requirement for a subject to have a conscious experience. A HOT can represent a subject as being in a first-order state with a specific first-order state existing. It is represented to the subject that they bear the first-order state S, whether they genuinely bear S or not. What is important is that a first-order content is represented to the subject, even though the first-order state may not exist. Thus, Rosenthal's answer for the experience of subject (C) is that even if the first-order state is missing, there is still a suitable HOT that determines that the subject is consciously experiencing green. If only a suitable HOT is what is required for a conscious experience then we can

see that Rosenthal naturally rejects that there is an incoherence in the theory. The necessary condition is not essential for consciousness as all that is required is a suitable higher-order thought and only seems to apply when there is an existing first-order state. The necessary condition is important for first-order states that do exist as this is their way of the subject becoming aware of them and thus changing the subjective mental appearance of the bearer.

There is a worry that if all that is required for consciousness is a HOT that represents the subject to be in a first-order state, whether it exists or not, then first-order states become redundant. All that matters is that the subject believes themselves to be in certain first-order state. Rosenthal has answered this worry. He claims that as our mental properties correspond to perceptual properties in one's environment, we can understand why HOTs about qualitative states exist in the first place. He argues that "The concepts that figure in HOTs about qualitative states will have connections with concepts for perceptible properties, which figure in perceiving. So once a creature has such concepts for qualitative properties, perceiving will itself facilitate the occurrence of the relevant HOTs."<sup>9</sup> Therefore, under normal circumstances, where there has been no cognitive malfunction and a HOT is not misrepresenting, we can see that Rosenthal accommodates a function for first-order states on the HOT theory.

To offer support for the claim that consciousness still arises from targetless HOTs, Rosenthal points to the phenomenon of dental fear to elucidate his point. A patient is sitting in the chair at the dentist and is surrounded by a dentist and her metallic tools. The subject has been sufficiently anaesthetised, so the relevant nerves are deadened. This means that there should be no feeling when the dentist operates. The dentist presses the trigger on the drill and taps the deadened area with a mirror for a better look at what she needs to do. As the cold metal mirror touches the deadened nerves, the subject experiences an agonising pain in the area that has been anaesthetised. Rosenthal uses this to claim that the subject cannot have a first-order state of pain, as they have been anaesthetised.

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<sup>9</sup> Rosenthal, D.M., (2008) – Page 251.

However, the patient is still reacting as though one would if they were in agonising pain. The patients also report that they were in pain when reflecting on the experience. Rosenthal says that these patients who report feeling pain really do feel pain. This is because many factors in a patient's trip to the dentist may contribute in causing the patient to have a suitable higher-order representation of them being in pain. If there is a suitable HOT that represents the subject to bear a first-order state of pain, then the subject consciously experiences pain. Rosenthal takes the phenomenon of dental fear to be an everyday example of how targetless HOTs figure in conscious experience.

The final point that I would like to make in this section is how the HOT theory fits in when we are discussing what phenomenal consciousness consists in. As stated above the what-it-is-likeness of our experiences is determined by our HOTs. In a sense our HOTs entirely determine what we are phenomenally conscious of. This is how one perceives specific colours or sounds and we are not conscious of a mush of qualities gathered through the information we receive. Rosenthal states that "Being in a red state is being in a state in virtue of which one visually senses or perceives red objects.... It's sufficient to have the concept of a red state that one have a concept of that distinctive state."<sup>10</sup> In other words, the concepts that we possess shape the experiences that we have, as the concepts are used in the very representing by the HOT. Rosenthal also states that "HOTs require relatively minimal conceptual resources. So, non-linguistic beings, including human infants, might well have HOTs, and thereby be in mental states that are conscious."<sup>11</sup> Non-linguistic being's would not be conscious in the fine-grained way that we experience as human adults. Rosenthal builds on this and argues that learning a new concept reflects learning a new word. Once a new concept is learned it can be applied in how our HOTs represent the mental states that we bear. Rosenthal contends that "mental taste qualities may, at an early stage, be consciously indistinguishable. But we sometimes come, upon learning suitable terms, to be conscious of the qualities as distinct. Learning new words reflects the learning of the concepts those words express, concepts that result in our being able to have more fine-

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<sup>10</sup> Rosenthal, D.M., (2005) – Page 218.

<sup>11</sup> Rosenthal, D.M., (2005) – Page 6.

grained thoughts about our mental qualities. Since purely intentional states about mental qualities can by themselves result in what it's like for one to be more fine-grained, HOTs can presumably result in there being something it's like for one in the first place."<sup>12</sup> An example of this is when one listens to a complex piece of music like the first movement of Rachmaninov's Piano Concerto number two. When one first listens they can hear the piano accompanied by the orchestra, but as one listens more and studies the piece, separate notes from different instruments can be distinguished. As the piece is studied the French horn solo will be distinguishable. This changes the phenomenology of the piece for the listener. This is because due to finer-grained concepts being learned these are now applied by the HOT in the representation of the first-order state we bear. This shows that the HOT theory can also offer an informative explanation of why there is a certain way that our experiences feel. Our conscious experiences have a certain what-it-is-likeness and this is wholly determined by how HOTs represent the states we bear. If one, through training and frequent exposure, learns finer-grained concepts these will be applied by the HOT in its representation of the first-order mental states that we bear.

This section has explored what conditions need to be met for state consciousness under Rosenthal's higher-order thought theory. The intuitive force of the theory comes from the implementation of what has been labelled the 'Transitivity Principle' through HOTs. I have analysed the objections of misrepresentation and targetless HOTs and shown how Rosenthal believes they are acceptable consequences of his theory. As part of this, I elucidated the reason why Rosenthal is not troubled by Ned Block's claim that the HOT theory harbours an incoherence when it comes to targetless HOTs. Through doing this we have arrived at a nuanced version of Rosenthal's non-relational HOT theory.

It is from here that I can now analyse other theories of consciousness that have a higher-order component to them. The next section will explain Rocco Gennaro's wide intrinsicity view (hereafter WIV). Gennaro's WIV is modelled on Rosenthal's HOT theory yet argues that consciousness should be considered as an intrinsic property. The intention of the next section is to explicate the structure of

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<sup>12</sup> Rosenthal, D.M., (2009) – Page 10.

consciousness, under the WIV. In advocating the WIV, Gennaro places a lot of weight behind being able to deal with objections aimed against higher order theories. So much so that it seems that Gennaro contends one of the main selling points of the WIV is being able to deal with these objections in a more satisfactory way than Rosenthal's HOT theory. I will be arguing that Gennaro does not give us sufficient reason to abandon Rosenthal's HOT theory as the WIV is still vulnerable to the objections raised against higher-order theories. Therefore, the next section will just focus on the structure of consciousness on the WIV and its notable features as a theory of consciousness. In the third section I will then present the objections discussed by Gennaro and how he proposes the WIV deals with the objections. I will also argue that Gennaro does not adequately answer the objections against higher-order theories and as a result I claim that we are not given sufficient reason to advocate the WIV over Rosenthal's HOT theory.

### **Gennaro's Wide Intrinsicity View**

The development of Gennaro's WIV owes a lot to Rosenthal's HOT theory, which Gennaro has stated many times. The reason for this is that Gennaro sees the WIV as a higher-order thought theory that incorporates the property of consciousness as an intrinsic property of a conscious mental state. Gennaro claims that a conscious mental state is a complex state that consists of two parts. There is a world-directed mental state part (M) which represents the features of the subject's environment, including the subject's body. If I perceive a red strawberry, it is the mental state part that represents the red percept. The other part of a conscious state is the metapsychological thought (MET). The MET represents the mental state part which results in the whole first-order complex state becoming conscious. Gennaro is claiming that the structure of consciousness is not a first-order mental state represented by a numerically distinct state. The structure of consciousness, for Gennaro, consists of two parts that form a complex first-order conscious state. The MET, like Rosenthal's HOTs, is a form of awareness. This means that when the M is represented by the MET that the subject becomes aware of being in a certain first-order mental state. In the case of M being a red percept, the MET represents



that I am bearing a mental state part which is a red percept and I consciously experience perceiving the colour red. Gennaro states that when the subject is aware of being in a first-order mental state, it is the whole complex state that becomes conscious. However, “there is something it is like to be in only part of conscious mental states in the sense that S is only consciously aware of the *content* of M.”<sup>13</sup> The MET is generally unconscious in nature unless it is represented by a higher MET. This is a case of introspection for Gennaro.

It is important to explore the idea of two parts making up a complex state. In an instance where there is a conscious mental state on the WIV, the MET is unconscious. This means that within the conscious mental state, there is a part of it that remains unconscious, unless the subject introspects. Some may find this implausible and say that this leads the WIV into contradiction.<sup>14</sup> The apparent contradiction that the WIV faces is that conscious mental states, and therefore a subject’s conscious experience, holds that a part of the conscious mental state remains unconscious. A conscious mental state cannot be said to be both conscious and unconscious at the same time. Gennaro responds to the claim that the WIV leads to contradiction in a variety of way ways. The initial response is to state that those who advocate the objection of contradiction commit a fallacy labelled the ‘fallacy of division.’ Gennaro argues that to assume that what is true of the whole must be true for each of the parts individually is fallacious reasoning. In arguing that both of the parts of a conscious state must both be conscious is to assume that they must be this way because the whole mental state is conscious. Whether the reasoning is fallacious or not, we are still left with a conscious state that has an unconscious part, which is still to be explained.

Gennaro states that he sees no reason why we should assume that each part of a conscious state is conscious. It is clear that a subject is not consciously aware of all the parts of a conscious state, Gennaro contends, if we consider them to be globally represented states.<sup>15</sup> It is not clear in the book

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<sup>13</sup> Gennaro, R., (2012) – Page 101. Gennaro’s emphasis.

<sup>14</sup> Kriegel, U., (2006).

<sup>15</sup> Gennaro, R., (2012) – Page 88-89.

what Gennaro is referring to when he tells us that conscious states should be referred to as globally represented states. In personal correspondence, Gennaro informed me that what he meant by globally represented states is “the entire complex state, including both M and MET, especially as understood from a 3rd person neurophysiological perspective.”<sup>16</sup> From what I can gather from this response, Gennaro is saying that from a third person neurophysiological perspective, the idea of a conscious complex state with an unconscious part, is nothing to raise an eyebrow at. Back to his book, Gennaro argues that looking at the conscious state from a first-person perspective we cannot expect to be aware of all information in the conscious mental state. He argues that we receive information via the senses, some of this information is stored as an unconscious mental state. However, it is only with concept application of higher-order concepts, which comes with the unconscious MET, that these mental state parts can become conscious. With this in mind, Gennaro claims that it is not implausible to have unconscious parts of a conscious mental state, but it is a subtlety of the WIV.<sup>17</sup> There remains the oddity that there is an element of consciousness of which we are not conscious. However, Gennaro does not see it as an oddity.

The main difference between the WIV and Rosenthal’s HOT is whether consciousness is construed to be an intrinsic or extrinsic property of a conscious state. Gennaro holds that having an account where consciousness is an intrinsic property of conscious states is advantageous. This means that a conscious state would have the property of being conscious in and of itself and is not acquired through bearing a relation to anything else. Gennaro puts forward two reasons why considering consciousness as an intrinsic property of conscious states is advantageous. The first is that it seems intuitive to us that the property that makes a state conscious is not acquired through a relation to something else. The second reason is that he believes that Rosenthal does not give us good enough reason to consider consciousness as an extrinsic property of conscious states. On the first reason, Gennaro contends that it intuitively sounds right to say that the property of being conscious exists within the mental state

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<sup>16</sup> Personal correspondence – 11/03/2014

<sup>17</sup> Ibid.

that we are conscious of. Gennaro goes on to claim “consciousness does not seem to be analogous to ‘being the cousin of’ or ‘being to the left of but instead seems to be part of the state itself.”<sup>18</sup> If I am consciously experiencing a rich smell of coffee, Gennaro is saying that we intuitively are drawn to the idea the first-order state of COFFEE SMELL is not rendered conscious by something distinct from that first-order state. Rosenthal’s response to Gennaro’s claim of intuition is that we cannot take it as granted that our first-person appearance of consciousness is the way that it is in reality. In other words, it may seem counter-intuitive that consciousness is an extrinsic property of conscious states. However, we cannot rule out that this may be the case because of the way things seem to us.

Gennaro’s second reason for thinking that consciousness is an intrinsic property of conscious states is because he believes Rosenthal has not given sufficient reason to think otherwise. Presumably, Gennaro thinks that the onus is on Rosenthal to do this as throughout history, theories of consciousness have generally considered consciousness to be an intrinsic property of conscious states. Gennaro contends that the intrinsicist HOT view is given bad press by Rosenthal, who he argues sets up a false dilemma. Rosenthal has argued that if consciousness is considered to be an intrinsic property then consciousness is reduced to being simple and unanalysable with no articulated structure. Gennaro denies this and argues that Rosenthal is demanding that we “either accept the Cartesian view that mental states are essentially and intrinsically conscious (and so unanalysable) or accept his version of HOT theory.”<sup>19</sup> Gennaro, however, believes that the WIV can give consciousness an articulated structure and consciousness can therefore be analysable and complex while intrinsic to the conscious state. In a bid to drive the point home, Gennaro asks us to look at consciousness from a third-person neurophysiological perspective. He claims that from this standpoint it seems peculiar to say that what makes a mental state conscious is something else. Gennaro points to the possible discovery of the neural correlates of consciousness to make his point. He declares that it seems more likely that they will be found to be part of the brain state. Gennaro does not offer an argument to

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<sup>18</sup> Gennaro, R., (2012) – Page 57

<sup>19</sup> Gennaro, R., (2012) – Page 57

explain why the neural correlates of consciousness are more likely to be part of the brain state. This seems to beg the question against those who argue that consciousness is an extrinsic property of conscious mental states. Rosenthal and Lau have presented research which they contend possibly offers empirical support for Rosenthal's HOT theory being realised in the brain. They claim that "first-order perceptual representations depend on neural activity in early sensory regions, whereas higher-order representations depend on neural activity mainly in prefrontal (and parietal) cortex in humans and other primates."<sup>20</sup> If this is found to be true, it may be considered to be evidence for the HOT theory. It may be that first-order mental states are being represented and therefore becoming conscious due to another part of the brain. But this is not conclusive evidence. I am not arguing that the empirical support of HOT theory offered by Rosenthal and Lau is definitive proof of Rosenthal's HOT theory being realised in the brain. Nevertheless, it does show that we do not have to accept that the third-person neuropsychological perspective gives us more reason to think that consciousness is an intrinsic property of conscious states. It may be the case that there is an argument for consciousness to be considered as an intrinsic property of mental states that is still to be articulated in the literature.

Another important feature of the WIV to discuss is that, like Rosenthal's HOT theory, it explains our conscious experiences in terms of the concepts that we possess. On the WIV, these experiences are wholly determined by the higher-order application of concepts to first-order states. Gennaro is very clear about what it means to possess a concept and this is important to understand in order to accept the conceptualism of the WIV.<sup>21</sup> Conceptualism should be taken as the view that the content of our conscious perceptual experiences is wholly determined by the concepts that we possess. For Gennaro, the possession of a concept is an ability of the subject who possesses the concept. More needs to be said on this as it is unclear what type of ability this is. We can get a better understanding if we look at what the possession of a concept enables the subject to do. Gennaro states that on his view, a subject

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<sup>20</sup> Lau, H. and Rosenthal, D., (2011). Pages 365-366

<sup>21</sup> I shall not be going into the full details of Gennaro's defence of conceptualism here for a matter a space. However, it is important to be clear about how concepts are needed in the WIV.

who possesses concept C should be able discriminate instances of C from non-C's. If I have the concept of COFFEE, I should be able to pick out, via smell or taste, the instances of coffee from non-coffee. On Gennaro's view, the possession of a concept should allow the subject to identify or recognise instances of C due to the main features or properties of C. Having the concept of COFFEE should mean that I can identify other instances of coffee by its smell or its bitter taste. Gennaro tells us that this seems to capture what is meant by conceptualists when they speak of a concept being *deployed* in experience. These concepts on the WIV are located in the MET. This is why without the MET the M remains unconscious and unconceptualised. It is interesting to note that if the content of our conscious perceptual experiences is wholly determined by the concepts we possess and these concepts only exist within the MET, then Gennaro's view is extremely close to Rosenthal's HOT theory.

Gennaro contends that the WIV is better suited to dealing with the objections aimed against higher-order theories of consciousness. In the next section, I shall discuss the objections of misrepresentation, targetless HOTs and the 'problem of the rock'. I will show that Gennaro's proposed solutions to these objections do not give us any advantage over the responses of Rosenthal. I will end the next section by concluding that Gennaro does not give us sufficient reason to abandon Rosenthal's HOT theory.

### **The WIV and Objections against Higher-Order Theories of Consciousness**

I shall spend time in this section discussing three objections that are raised against higher-order theories of consciousness. As noted at the end of the previous section, these are the problem of the rock and the other two problems, which have been discussed in a previous section, are misrepresentation and targetless HOTs. I have already explicated how Rosenthal responds to the objections of misrepresentation and targetless HOTs. So I will start this section by explicating the 'problem of the rock' and how Rosenthal would respond. I will then present how Gennaro argues that the WIV can deal with the problem of the rock but show that this is not an adequate response. It is from here that I will show that all of Gennaro's responses rely on what I shall label as the 'matching

condition.’ This is the idea that the concepts in lower-order and higher-order states must at least partially, if not fully, match for consciousness. Gennaro does not give satisfactory reason as to why this matching condition is in place. We can then recapitulate on the objections of misrepresentation and targetless HOTs and I argue that Gennaro’s proposed answers to these objections are not satisfactory due to relying on this ‘matching condition.’ From this I will claim that Gennaro does not give us sufficient reason to advocate the WIV over Rosenthal’s HOT theory.

The ‘problem of the rock’ can be originally attributed to Alvin Goldman<sup>22</sup> but was explored in the book ‘Consciousness and Qualia’ by Stubenbug.<sup>23</sup> When one has a thought about a rock, it would be strange to think that the rock will become conscious as a result of our thinking about it. The objection then is why is it the case that a first-order mental state becomes conscious as a result of a HOT being directed at it? If the HOT theorist is unable to answer why rocks cannot become conscious but mental states can, then being the target of a HOT turns out to be not sufficient for consciousness. This is because an additional condition is needed to explain why a rock does not become conscious. There needs to be a reason why intentional or qualitative first-order states have the potential to become conscious but a rock does not. William Lycan argued that there needs to be a distinction made between psychological things and non-psychological things. He claimed that a rock is not a psychological thing whereas a mental state is. As a result a rock cannot be conscious as it is a non-psychological thing.<sup>24</sup> It should be questioned whether this response is a satisfactory one. If we consider what it means to be a psychological thing, presumably what is meant is that it’s in the brain or in some sense ‘mental.’ We can ask, if a HOT *could* make a rock conscious we would ipso facto consider rocks to be mental? There needs to be caution that one is just not restating the fact that rocks cannot become conscious without addressing why.

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<sup>22</sup> Goldman, A., (1993)

<sup>23</sup> Stubenbug, L., (1998)

<sup>24</sup> Lycan, W., (1996)

Rosenthal does not explicitly go down this line of argument against the ‘problem of the rock.’ Instead he points out that there are two different ways that we use the term ‘conscious’.<sup>25</sup> The transitive use of the term is used when one is *conscious of* something. As I stare at the cup of coffee in front of me, I am aware that it is there and that it will soon need refilling. In this instance, my thoughts are directed at that certain cup of coffee and this is a direct object to which my thoughts are aimed. I am therefore conscious of the cup of coffee and this is a transitive use of the term ‘conscious.’ The other use of the term ‘conscious’ that Rosenthal explicates is an intransitive use of the term. This is used only for when we speak of mental states as conscious mental states. Thus, the intransitive use is not used for external objects that are not mental states. This has been labelled as ‘state consciousness’ and is what HOT aims to account for. This distinction is important for Rosenthal’s response to the ‘problem of the rock.’ He argues that “Being transitively conscious of a mental state does in a sense make it intransitively conscious. But that is not because being conscious of a mental state causes that state to have the property of being intransitively conscious; rather, it is because a mental state’s being intransitively conscious simply consists in one’s being transitively conscious of it. The mistake here is to suppose that a state’s being intransitively conscious is an intrinsic property of that state.”<sup>26</sup> Rosenthal is claiming here that it is wrongheaded to think that a suitable HOT *causes* a first-order state to acquire the property of being conscious. To reiterate the point he is making, a mental state’s intransitive consciousness consists of a person’s being transitively conscious of that mental state. It is not that by a HOT representing a first-order state causes a first-order state to acquire the property of being conscious. The objection, which questions why a rock cannot become conscious when we have a thought about it, misconstrues the HOT theorist’s position. The intention of HOT theory is to give an account of the transition of unconscious mental states to conscious mental states. It does this through explaining intransitive consciousness in transitive consciousness terms.

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<sup>25</sup> Rosenthal, D. M., (1997)

<sup>26</sup> Rosenthal, D. M., (1997). Pages 738-739.

Yet, this seems like Rosenthal straight forwardly blocking the objection rather than trying to offer a solution. There still remains the question of why mental states get to become intransitively conscious but not rocks do not. One response that could be given is that mental states unlike rocks are in the head. The important factor is that the HOTS system is also in the head. If the HOT system is short-ranged in the sense that HOTS can only represent items that are within a close proximity, say the subject's brain where the HOT is. It would make sense to argue that the HOT system can only represent the mental states in the brain of the subject who has the HOT. This would also explain why it cannot be the case that my HOTS can represent another person's first-order states, making them conscious. As stated this is just a suggestion to dealing with the object. I will now analyse how Gennaro claims that the WIV and deal with the 'problem of the rock.'

Gennaro's first pass at dealing with this objection is to go along William Lycan's line of argument in distinguishing between psychological states and nonpsychological things. This, for Gennaro, is a broad step that HOT theorists must make initially in order to avoid the (reductio) argument that any object can become conscious if a subject has a thought about that object. The point of the objection is that objects such as rocks do not in fact become conscious. As stated above, if it cannot be explained why rocks do not become conscious then HOTS, or in Gennaro's case, MET are not sufficient for consciousness. The term 'mental' for Gennaro refers to a causal-functional role within the organism or a neural/biochemical processes in the brain. By this token the item that is represented has to be in a brain. Gennaro is not specific about which processes or causal-functional roles states have to play to be mental states. He is satisfied to say that a mental state is either a causal-functional role within the organism or a neural/biochemical processes in the brain. He contends that a rock cannot be a mental item as it is clear that either of these criteria cannot be met by a nonpsychological thing such as a rock.<sup>27</sup> We may not have a rigid definition from Gennaro regarding which specific causal-functional role or neural/biochemical processes we are talking about. Nevertheless, we still have

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<sup>27</sup> Gennaro, R., (2012) – Page 74.



processes that contain information, some of which will have been gained through our perceptions of the world. The information comes in through the subject's retina and then enters the visual cortex V1. Gennaro describes the overall process as lots of information being presented to the subject and some, not all, of the information will rise to be an unconscious mental state. It is from here where the WIV seeks to explain how the unconscious mental state becomes conscious. With a grasp of what it is for a state to be a 'mental' state, it is still to be explained why a mental state can become conscious but a rock cannot. As explained in the previous section, if this cannot be explained then a higher-order thought cannot be sufficient for consciousness as more conditions are required for consciousness, which would be accepted as long as the conditions could be specified.

Gennaro stipulates that all HO theories must hold that there is not only something special about the HO state but there is also something special about the object of the HO state.<sup>28</sup> By the 'object' here Gennaro is referring to first-order states, which are mental states. Gennaro does not explicitly state what the 'specialness' of mental states is, but places a big importance on the role of concepts in a first-order state becoming a conscious mental state. For Gennaro, a conscious experience requires the application of higher-order concepts. These concepts are stored in the MET (or HOT) and they solely determine the way one experiences the mental states they bear. When a subject receives information from the world some of the information will rise to the level of an unconscious mental state. Gennaro tells us that there is some form of conceptualisation at this point in so far as an unconscious mental state has intentional content.<sup>29</sup> This intentional content of an unconscious mental state is more a jumbled mesh of information as it could only have low-level concepts applied to it such as OBJECT or SPACE. Gennaro has previously argued that the application of higher-order concepts changes the content of a mental state, as it goes from being unconscious to a conscious mental state.<sup>30</sup> The change in content goes from a blurry picture where not much can be picked out to a clear, defined picture

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<sup>28</sup> Gennaro. R., (2012) – Page 73

<sup>29</sup> Gennaro. R., (2012) – Page 78

<sup>30</sup> Gennaro. R., (1996)

where the content of what is experienced is determined. As the higher-order concepts are applied to the intentional content of the unconscious mental state, the intentional content becomes more defined in terms of what the subject experiences. As I consciously experience a red strawberry, higher order concepts such as RED, STRAWBERRY or FRUIT are applied to the incoming information. The what-it-is-likeness of the conscious experience is determined solely by the higher-order concepts that are applied. It becomes clear that the 'specialness' of METs (HOTs) is the application of higher-order concepts which they contain. Regarding the 'specialness' of the object of HOTs Gennaro does not pin down exactly what this is. However, his response to the problem of the rock gives insight as to why he considers the object of HOTs to be special

On the WIV, Gennaro claims, the MET is much more intimate with its object, a first order mental state, than on the standard HOT theory. The M and the MET are intimate in the sense that they are two parts of the same complex state. Both parts are necessary for a conscious state to occur. Gennaro stipulates that "Whenever a subject S has a HOT directed at e, the content c of S's HOT determines the way that S experiences e (provided that there is a full or partial conceptual match with the lower-order state, or when the HO state contains more specific or fine-grained concepts than the LO state has, or when the LO state contains more specific or fine-grained concepts than the HO state has, or when the HO concepts can combine to match the LO concept)." <sup>31</sup> The idea is that the conscious experience of seeing a strawberry is determined by the higher-order concepts of an MET. Yet there is a provision that the low level concepts of the M like OBJECT or COLOUR at least partially match higher order concepts in the MET, otherwise there will be no conscious experience of the strawberry at all. The higher-order concepts in this instance would be along the lines of RED or SHAPE OF A STRAWBERRY. Without both parts and therefore the concepts of both parts matching there would not be a conscious experience of seeing a strawberry for the subject.

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<sup>31</sup> Gennaro, R., (2012) – Page 180.

Gennaro argues that the 'problem of the rock' can therefore be answered by those who advocate the WIV and in a more satisfactory way than standard HOT theory. He argues that a rock cannot be one of the two components required for a conscious mental state. The intimate relationship, consisting of a conceptual match, between M and MET means that non-psychological things that are not mental states are a non-starter for Gennaro. For one thing a rock is not a neural or biochemical event in one's brain. It is not the case that if an unfortunate person were to have a rock jammed into their head that it would suddenly become conscious. This is because although the rock is 'in the head' as mental states require, it would not have any concepts that could be even partially matched by a HOT. The content of the HOT is what the subject consciously experiences but this cannot occur without a match of some sort between the concepts of the LO and HO parts. A rock does not contain any concepts to categorise incoming information due to it being an inanimate object. Due to the lack of concepts, it is impossible for the rock to enter into the intimate relationship with an MET. I wrote earlier about Gennaro saying that there is a 'specialness' to the object of an MET. As Gennaro does not explicitly state what this is, I can only deduce that the potential for a conceptual match is what he is referring to. If this is the case, the specialness about an object of an MET is that they must have the potential to enter into an intimate relationship with an MET. For this to happen the object must contain some low level concepts that can be matched by the MET. In laying out Gennaro's solution to the 'problem of the rock,' we can see that what he is saying is that a non-psychological thing such as a rock cannot become conscious because it cannot become part of a complex mental state. For consciousness to occur there has to be a mental state part that has lower-order concepts that can be 'matched' by the higher-order concepts in an MET/HOT. A rock does not have these concepts and could not categorise incoming stimuli.

It is this 'matching condition' that is the focus of the objection against Gennaro claiming to have offered a superior theory of consciousness. One of the main differences between the WIV and the standard HOT theory offered by Rosenthal is the involvement of first order states or mental state parts. As I explicated in a previous section, Rosenthal has argued that a first order state need not exist in order for a subject to have a conscious experience. All that is required, Rosenthal argues, is a

suitable HOT as the content of the conscious experience is solely determined by the HOT. We can see that it is also the case on the WIV that the content of the conscious experience is solely determined by the HOT. However, Gennaro stipulates this 'matching condition' in order to force a relationship between the M and the MET. Rosenthal has previously stated that he believes the difference between his theory and the WIV to be a terminological dispute. For the dispute to be more substantive than just terminology, Gennaro needs to give a reason why this matching condition is in place. I will now analyse the proposed 'matching condition' given by Gennaro. I do this with the intention of showing that without this stipulation the WIV cannot deal with standard objections against HOT in a more adequate fashion than Rosenthal's HOT theory.

It is unclear how the proposed 'matching condition' would work or how the parameters of what would match and what would not are defined. At a first pass, it could be that HOTs are determinates of the determinables that are expressed by the lower order state. Gennaro tells us that he thinks that the lower order mental state part has some form of conceptualisation in so far as it has content. The lower-order concepts of the mental state part have loose definitions. Gennaro argues that it is only when the higher-order concepts of an MET are applied to the information of the mental state part that the subject has a conscious experience. It is hard to see how the well-defined higher-order concepts can match up to the lower-order concepts. Say that I am looking at a strawberry. If one bears the mental state part which contains the concepts OBJECT and COLOUR, which could be considered as determinables, this then has to match with the higher-order concepts of STRAWBERRY and REDDISH. These are the some of the many possible determinates of the determinables OBJECT and COLOUR. If the concepts are matching due to a strawberry being an object and red being a colour then it appears that we are on shaky ground for the 'matching condition' as other determinates would match. The idea is that it appears to leave open the possibility that a wrong higher-order concept could be 'matched' with the lower-order concepts of a mental state part. If all that is required is that the higher-order concepts are concepts of something that would fall under the group of lower-order concepts then there are many possible 'matches'. In this case we have a STRAWBERRY matching the

concept OBJECT because it is an object and REDDISH matching the concept of COLOUR as it is a shade of colour. It could also be imagined that if the determinables are OBJECT and COLOUR, then it could like be matched by the concepts APPLE and GREEN or by BANANA and YELLOW. Yet, it is hard to see any other way that the lower-order and higher-order concepts can match without Gennaro needing to add in more requirements.

The case for the WIV becomes weaker when the reader realises that Gennaro does not give any reason to explain why this matching condition is in place on the WIV. This needs to be explained by Gennaro as he is arguing that the intimate relation of a conceptual match can answer the problem of the rock on the WIV. However, if it is not explained why the matching condition is in place, then we are none the wiser as to how the WIV can answer the 'problem of the rock.' The arguments that he gives to explain how the WIV deals with the problem of the rock, misrepresentation and targetless HOTs all rely on this matching condition to some extent. I will now go on to explicate how Gennaro's response to both misrepresentation and targetless HOTs rely on the matching condition to be in place. By casting doubt upon the reasons to accept the 'matching condition' we bring into question whether Gennaro gives us successful solutions to the objections raised.

I shall now look at his response to the problem of misrepresentation. To recapitulate, the problem of misrepresentation questions what happens when the content of a first-order state is misrepresented by a HOT. In Gennaro's case, the MET may misrepresent the content of the lower order mental state part. The MET may represent the M as having a green percept as the first order content. Yet the subject may be looking at a patch of red. Gennaro has stated that a conscious mental state consists of two parts. The mental state part, which can be taken as the first-order state, is directed at the world and the meta-psychological thought is directed at the mental state part. Gennaro states that this means we have a conscious mental state that has an inner intrinsic relation between the two parts. It is this self-referential aspect that rules out the WIV from being troubled by cases of

misrepresentation.<sup>32</sup> The conscious mental state is self-referential as it has one part (MET) directed at and representing another part (M). Gennaro claims that “if misrepresentation occurs between M and MET then no conscious state results. At the very least, if a misrepresentation occurs between some of the relevant concepts in M and MET, then that *aspect* of the conscious state would not exist”<sup>33</sup> Gennaro is straight-forwardly blocking any question that a conscious state can exist if the MET misrepresents M due to the self-referential aspect. Delving into this self-referential aspect, we can see that Gennaro has the requirement for a conceptual match between the MET and the M as an underlay to his claims. He says that “When an MET recognises a lower-order input as having the same or similar concepts, the result is a conscious (qualitative) state.”<sup>34</sup> The conscious state is self-referential as one of its parts is directed at the other. But Gennaro stipulates that there also has to be this conceptual match between the two parts. Presumably, he thinks that due to the need for a conceptual match, the conscious state cannot misrepresent itself. It has been argued that self-misrepresentation is indeed possible and we cannot just accept that a conscious mental state cannot misrepresent itself. If we take the sentence “this sentence consists of four words” we can see that the sentence is misrepresenting itself. The sentence refers to itself and then states something that is not true about itself. It cannot be doubted that the sentence has a self-referential aspect, just like a conscious mental state on the WIV, and it is clearly misrepresenting itself. It can also be said that paintings and photographs are able to misrepresent themselves too. Imagine a painting that is hanging up in an art gallery. The painting depicts that very same painting that is hanging up in that gallery. We can say that the painting is referring to itself. The painting hanging on the wall depicted in the painting you are looking at is nearly identical to the gallery that you are standing in, whilst looking at the painting. Both sets of walls are white and bare except for that one painting. The frame around the painting’s painting is the same and the actual frame on the real painting. However, you notice that the floor of the painting is a laminate floor of light wood yet the floor you are standing on is more of a darker oak wood. Moreover the floor

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<sup>32</sup> Gennaro, R., (2012) – Page 63.

<sup>33</sup> Gennaro, R., (2012) – Page 62

<sup>34</sup> Gennaro, R., (2012) – Page 66

in the painting is straight lined along the room but the floor you are standing on has pattern on it. The painting depicted in the painting is referring to itself but is misrepresenting an aspect of itself, namely the floor. The other aspects of the painting are correctly represented and can be said to be an accurate representation to a degree. If self-misrepresentation is possible in at least the form of sentences and pictures, Gennaro will need to give a reason why he contends that a conscious mental state cannot misrepresent itself.

Gennaro has argued against this objection, stating that we cannot draw a legitimate conclusion about the structure of consciousness from examples about sentences and paintings because they are not sufficiently similar. They lack similarity, for Gennaro, due to sentences and painting not having any 'psychological integration' like we find from the neural activity that goes on for conscious mental states<sup>35</sup>. The argument seems to be that because the nature of the sentence or painting does not require cognitive processing then we cannot draw an analogue to consciousness. Gennaro argues that in a conscious mental state there is interaction between the concepts of the vehicles of the lower-order content and higher-order content. It is unclear why the interaction between the M and the MET means that an analogy cannot be drawn to sentences or paintings. David Pereplyotchik has argued that a sentence could be constructed which consists of two conjuncts, the first conjunct referring to the second and the second saying something true about a different subject. An example of this could be "The second conjunct of this sentence is about otters and England won the World Cup in 1966."<sup>36</sup> Pereplyotchik leads on to say that it is unclear why this could not be counted as a suitable analogue for what we have in the WIV. We can also cast doubt on the idea of needing an interaction between the MET and M as this rests on Gennaro's stipulation that the concepts have to match in order for a conscious mental state. I have already shown that the matching condition cannot be taken as a given due to needing more of an explanation of why it is in place. I have shown that we cannot safely say

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<sup>35</sup> Gennaro, R., (2012) – Page 67.

<sup>36</sup> Pereplyotchik, D., (2013).

that Gennaro's solution to the problem of misrepresentation is successful. The aspect of self-reference rests on Gennaro's idea that the concepts between the parts of a conscious state, M and MET, require at least a partial match in concepts. As previously claimed, I do not think that Gennaro has given sufficient explanation as to why the conceptual match is a necessity. Gennaro's solution to misrepresentation is not satisfactory and does not give us any advantage over Rosenthal's response to misrepresentation. I shall now analyse Gennaro's proposed solution to targetless HOTS/METs. I do this with a view to show that this proposed solution also does not give us a satisfactory outcome.

As the reader will recall, the objection of targetless HOTS/METs presents a subject being conscious of a mental state that in fact does not exist. This is a possibility on Rosenthal's theory as the HOT solely determines the content of a subject's conscious mental appearance and it is not a necessary requirement that a first-order state exist. For Gennaro, a targetless HOT could not result in a conscious mental state due to it lacking one of the necessary parts of the two part complex state. If a mental state part does not exist then the MET cannot be directed at anything and it therefore cannot represent itself meaning that the whole complex state cannot become conscious. However, Gennaro is assuming that we always think about something that exists. It is possible that you can misrepresent via non-existent parts. I could say that "I like my third arm." In this case I am referring to a non-existent part of myself. I am misrepresenting myself to be a person that has three arms. Nonetheless, the need for the M to exist is a requirement as Gennaro stipulates that there needs to be a match between lower-order and higher-order concepts. This cannot be fulfilled if the mental state part does not exist as there can be no lower-order concepts. Even though the 'matching condition' has been stipulated by Gennaro, it may still not be enough as it may be possible for a non-existent mental state to have the concepts required to match those of the MET. It has been stated above that on the WIV the MET solely determines the content of the conscious experience when a subject bears a conscious mental state. If an MET was directed at a non-existent mental state part and we propose that there is at least a partial conceptual match, there could still be a conscious experience for the subject. This is because, although Gennaro stipulates that the concepts on the M and the MET have to match. The content of



the conscious experience is still solely determined by what is represented by the HOT. In our proposed situation where the MET is directed at a non-existent M but there is a conceptual match, the conscious experience of the subject would be indistinguishable from a subject whose conscious state consisted of two existent parts. An example could be given from hallucinations. A subject in the desert believes that there is an oasis in front of them. The water they think they see is the clearest blue water they have ever come across. The non-existent blue percept of the water could potentially be matched by an MET that is directed at the non-existent blue percept. This is a problem for Gennaro as we can see how a targetless MET can still bring about a conscious experience. The conceptual match between the MET and a non-existent M may be even more probable if we consider the matching condition to be the loose condition of determinates/determinables. To render a satisfactory solution to the problem of targetless METs Gennaro will need to I) give a principled explanation of why there is a requirement of a conceptual match between the M and the MET. This was the outcome for his proposed solutions to the 'problem of the rock' and misrepresentation. But he must also II) account for why an MET cannot be directed at and have a conceptual match with a non-existent mental state part

For the matching condition to be accepted as part of the WIV Gennaro will need to give an explanation as to why the matching condition is in place. We have not been given sufficient principled reason to accept that the concepts of the M need to at least partially match those in the MET. The proposed solution does not flow from Gennaro's theory of consciousness. It seems that there is enough doubt surrounding the 'matching condition' to show that Gennaro will need to give us more reason to accept the matching condition or find another way out of the boiling pot. As a result he has not shown how the WIV is better suited to deal with these objections. This was the main thrust of his argument that the WIV should be accepted over Rosenthal's HOT theory. In not showing that the WIV is better suited to deal with the objections, we have not been given sufficient reasoning to abandon Rosenthal's HOT in favour of the WIV.

Over the past three sections, I have claimed that Gennaro has failed to supply us with a superior alternative theory of consciousness. I have based this on the failure of the WIV to give satisfactory solutions to objections aimed against the higher-order thought theory. I have not argued for Rosenthal's HOT theory to be considered the superior theory of the two. My intention was to show that Gennaro contends that the WIV is advantageous in its dealings with these objections. However, Gennaro and the WIV cannot answer these objections in the way that Gennaro has argued. This leaves the WIV vulnerable to these objections. It is on this basis that I believe we still have an equal, if not better, chance of explaining consciousness under Rosenthal's HOT theory. The final two sections will be looking at Kriegel's complex self-representational theory of consciousness. The next section will explore how the theory considers consciousness to be and why Kriegel argues we should advocate this theory.

### **Kriegel's 'Complex' Self-Representational Theory of Consciousness.**

This section will be the first of two sections focusing on Kriegel's self-representational (SR) theory of consciousness. The present section will explicate Kriegel's 'complex' SR to its strongest position. To do this I will analyse what is being offered as the structure of consciousness and therefore our conscious states. I will first discuss Kriegel's 'simple' SR theory, that Kriegel abandoned due to the unlikelihood that it could be naturalised. What is meant by 'naturalisation' is that, when considering theories of consciousness, it is generally considered a virtue of the theory if it can explain consciousness as being part of the physical world. Kriegel notes this gripe with the simple version of SR. He has now presented a more refined version of the theory that he refers to as the complex SR theory. This was presented in his admirably lucid book *Subjective Consciousness: A Self Representational Theory*. The final section consists of Kriegel's formulation of objections raised against higher-order theories of conscious. He considers these to be argument's for 'complex' SR *via negativa*. I will ultimately argue that he does not give us sufficient reason to abandon Rosenthal's HOT theory. I will claim that Kriegel's 'complex' is also vulnerable to the objections that he formulates against higher-order theories.

If we were to lay out the arguments for accepting the self-representational theory and the higher-order thought theory of consciousness side by side, we could draw some important similarities. Both accept that conscious states are mental states that the subject is aware of themselves as being in. They both also accept that mental states that one is aware of are represented states. Both, therefore accepted that all conscious states are represented state. It is at this stage where the theories would split because this is where one asks: what is doing the representing that makes mental states conscious? More precisely, is the conscious mental state represented by a numerically distinct state, which is a higher-order theory, or is it represented by itself, which is the self-representational theory. I have explained in previous sections that on Rosenthal's standard HOT theory, where the brain is working as it should, it is a distinct mental state that makes the subject aware of the first-order mental states that they bear.

The central claim of the 'simple' self-representational theory is that when a conscious mental state represents some environmental feature, which is the first-order content, it also represents itself. When I am looking at the redness of a strawberry, a mental state that I bear represents the redness of the strawberry. The redness of the strawberry is the intentional content as this is what is being represented. At the same time, on the 'simple' SR theory, this mental state which has represented the 'redness' of the strawberry, also represents itself. This self-representation results in the mental state becoming self-aware, as it is directed back at itself. When a mental state is self-aware, this is what gets the first order content of the state to the stream of consciousness of the subject. On the 'simple' SR theory, the whole of the mental state represents itself. In other words, it is not that one part of the state represents another. It is more that the whole state, in crude terms, looks back at itself at which point there is the self-awareness required for consciousness. The self-representational theory of consciousness neatly knits together the mental states that we bear and what is consciously experienced by the subject. This is because the environmental features that are represented in the mental state cannot fail to get into the stream of consciousness, if the mental state represents itself.

It becomes apparent that given the structure of the 'simple' self-representational theory there is no room for misrepresentation or a subject being conscious of a state that they do not bear. Rosenthal readily accepts that misrepresentation and targetless HOTs can happen as he argues that phenomenal consciousness is merely a subjective mental appearance. This is not a satisfying answer for the self-representationalist as they want to ground consciousness in the states that a subject genuinely bears. As the whole mental state uses itself to represent itself we have the intuition that the first-order content of that state will not be misrepresented. This intuition is based on the fact that the thing that represents is also the thing being represented and they seem to be bound in a way such that misrepresentation cannot creep in. The subject becoming aware of the state is the result of the whole state directing awareness back at itself. Say that the state was a red percept, the awareness that makes the state conscious is just the percept looking back at itself. It is also the case that the self-representational view does not allow the possibility of the subject being conscious of a mental state they do not bear. A state can only be conscious if it is represented due to the condition of needing self-awareness. On the self-representational view there is no higher-order representing without the first-order mental state. The subject needs to genuinely bear a mental state for that mental state to represent itself. The simple SR theory of consciousness gives us a way of ensuring that what we are conscious of has some grounding in what mental states we are in. The objections that are raised against Rosenthal and Gennaro are not a problem for the simple SR theory.

The neatly wrapped present of simple SR theory is not a present that we would like to keep. It does not give us all that we want from a theory of consciousness. It is considered a virtue if a theory of consciousness can account for how consciousness can be naturalised. By naturalised what is meant is that all the facts about the mental can be explained by natural science. The relation of representation is considered to be the most promising relation to do this by many. This is one of the reasons for the recent focus on representational theories when trying to explain consciousness. Kriegel puts his finger on the problem when he considered how the simple SR theory could be naturalised. He states that when looking to offer a reductive explanation of representations, we do so in terms of broad causal

relations. Representation, in a natural setting, requires that there is a causal relation between that which is represented and that which is doing the representing. However, causal relations never hold between a thing and itself as they are anti-reflexive relations. This means that no mental state is able to bring about the occurrence of itself. This leads Kriegel to reformulate his 'simple' SR theory into a 'complex' SR theory.

The rest of this section will now be focusing on what Kriegel has termed as a 'complex' self-representational theory of consciousness. When speaking of the SR theory, I shall be referring to the re-formed 'complex' version. Before getting into the structure of the theory, it is important to clarify what Kriegel sees the SR theory to be a theory of. We are still looking for a theory of phenomenal consciousness. Up to this point, I have been considering the term to refer to property P that means that subject S's experience has a certain what-it-is-likeness to it. This means that mental state M is phenomenally conscious when this property P is present. Kriegel, however, wants to use a specific definition of what the term 'phenomenal consciousness' refers to. Kriegel's definition of phenomenal conscious is "The property F, such that, in the actual world, F is responsible for the mystery of consciousness"<sup>37</sup> Kriegel points out that there may be movement on what certain words of the description mean and this will lead to different rigid definitions. We could take the word 'responsible' as causally responsible, in that it causes the mystery of consciousness. We could also take the term 'mystery' to mean that which cannot be deduced from physical facts. The point is that phenomenal consciousness is defined as whatever property is the source of the prima facie mystery surrounding consciousness. Kriegel offers this definition as he believes that it shows why there has been such a wide usage of the term and that it gets at the core of many debates about consciousness.

With this caveat about phenomenal consciousness in place, I will now explicate Kriegel's complex version of the self-representational theory of consciousness. Kriegel's starting point is to claim that a conscious state and therefore a subject's conscious experience has two necessary components. One

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<sup>37</sup> Kriegel, U., (2009) – Page 3.

component is what he refers to as qualitative character, which makes a mental state the kind of phenomenally conscious state that it is. Imagine that you are looking at a red strawberry, the red-ish properties of that strawberry are the first-order content of your conscious state. These qualitative properties corresponds to environmental features, including the subject's body. Thus the first component is first-order content about the world, constituting qualitative character. The other component of a phenomenally conscious state is subjective character, which makes a mental state a phenomenally conscious state at all. For each conscious experience that one has, Kriegel claims, that there is a 'for-me-ness' of that conscious experience. Roughly, phenomenal character is the compresence of qualitative character and subjective character. The phenomenal character of the conscious experience of seeing a red strawberry is a 'red-ish for-me-ness.' Kriegel states that subjective character is a form of awareness. This is because it is due to my being aware of my mental states that there is something it is like *for me* to bear those states.<sup>38</sup> Kriegel argues that conscious states have subjective character when the state represents itself in a suitable way. I will delve into the notion of self-representation after exploring what Kriegel means when referring to 'subjective character.'

Kriegel further defines subjective character as a form of *peripheral inner awareness*. Inner awareness is awareness of the awareness of our mental states. To understand what he means by this I will look at the distinction he makes between three types of awareness. Kriegel claims that one can be I) focally aware of M II) peripherally aware of M or III) completely unaware of M. When considering what makes a mental state M phenomenally conscious, awareness type III cannot help us gain any ground. This is because, as stated above, a conscious state is a mental state that the subject is aware of themselves as being in. If one is completely unaware of a mental state then that state cannot be conscious. Kriegel tells us that it is normally the case that we are peripherally aware of our conscious states.<sup>39</sup> What is meant is that the mental states we are conscious of are not the central focus of what we may be

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<sup>38</sup> Kriegel, U., (2009) – Page 47.

<sup>39</sup> Ibid

attending to. For one to be focally aware of their conscious states it requires the subject to introspect or reflect on the conscious state that they are bearing. This is because to be focally aware of a conscious state the subject needs to be focused on that certain conscious state. When the subject is no longer focusing on that conscious state, they either become peripherally aware of the conscious state or completely unaware of the mental state. If a strawberry is placed in front of me, I stare at the redness of the strawberry. My conscious experience of the redness means that I am the bearer of a conscious state that is represented to me to be a red percept. If I start to introspect, I would say to myself "I currently bear a mental state that is a red percept." At this point Kriegel would say that I am focally aware of the mental state. It is when I stop introspecting that I am either peripherally aware of the conscious state or completely unaware of it.

Further to this, Kriegel tells us that this threefold distinction of awareness does not just apply to mental states but to states of affairs and external objects too. As I sit here, typing on the laptop, I am listening to Joaquín Rodrigo's *Concierto de Aranjuez*. As it comes to the beginning of the second movement I become focally aware of the eloquent and soulful clarinet playing over the lightly strummed guitar strings and stop typing to listen intently. As I am listening, I spot a book on my bookshelf that reminds me that a friend wanted to lend that book and I forgot to give to them. I start to focus on details such as when I will next see them so that I give the book to them. I am now only peripherally aware of the music as I am now concentrating on giving the book to my friend. He states that "peripheral inner awareness is virtually ubiquitous, in that it 'hums' in the background of our stream of consciousness with nearly absolute constancy and is absent only when replaced by focal inner awareness."<sup>40</sup> A crude analogy is that peripheral inner awareness of our mental state is like an internal news feed that constantly tracks our awareness of the mental states we bear. It is only when a certain post of the feed stands out, or that feed is concentrated on that one is focally aware of it.

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<sup>40</sup> Kriegel, U., (2009) – Page 49.

The progression of Kriegel's account of subjective character starts at the inner awareness described above. He takes the steps to show how we get from inner awareness to representation and then from representation to self-representation. Taking these steps with Kriegel shows us how the theory takes shape. The step of inner awareness to representation is a matter of how inner awareness is construed. Kriegel states that it is plausible to claim that awareness of anything requires representation of it. My awareness of a coffee taste requires that the taste is represented to me. This is the first-order content of 'taste of coffee' is represented by the higher-order component of a conscious state. Inner awareness is awareness of this perceptual state. Kriegel claims that for the occurrence of inner awareness there is a necessary condition of obtaining a representational fact. He says "in short, representation is a necessary condition for inner awareness (and therefore, by contraposition, inner awareness is a sufficient condition for representation)"<sup>41</sup> Following this, Kriegel then introduces his *epistemic argument for self-representationalism* which concludes that every conscious state is self-represented. Initially, three options are presented of what does the representing for a conscious mental state. The options are I) every conscious state represents itself, II) every conscious state is represented by a numerically distinct state or III) some conscious states are self-represented and some conscious states are represented by numerically distinct states.<sup>42</sup> We can see that option I is self-representationalism, option II is a higher-order representational theory and III is a hybrid account. Kriegel's *epistemic argument for self-representationalism* is as follows:

- 1) Every conscious state is not just represented, but consciously represented.
- 2) If that is the case, then it must be that every conscious state is self-represented.

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- 3) Every conscious state is self-represented.

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<sup>41</sup> Kriegel, U., (2009) – Page 109.

<sup>42</sup> Kriegel, U., (2009) – Page 114.



The second premise is easily argued for, on the basis that we accept the first premise. If it is the case that every conscious state is consciously represented then we get into a situation where the preferable theory is self-representationalism. If every represented state is consciously represented then there is discomfort when we add every conscious state being represented by a numerically distinct state. There are two outcomes that Kriegel points out in this scenario. The first is that the subject “harbours an infinite hierarchy of mental states, each representing the one before it.”<sup>43</sup> Thus each mental state that one bears may come with an infinite regress of higher-order mental states. The other option is the empirically problematic option that the subject has a large but finite cycle of mental states. Kriegel rejects the second option on the basis of the demand that this would require on the cognitive resources of the subject. The idea that some conscious states are self-represented and some conscious states are represented by numerically distinct states is a non-starter for Kriegel as this would mean an “untoward heterogeneity in the underlying nature of consciousness.”<sup>44</sup> Through these refutations of higher-order theories and hybrid theories not sitting well with conscious states being consciously represented, we are led to self-representationalism. Yet, we are in need of an argument to accept the first premise of *epistemic argument for self-representationalism*.

Kriegel argues for the first premise by saying that the most important reason to think conscious states are consciously represented is direct phenomenological evidence. This is evidence that is gathered by accounts of the way the subject experiences certain phenomena. This, Kriegel claims, is something we can only acquire through conscious states. He explains that by ‘direct’ what he means is that the phenomenological evidence we are looking for is gathered from the same thing which we are trying to explain. In other words, we are trying to explain the structure of consciousness or conscious experience. Yet, it is through our conscious experiences that we can gather evidence about the

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<sup>43</sup> Kriegel, U., (2009) – Page 124.

<sup>44</sup> Kriegel, U., (2009) – Page 126.

structure that we are trying to explain. Kriegel surveys alternative sources of evidence for the claim that all conscious states are consciously represented.<sup>45</sup> However, through his reasoning he concludes if there is to be any evidence that conscious states are represented at all, then it can only be direct phenomenological evidence. Kriegel gives us an example of looking for perceptual evidence of parrots in his neighbourhood. Direct perceptual evidence would be if one were to see parrots. Whereas, indirect perceptual evidence would be seeing merely a parrot's nest, from which one would infer there are parrots in the neighbourhood. Kriegel states that the same is true of direct phenomenological evidence. If one were to look for direct phenomenological evidence of a representation of a conscious state, this representation would need to be phenomenologically manifest. This would require the subject to be aware of and therefore experience that which is represented. Kriegel argues that if we suppose that all conscious states are consciously represented, meaning that we are aware of the conscious state being represented, then the representations of conscious states would always be phenomenologically manifest. This means that we have to be conscious of that which makes our conscious states conscious. This means that the subject always has direct phenomenological evidence of their conscious states. He then reverses the argument to say that if it were not the case that all conscious states are consciously represented then some would have to be represented unconsciously. If this is the case then there cannot be any direct phenomenological evidence that conscious states are represented. Kriegel contends that if there is any evidence that conscious states are represented, the best source of evidence is direct phenomenological evidence. Kriegel lays out his argument for self-representationalism as:

- 1) We have evidence that all conscious states are represented.

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<sup>45</sup> These are indirect phenomenological evidence, a posteriori experimental evidence, a priori conceptual-analysis evidence and philosophical principles. I will not be explicating these alternatives due to space requirements. Kriegel's reasons for rejecting them for direct phenomenological evidence can be found between pages 117-122 of his 2009 book.

2) If we have evidence that all conscious states are represented, it must be direct phenomenological evidence.

3) We have direct phenomenological evidence that all conscious states are represented only if all conscious states are consciously represented.

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4) All conscious states are consciously represented.

5) If all conscious states are consciously represented, then they are all self-represented.

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6) All conscious states are self-represented.<sup>46</sup>

We have arrived at Kriegel's conclusion that all conscious states are self-represented. It remains for me to explicate Kriegel's explanation of how the self-representation works. As we have seen, a conscious state is considered to have two components, for Kriegel. One component is a certain experience and the other component is the awareness about that particular experience. To reiterate, one part of a conscious state carries its first-order content in being a representation of environmental features. The other component is a part of the overall conscious state that is directed at and represents the sensory component. This is the higher-order component of the conscious state. It is important to note that Kriegel claims that the two parts of the conscious state are *logical* parts. He defines logical parthood as being neither a temporal or spatial notion.<sup>47</sup> To get at how a conscious state represents itself, Kriegel invokes a distinction between direct and indirect representation. An example, that Kriegel presents, to illuminate the matter is to consider the painting of a house. If the painting only shows one side of the house, the rest may be covered by trees or bushes, we would consider the painting to depict the whole house. The painting directly represents one side of the

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<sup>46</sup> Kriegel, U., (2009) – Page 129.

<sup>47</sup> Kriegel, U., (2009) – Page 218.

house, but the entire house is indirectly represented. The entire house is indirectly represented as it is considered to be a whole, of which one of the walls is only a part. In other words, “the part is suitably integrated into the whole.”<sup>48</sup> The same can be said for a picture of a section/stand of seats in a football ground. The stand is what is directly represented but the whole stadium is indirectly represented. This is how Kriegel explains the ontological workings of the self-representational view. The higher order component directly represents the sensory component, which has a certain first-order content. In doing so, it also indirectly represents that whole of the conscious state, consisting of both parts. Kriegel states that “indirect representation is mediated by the direct representation of parts.”<sup>49</sup> This mediation is the suitable integration of parts to a whole of a conscious state. Indirect representation happens in virtue of the direct representation of a part. The higher-order component directly represents the first-order sensory component but also indirectly represents that whole state, of which they’re a part, including therefore itself. This is how that subject becomes aware of bearing a conscious state. It remains to look at how the logical parts of a conscious state are suitably integrated. If they are not suitably integrated then it is hard to see how there can be an indirect representation of the whole state.

Kriegel acknowledges that more needs to be said in relation to the notion of the logical parts’ integration into a conscious state. At this point, his theory is only trivially different from higher-order theories. The higher-order theory claims that two separate states are required for consciousness. The self-representational theory is claiming that two logical parts of one single state is what is required. To cement the significant difference between the theories, Kriegel appeals to a distinction between two kinds of wholes, which he takes from Simons.<sup>50</sup> The distinction is between *sums* and *complexes*. Kriegel explains the distinction as, “A complex is a whole whose parts are essentially interconnected,

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<sup>48</sup> Kriegel, U., (2009) – Page 227.

<sup>49</sup> Kriegel, U., (2009) – Page 225.

<sup>50</sup> Simons, P., (1987) – Chapter 9

or bound, in a certain way. A sum is a whole whose parts are connected contingently if at all.”<sup>51</sup> The identity of the complex is formed by the necessity that its parts are interconnected in a certain way, whereas this is not the case for a sum. The example of a complex that Kriegel gives is the atoms that constitute a molecule must be interconnected in a certain way, otherwise there can be no molecule. This tells us more about the nature of a complex. It is not a requirement that a part of a complex need go out of existence for the whole to cease to exist. This is the case for a sum. All that is required for a complex to cease existing is that the parts are not connected in the correct way and there can be no whole. The self-representational theory posits that a conscious state is one that consciously represents itself indirectly, due to one logical part directly representing the other logical part. These two parts are interconnected necessarily, for a complex, in a certain way and if they are not interconnected in this way then there can be no conscious experience. Kriegel argues that the sensory component and the higher order component are unified in a way that makes them a complex state. He tells us of a perceptual experience of blue, “the perception of blue and the awareness of that perception are unified by some psychologically real relation whose dissolution would entail the destruction of the experience...This psychologically real relation is effectively the synchronic unity of consciousness.”<sup>52</sup> Kriegel is saying that what unites the two components is that they are presented to the subject together. If it were the case that both existed but were not integrated in this way then there would not be a conscious state.

In this section I have presented Kriegel’s ‘complex’ self-representational theory of consciousness. I do so with a view that the next section will present his formulation of objections aimed at higher-order theories. I started with the original ‘simple’ SR theory that Kriegel abandoned due to the unlikelihood that it could be naturalised. In presenting Kriegel’s ‘complex’ SR theory, I elucidated on how the theory considers consciousness and how Kriegel contends his theory works. The final section shall look at

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<sup>51</sup> Kriegel, U., (2009) – Page 221

<sup>52</sup> Kriegel, U., (2009) – Page 222

Kriegel's objections to higher-order theories. I will be concluding that, given the structure of consciousness that is presented in Kriegel's self-representationalism, Kriegel falls prey to some of the objections that he presents against the higher-order theories. It is from here that I will round up the overall argument of this work, which claims that Gennaro's WIV and Kriegel's SR theory do not give us sufficient reason to abandon Rosenthal's standard HOT theory.

### **Kriegel's Argument for 'Complex' Self-Representationalism Via Negativa**

The focus of the previous section was on Kriegel's positive argument for self-representationalism. I will now move onto his argument for his 'complex' self-representational theory of consciousness 'via negativa'. This section in his book consists of objections against higher-order theories and hybrid theories of consciousness. I will be critically assessing two of the objections presented by Kriegel. These are the objections of targetless higher-order representations and Kriegel's objection that higher-order theories lead to consciousness being rendered as epiphenomenal<sup>53</sup> due to construing consciousness as an extrinsic property. This would mean that consciousness has no causal role with respect to the mental states that become conscious. Kriegel does also push the objection known as the *generality problem* or the *problem of the rock*. I shall not be tackling this objection in this section as I have explicated how Rosenthal responds to this matter in the section where I argue that Gennaro does not give us sufficient reason to abandon Rosenthal's HOT theory. Kriegel's way of formulating the objection would not, I believe, bring about a different response from Rosenthal. I shall first analyse Kriegel's claim that targetless higher-order representations show a vulnerability in higher-order theories that he does not consider have an effect on 'complex' self-representationalism. I will first explicate why Kriegel does not see cases of misrepresentation as harmful to his theory. I will then claim that Coleman's argument that 'complex' self-representationalism is vulnerable to targetless higher-order representations shows that Kriegel's theory gains no ground on HOT theory over the

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<sup>53</sup> Roughly, this is the theory that mental events or states have physical causes in the brain, but these events or mental states do not have any causal influence.

objection of targetless HOTs. I will then move on to the objection that higher-order theories render consciousness as having no causal role. The overall argument of this section is that Kriegel does not give us sufficient reason to abandon Rosenthal's HOT theory.

Kriegel presents the occurrence of misrepresentation and targetless higher-order states alongside each other, but focuses on the latter. As detailed in previous sections, a higher order state may misrepresent the mental state that a subject actually bears. The subject may be bearing mental state R but, due to a misfiring, the subject takes themselves to be bearing mental state G. Their experiences are identical to if the subject did genuinely bear mental state G. The separate but connected matter of targetless HOTs are instances when a higher-order state may represent that the subject is in mental state G, when mental state G does not exist. These are common objections to higher-order theories, as Kriegel notes. Putting his own spin on the objection of targetless higher-order states, Kriegel puts forward an example of two subjects (S1 and S2) who both have a higher-order state that represents them to be undergoing a bluish experience. S1 genuinely bears the mental state of a blue percept. S2 does not. To this, Kriegel claims "Higher-order representationalism faces a dilemma: either (a) what it is like to be S1 at t is the same as what it is like to be S2 at t, or (b) What it is like is not the same."<sup>54</sup> Neither option, Kriegel warns, is one that is agreeable. In response to Kriegel, Rosenthal would not accept option (b). On Rosenthal's HOT theory, what the subject is conscious of is wholly determined by one's HOT. As it is the case that both S1 and S2 have the same higher-order state, it cannot be the case for Rosenthal that the what-it-is-likeness differs. Therefore, Rosenthal's response to Kriegel's 'dilemma' would be to accept option (a). The problem in accepting option (a), Kriegel claims, is that he sees it to contradict with what he labels an 'obvious truism'. He formulates his obvious truism as:

(OT) – For any subject S at time t, there is something it is like to be S at t iff there is a mental state M, such that (I) S is in M at t and (II) M is conscious at t.<sup>55</sup>

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<sup>54</sup> Kriegel, U., (2009) – Page 130.

<sup>55</sup> Ibid.

In other words, Kriegel is insisting that it is obviously true that there is something it is like for a subject at a certain time, if and only if the subject bears a mental state at that certain time and the mental state is conscious. However, one needs to take care with what the term 'iff', meaning if and only if, adds to this 'truism'. What it does add is that it is only in these circumstances that there can be a what-it-is-likeness for the subject. If it were the case that the 'iff' was an 'if' then this would be more of an obvious truism and could be accepted by all three theories of consciousness presented in this essay. Yet, Kriegel has set up a false dilemma for Rosenthal. For Rosenthal to accept option B would be going against what his theory argues. The other option is then manipulated by Kriegel's insistence that his obvious truism cannot be seriously rejected.<sup>56</sup> Despite Kriegel's insistence, Rosenthal has two options open to him in the acceptance of option (a). He can reject the 'truism' and stick to his conviction that consciousness is a subjective mental appearance that is wholly determined by a subject's HOTs. The truism would be rejected on the basis that it begs the question against the HOT theory of consciousness. Rosenthal's other option, as Coleman points out, is to deny that the conscious state that the subject is 'in' is an existent state. Coleman calls attention to Kriegel's assumption that a conscious state that one is 'in' must be one that exists.<sup>57</sup> On Rosenthal's HOT theory, the notion of a subject being 'in' a conscious state that does not exist is simply to have a HOT that is directed at a non-existent state. The subject can still have a phenomenally conscious experience. It is for these reasons that I argue that Kriegel's twist on the objection of targetless higher-order states does not trouble Rosenthal and the standard HOT theory of consciousness. I shall now move to on how Kriegel's 'complex' self-representationalism falls into problems when it comes to targetless higher-order representations.

The intention of this section is not to argue that Rosenthal's HOT theory should be advocated because all other theories fail. Rather, I am arguing that for those of us who are sympathetic to Rosenthal's HOT theory, Kriegel does not give us sufficient reason to abandon the higher-order theory. In support

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<sup>56</sup> Kriegel, U., (2009) – Page 131.

<sup>57</sup> Coleman, S., (2014) – Note 13.



of the main intention, there is also a secondary intention to show that Kriegel may also be vulnerable to some objections raised towards the higher-order thought theory. This secondary intention has its strongest case in the occurrence of targetless higher-order states. The 'simple' self-representational view gave us an account of phenomenal consciousness whereby a whole mental state represented itself. It is by this self-representation of the mental state that the subject becomes aware of being in that mental state. The structure of 'simple' self-representationalism did not allow for the occurrence of misrepresentation or targetless higher-order states. This is because the awareness of the state was the first order state looking back at itself. It would be strange to say that a red percept looking back on itself would take itself to be green. If the first order state didn't in fact exist, on the 'simple' SR theory, then there could be no awareness and therefore no conscious state. The 'simple' theory was abandoned by Kriegel for his more nuanced 'complex' self-representational theory. As discussed in the previous section, on the 'complex' self-representational theory of consciousness, a conscious mental state consists of two components. There is a first-order sensory component, which represents environmental features, which constitutes qualitative character. There is also a component that represents the sensory state and should be considered as the higher-order component. The higher order component directly represents that sensory component and in doing so indirectly represents the whole state which consists of both these parts. Thus the higher-order component indirectly represents itself. The higher-order component provides the awareness that is required for the whole state, consisting of both parts, to become a conscious mental state.

As the 'complex' self-representational theory posits a conscious mental state as consisting of two parts, it becomes apparent that there can be instances of misrepresentation. We can question what happens when there is a discrepancy between the sensory component and what is represented by the higher-order component. The direct representation of the sensory component may misrepresent the first-order content of the state. Kriegel claims that "it is perfectly coherent to suppose that a mental

state may represent itself to be a certain way when in reality it is not that way.”<sup>58</sup> Kriegel leads on to say that if this is viewed as a vulnerability for self-representationalism, then it creates the exact same problems for the higher-order theory. The advantage of self-representationalism, Kriegel claims, is how it is not vulnerable to the objection of targetless self-representations.<sup>59</sup> Kriegel states that targetless self-representation is a logical impossibility on the ‘complex’ SR theory. He tells us that “it is incoherent to suppose that a mental state may represent itself to exist when in reality it does not exist.”<sup>60</sup>

This has recently been opposed by Coleman who argues that it is conceivable that one part of the state can exist without the other.<sup>61</sup> Coleman considers a case in which a sensory state is directly represented by the higher-order component and the higher-order component is indirectly representing itself. Yet, “subsequently for some reason the sensory component ceases to exist.”<sup>62</sup> Coleman takes his cue from Kriegel’s treatment of a conscious state that lacks qualitative properties but is represented to be qualitatively F. Kriegel argues that in these instances it is unproblematic to conclude that the mental state is experienced as qualitatively F.<sup>63</sup> Coleman claims that this is because “the higher-order presenter’s ascription of qualitative properties to the sensory state is constitutive of such properties figuring in the stream of consciousness. So the first-order qualitative properties are not even needed.”<sup>64</sup> Coleman’s argument is that, in the instance where the sensory component has been represented but then ceases to exist, if the higher-order representer continues to exist the ascribed qualities will remain in the subject’s stream of consciousness. As the higher-order representer used to be integrated with the now deceased sensory part, Coleman claims the indirect representation can still go through.<sup>65</sup> The idea is that as the sensory state once existed, it would have

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<sup>58</sup> Kriegel, U., (2009) – Page 136

<sup>59</sup> Ibid.

<sup>60</sup> Ibid.

<sup>61</sup> Coleman, S., (2014)

<sup>62</sup> Ibid

<sup>63</sup> Kriegel, U., (2009) – Page 137

<sup>64</sup> Coleman, S., (2014)

<sup>65</sup> Ibid.

been integrated with the higher-order component. Whilst integrated the higher order component would directly represent the sensory state and indirectly represent the whole state, of which it is part. This means that what is represented by the higher-order component would still get into the subject's consciousness. If the indirect representation can still go through then the ascribed qualities of the now deceased sensory part still figure in the subjects' consciousness. An example that Coleman uses to show how this can happen is how people represent the company Apple by representing the former chairman and CEO of the company Steve Jobs.<sup>66</sup> When we represent Steve Jobs directly, as the two were integrated when Jobs was alive, we indirectly represent the whole, which in this case is the company Apple. He goes on to say that cases where the sensory state was never integrated into the whole mental state are trickier but not impossible. He gives the example of someone who "thought that Atlantis (assuming Atlantis never existed) was a large component of the European landmass, they could plausibly indirectly represent Europe by representing Atlantis, though Atlantis is non-existent."<sup>67</sup> Coleman's argument shows that on Kriegel's complex self-representational theory it can be the case that a subject is phenomenally conscious without there being an existing sensory state.<sup>68</sup> This is the exact outcome that Rosenthal's HOT theory has regarding targetless HOTs. It appears that the theory has no advantage over Rosenthal's HOT theory, when it comes targetless higher-order representations. It is well documented that Rosenthal accepts cases of misrepresentation and cases of targetless higher-order thoughts as a consequence of his theory. Kriegel will either have to do the same or show that Coleman's argument either misfires at or misrepresents complex self-representationalism.

Another objection that Kriegel raises for Rosenthal is also based on the extrinsicness of consciousness.

Kriegel uses the example of mental content being rendered causally inert on theories of mental

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<sup>66</sup> I have chosen to state that Steve Jobs is the former chairman and CEO of Apple as these are positions that he no longer holds. Even though deceased he will remain a co-founder of the company.

<sup>67</sup> Coleman, S., (2014).

<sup>68</sup> This is not Coleman's main aim in his paper, as he goes on to advocate a different higher-order theory of consciousness. This is because he believes that both complex self-representationalism and Rosenthal's HOT theory fail to make sensory states conscious. I do not have the space to explore this further.

content where the content is construed as an extrinsic property of mental states.<sup>69</sup> <sup>70</sup> The reason for this, Kriegel continues, is because causation is a local affair, which would mean that only intrinsic properties can contribute to the causal powers of mental states. From this, Kriegel concludes that if externalism about mental content is true the content of our mental states is causally inert or epiphenomenal.<sup>71</sup> The reason that this is important is that Kriegel uses this argument to say the same is true of consciousness of the higher-order account. However, for Kriegel to use this argument against the higher-order theory, he notes that the thesis that causal powers of a mental state are wholly intrinsic properties must be accepted. As Kriegel notes this is not an uncontroversial claim and has been rejected by some philosophers.<sup>72</sup> Without Kriegel explicitly stating how he defines a causal power, we shall take it as the potential to or a possibility of causing an effect.<sup>73</sup> An example is that gravity has the causal power to cause objects to drop to the ground, if they are not prevented from doing so.

With this provision laid down, Kriegel shows how the argument can be applied to consciousness on the higher-order representational theory. He says that the argument roughly goes “extrinsic properties are epiphenomenal; higher-order representationalism entails that consciousness is extrinsic; therefore, higher-order representationalism entails that consciousness is epiphenomenal.”<sup>74</sup> The conclusion of Kriegel’s argument is claiming that on the higher-order representational theory, consciousness has no causal influence. This means that when a mental state becomes conscious, the mental state cannot change in light of the subject becoming aware of the mental state. It may perhaps constitutively change but not causally. This is because any change of the mental state would be caused

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<sup>69</sup> See Putnam, H., (1975) for the well-known ‘Twin Earth’ thought experiment. The thought experiment was originally constructed by Putnam to argue for semantic externalism. However, the same argument has been used for externalism regarding mental content.

<sup>70</sup> Stich, S., (1979) presents the argument of mental content being rendered causally inert that Kriegel is discussing.

<sup>71</sup> Kriegel, U., (2009) – Page 140.

<sup>72</sup> Dretske, F., (1988)

<sup>73</sup> I do not want to explore the notion of causality as I cannot accommodate it within the word limit. I have offered a description which I have tried to make as neutral as possible.

<sup>74</sup> Kriegel, U., (2009) – Pages 140-141

by its becoming a conscious mental state. Take the mental state that represents some pain in the subject as an example. When this first-order state is represented by a HOT the subject becomes aware of the pain. However, if consciousness is epiphenomenal, as Kriegel claims, then there can be no change in the qualitative properties. All that changes is that the subject is now aware of the pain. There needs to be caution taken so we do not construe Rosenthal as saying that a subject being aware of their mental states causes the mental state to gain the property of 'being conscious'. Rosenthal is not offering a causal account but a constitutive account. This means that Rosenthal is offering an account of what consciousness is constituted by not an account that is claiming what cause a mental state to become conscious. Rosenthal put this down in print when he said, "Being transitively conscious of a mental state does in a sense make it intransitively conscious. But that is not because being conscious of a mental state causes that state to have the property of being intransitively; rather, it is because a mental state's being intransitively conscious simply consists in one being transitively conscious of it."<sup>75</sup> Kriegel is well aware of this and notifies the reader and continues as this is not a way out of his objection but a cautionary note.

Kriegel's argument that consciousness becomes epiphenomenal on the higher-order theory rests on the counter-intuitive premise that all extrinsic properties are epiphenomenal. An extrinsic property is a property which an object has in relation to something else. The property of 'being able to float' is a property that an object has in relation to any liquid on which the object can float. What Kriegel's argument rests upon is that all extrinsic properties have no causal powers to bring about an effect in the physical world. One's weight is generally considered to be a relational property. A person weighs as much as they do due to the gravitational force between the object and the planet that they are on. If people were transported to different planets their weights would vary in relation to the planet that they are on. It seems strange to argue that one's weight has no causal power to bring about an effect on the physical world, especially if we were discussing this whilst sitting on a see-saw. However, it can

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<sup>75</sup> Rosenthal, D.M., (1997) – Pages 738-739.

be noted that someone is likely to respond by saying that the effects of weight are due to the mass of the object and mass is an intrinsic property. Kriegel does acknowledge that the premise that extrinsic properties are epiphenomenal may be disputed and tells us that his argument is offered to those who argue that all causal powers are intrinsic properties.<sup>76</sup> Nevertheless, more can be gained from Kriegel's argument if it is not rejected solely on extrinsic properties being epiphenomenal. I shall now proceed with Rosenthal's response to Kriegel's argument that consciousness is rendered as epiphenomenal on the higher-order theory.

Rosenthal has previously responded to this kind of objection before Kriegel's formulation of the matter. Fred Dretske argued theories that advocate state consciousness as a matter of a subject being transitively conscious of their mental states run into trouble. This trouble comes when the theories try to explain how a mental state's being conscious plays any role in the mental state's function.<sup>77</sup> Rosenthal's response to this is to say that we do easily overestimate a state's being conscious playing a role in a mental state's function. The causal role of a mental state when it comes to planning and reasoning will not change whether the state is conscious or not.<sup>78</sup> Kriegel takes this as a biting the bullet of sorts. Kriegel argues that Rosenthal's response of 'downplaying' the role a state's being conscious plays does not go far enough. To fully bite the bullet and to accept that consciousness is epiphenomenal on the higher-order theories, Kriegel claims that it must be accepted that consciousness has no causal powers whatsoever.<sup>79</sup> However, in the following paragraph after Rosenthal discusses our overestimation, he gives us an explanation of how consciousness may have some causal role in the mental state's function. Rosenthal states that on the HOT "a conscious state is a compound state, consisting of the state one is conscious of together with a HOT. So the causal role a conscious state plays is actually the interaction of two causal roles: that played by the state itself

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<sup>76</sup> Kriegel, U., (2009) – Page 141.

<sup>77</sup> Dretske, F., (1995) – Page 117.

<sup>78</sup> Rosenthal, D.M., (2002a) – Page 416.

<sup>79</sup> Kriegel, U., (2009) – Page 142.

and that played by the HOT.”<sup>80</sup> For Rosenthal, the causal role of the first-order state remains the same whether conscious or not. From what has already been said in the first section, the causal role of a first-order state appears to be constituting the bringing about of a HOT. But it is the interaction between this causal role and the causal role of the HOT that make up the causal role of the conscious state. The causal role of a HOT would be how constituting how the experience what is represented. Rosenthal adds that in cases where the first order state does not match what is represented, the causal role of the HOT matters more. This is in respect of which first-order property we are represented as being in.<sup>81</sup> If Rosenthal’s reasoning is followed then the causal roles of unconscious mental states and conscious mental states differ. The causal role of an unconscious mental state would be what is caused by the percept or quality which is represented. The causal role of a conscious mental state is the interaction of the original causal role with the causal role of the HOT. The broader casual role of this interaction appears to be to constitute a phenomenally conscious experience. Therefore, consciousness does not change the causal role of a mental state, in a sense it adds to it. This is also the case when the first-order state is misrepresented as there is still interaction between the first-order state’s causal role and the causal role of the HOT. There is still the broad causal role of constituting a phenomenally conscious experience, even when the first-order state is misrepresented. The point that I believe Rosenthal is making, is that the interaction of the causal roles of the first-order state and the HOT does constitute a change for the subject. This goes towards arguing that it seems to be false that extrinsic properties are epiphenomenal.

In this section, I have spent time considering some of the objections presented by Kriegel against higher-order theories of consciousness. I first analysed the common objection of targetless higher order thoughts. Kriegel argues that Rosenthal has to either accept that the what-it-is-likeness differs between the subjects or the what-it-is-likeness is the same. Kriegel claims that both are unpalatable options. I show that this is a false dilemma that is based on Kriegel’s insistence that his ‘obvious truism’

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<sup>80</sup> Rosenthal, D.M., (2002a) – Page 416.

<sup>81</sup> Ibid.

cannot be rejected. It is from here that I used Coleman's argument to show that Kriegel's complex self-representational theory renders the same outcome when we consider targetless higher-order states. This means that the 'complex' SR theory has no advantage over Rosenthal's HOT theory, when it comes to targetless higher-order representations. Following this, I gave Rosenthal's reason for rejecting the claim that consciousness has no causal role, if construed as an extrinsic property. Having defused these objections we can reason that we are not given sufficient reason to abandon Rosenthal's HOT theory of consciousness. I conclude that for those of us who are persuaded by Rosenthal's HOT theory, we are not given sufficient reason by Kriegel to abandon the HOT theory. This is because the objections presented against Rosenthal's HOT theory can be explained and Kriegel's theory is also vulnerable to some of the objections.

### **Conclusion**

The central thesis of this dissertation has been to argue that those of us who are persuaded by Rosenthal's HOT theory, are not given sufficient reason to abandon the HOT theory by either Gennaro or Kriegel. I have explored Gennaro's WIV and Kriegel's 'complex' self-representational theory of consciousness. Through this exploration, I showed how consciousness is viewed on both of Gennaro's and Kriegel's theories in turn. The main intention of the thesis was not to show that we have reason to accept Rosenthal's HOT as a superior theory of consciousness. Rather, the main intention was to show that Gennaro and Kriegel do not give sufficient reason to abandon the HOT theory. I did this in five sections. The first section explicated Rosenthal's HOT theory of consciousness. I analysed the common objections aimed at higher-order theories of consciousness of misrepresentation and targetless HOTs. In doing this, I gave an account of how Rosenthal's nuanced position deals with these objections. It was important to do this as the objections against higher-order theories, play a crucial role in understanding why Gennaro and Kriegel claim that their theories are better suited to deal with them.

The focus of the second section was Rocco Gennaro's wide intrinsicality view (WIV). I presented how Gennaro contends consciousness is structured on the WIV. This gave us a clear idea of the conditions



that the WIV places on state consciousness. Gennaro contends that the WIV is better suited to deal with objections of the ‘problem of the rock,’ misrepresentation and targetless higher-order states. In the third section, I explicated how Gennaro argues that these objections are dealt with on the WIV. I went on to analyse Gennaro’s proposed solutions to the objections. Through this analysis, it became apparent that each of the solutions that Gennaro proposed relies on a conceptual match between the M and the MET. I argued that Gennaro does not give a principled reason that flows from his theory of consciousness to account for the existence of this conceptual match requirement. Therefore, I concluded in the third section that Gennaro’s responses cannot adequately render the WIV invulnerable to these objections. This led to the conclusion that Gennaro does not give us sufficient reason to abandon Rosenthal’s HOT theory of conscious. The fourth section moved away from the WIV and focused on the ‘complex’ self-representational theory of Uriah Kriegel. In the fourth section, I initially explicated Kriegel’s ‘simple’ self-representational theory of consciousness. This was reformulated into his ‘complex’ theory due to the unlikelihood that the ‘simple’ theory could be explained in natural terms. Following this, I laid out Kriegel’s ‘complex’ theory of consciousness. The final section criticised Kriegel’s argument for ‘complex’ SR *via negativa*. The negative argument was several objections aimed at higher-order theories of consciousness. I spent time considering some of the objections presented by Kriegel. Having defused these objections, I concluded that we are not given sufficient reason to abandon Rosenthal’s HOT theory of consciousness by Kriegel’s argument. This means that both Gennaro and Kriegel were unsuccessful in their attempts to show their theories to be superior to Rosenthal’s HOT theory. For those of us persuaded by the case for Rosenthal’s HOT theory of consciousness. The arguments of Gennaro and Kriegel do not give us need to consider advocating a different theory of consciousness.

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