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**A Study on Philosophical Intuition and Thought Experiment:  
Kripke's Critical encounter with Reductive Physicalism**

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**Abstract**

In philosophy, many reflections and categories were the result of intuition and thought experiments. Intuition is defined as direct, immediate, and non-inferential knowledge accompanied by a sense of certainty. The thought experiment has always been a source of new insights by imagining possible situations to demarcate concepts and revise common philosophical theories. Metaphysicians usually have consensus on the informativity of intuition, but in the analytical tradition, there are severe challenges in dealing with this type of knowledge. On the other hand, some contemporary philosophers believe that the thought experiment induce the unjustified and unacceptable results in the mind of audience. In this article, by referring to some aspects of Kripke's thought, we show that his use of intuition and thought experiments in his critique of radical physicalism is defensible. By distinguishing between fixing the referent of the mental state and the physical phenomenon, Kripke has been committed to the theory of property dualism, which is a critical approach to physicalism in the realm of philosophy of mind.

**Keywords:** Philosophical intuition, Thought experiment, Analyticity, Kripke, Property dualism

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## 1-Introduction

A brief look at the history of philosophy reveals that many philosophers have used thought experiments to provide intuitive justification for their arguments. For example, the *allegory of Plato's Cave*, John Locke's *prince and the cobbler*, and Rousseau's *state of nature* are among the thought experiments proposed by ancient and modern philosophers. In the contemporary era, thought experiments are widely used in "Philosophical Disciplines" that is a subset of the analytic tradition. In this article, we first examine philosophical intuition and its challenges and then discuss the nature, the aims of the thought experiment, and the strategies for presenting a justified thought experiment. Many theories of philosophy of mind are outlined in the face of the findings of the cognitive sciences and neuroscience. Therefore, it is necessary to determine the status of philosophical intuition to critically confront the reductive approach that governs new science. This requirement, in particular, manifests itself when we consider philosophy as an independent realm compared with science. Therefore, by referring to Kripke's main work, *Naming and Necessity*, we analyze some of his theories about the nature of the mental state. Contrary to the analytic tradition prevailing from Frege and Russell to Quine and Fodor, Kripke for defining the proper names, use of the theory of rigid designator, instead of the idea of Descriptions, and provides the basis for establishing the essentialism. Relying on philosophical intuition, on the other hand, he distinguishes between two types of identity propositions, namely physical-physical and physical-mental, and he then prefers the theory of property dualism over radical physicalism. Although Kripke's dualism does not have the metaphysical implications of Platonic-Cartesian's attitude, it nevertheless challenges reductive physicalism.

## 2-Research background

There are some articles in English about intuition and thought experiments. For example, we can refer to the article by Stven Hales, which formulates and analyzes the problem of intuition. Eric Margolis and Stephen Laurence also discuss how we can trust our intuition. Elke Brendel also has an article on the intuition pump and how to use thought experiment correctly. There is another article by George Sher on Kripke's dualistic view, in which he examines the relationship between Kripke's thought and Cartesian dualism. The author of this article has used all these sources to write the article. Our innovation is that we examine the place of thought experiment and philosophical intuition in Kripke's thought by referring to the theories that exist about the importance, role, challenges and functions of philosophical intuition and thought experiment.

## 3 -Roles of intuition in philosophy and science

There is a principle in Aristotelian logic that the chain of reasoning must ultimately lead to a fundamental belief which does not need to be proved by citing other

premises. In other words, the fundamental belief is accepted based on intuition and without resorting to the argument. Intuition, as direct knowledge, is therefore, the final premise of reasoning (Aristotle, 1956: 13). By definition, intuitions are propositional attitudes accompanied by a sense of certainty and are characterized by immediacy and non-inference features (Brendel, 2004: 109). Intuitions about empirical reality have often amounts to inaccurate conclusions about the natural world. For example, this intuition that the earth seems to be stationary and the sun revolves around it, is not accurate. Empirical intuitions must be weighed against the criteria of experience (Hales, 2000: 135). Accordingly, Kripke distinguishes between epistemic and metaphysical possibility. Based on how we know, we call the celestial body we see in the morning before sunrise, Hesperus and the celestial body we see in the evening, phosphorus. Empirical evidence shows us that Hesperus and Phosphorus refer to a unique object. Our initial notion that each name implies a distinct referent stems from ignorance and is merely an epistemological possibility (Gutting, 2009: 45- 46).

Many philosophers admit that their arguments are ultimately rooted in intuition; David Chalmers, for example, explicitly states that all the philosophical arguments that have been formulated up to now about the nature of the mind are based on intuition. Philosophical intuitions have a rational aspect and are not of the type of empirical intuitions; therefore, to determine their strength, one must pay attention to their implications and logical consequences. Of course, the use of intuition in philosophy is also has been met with criticism. Usually, those who grant a subsidiary role for philosophy compared to science are opposed to intuition. Some, following Wittgenstein, believe that philosophy does not have its truths and only plays the role of clarifying scientific propositions (Hales, 2000: 136). In this regard, Daniel Dennett believes that the purpose of the thought experiment is to develop a set of imaginary reflections to induce a formal result in the mind of people. Dennett uses the term *intuition pump*, because the thought experiment by designing an imaginary scenario inevitably leads the audience to the outcome desired by the speaker (Dennett, 2012: 11).

#### **4-The place of intuition**

In the contemporary philosophical literature, Socratic intuitions are defended and accepted by some thinkers. However, due to the dominance of positivist thought and analytic philosophy, traditional metaphysical intuitions have been fundamentally criticized. To determine the position of intuition, it is necessary to present examples of theories for and against the epistemological facet of intuition.

##### **4-1 Platonic approach: Intuition as a mysterious faculty**

According to Brown, intuition, as a mysterious faculty, is a vehicle for a priori access to the general and the objective laws of nature. In his view, the thought experiment by using such intuition violates the old theory and replaces the new idea. To prove his

point, he uses Galileo's thought experiment to disprove the Aristotelian theory: According to Aristotle, body A, which weighs ten times as much as body B, must have fallen ten times faster than body B. According to Galileo, if we consider bodies A and B as a whole, body B slows down the velocity of A. On the other hand, because the hybrid system usually is heavier than body A, it will fall faster than body A. According to Brown, this thought experiment, relying on a priori knowledge, shows the contradictions of Aristotelian theory, and concludes that objects fall at equal velocities, regardless of their weight (Brown, 1991: 122-123). In the present case, we gain intuitive knowledge of the objective laws of nature, and thus discover the laws governing falling objects. He means that all individual events are a reflection of the general laws contained in the realm beyond nature. On the other hand, the world has reasonable relations, and if we recognize a priori that an event is contradictory, then necessarily it cannot be realized in the outside world either.

A non-Platonic example of this attitude can be found in the a priori physicalism. In this approach, if we know all the laws governing nature, we can infer future events based on past events, a priori, without reference to the outside world (Madell, 1988: 31-32). In fact, a priori physicalism replaces absolute divine knowledge with comprehensive human science. Of course, unlike Plato, Descartes and Leibniz, Brown believes that this knowledge is not the result of divine illuminations and also is not infallible. At the same time, what he has in common with the Platonists is that he distinguishes such intuition from empirical method and scientific inference (Ibid: 127). According to Cooper, the conclusion that objects fall at a rate is not directly intuitive, but is based on empirical assumptions. Such a result can be considered definitive when we neglect other falling conditions of objects such as shape, material, and air resistance (Cooper, 2005: 341).

#### **4-2 The place of intuition in the Analytic tradition**

##### **Quine's theory**

Quine argues that the belief in informativity of intuition is rooted in the acceptance of analytical propositions. According to Quine, the analyticity is related to the theory of meaning and synonymy. Still, philosophers have mistakenly extended this issue to the real world, and this approach leads them to an inflationary ontology (Quine, 1951: 21). -22). By denying the distinction between analytic and synthetic propositions, he aimed to neutralize the authenticity of intuitive knowledge.

A) Analytical intuitions are confused with what seems obvious. Every analytical statement is clear, but not every clear statement is analytical; For example, merely proving a belief like (water is H<sub>2</sub>O) does not mean that it is understood intuitively. B) Analytical intuitions are the result of how some concepts are obtained and their synonyms and definitions. We learn the word "bachelor" through appropriate connections to other terms such as (unmarried man). When these concepts are more closely linked, they appear to have intuitive and analytical structures. C) Analytic

intuitions result from the pivotal role assigned to a particular concept or belief in a network of beliefs. A belief that is central to a set of beliefs and cannot be easily removed, creates the impression that it is intuitive and analytical (Quine, 1960: 66). Giving up these beliefs will require a massive revision or threat to our entire belief system. What George Edward Moore accepts based on common sense is stubborn beliefs, yet they are not analytical; For example: belief in other minds, our individual experiences are not of the dream type, the world has existed for more than a minute (Juhl & Loomis, 2010: 118).

### **Psychological analysis of intuition**

In response to whether we have a mysterious faculty called intuition, a psychological approach can be taken. An important issue in the psychological explanation of analytics is the answer to this question: how the concept of analyticity is constructed. In this way, when the concept of analyticity is achieved, analytical intuitions are also realized. A delineation to explain the above is an account based on the implied theory of meaning. The implicit theory of meaning can be universal or may be related to a specific culture. According to implicit theory, the meaning is constructed by linguistic functions and appears in inference patterns. The implicit theory measures how categories and concepts are used meaningfully to generate propositions. Another approach is similarity-based accounts. According to this view, a psychological mechanism categorizes propositions based on similarity criteria. For example, propositions such as (a bachelor is an unmarried person) with (everything is itself) in the range of analytical propositions and propositions such as (grass is green) and (Aristotle was Alexander's teacher) are placed under synthetic ones. When the concept of analyticity is formed, we use it as a philosophical perspective for the classification of propositions, and we do so based on predetermined samples and paradigms. The above psychological approach shows that we do not need to use analytical intuitions to explain analyticity (Margolis & Laurence, 2003: 312-318). Contrary to the views of traditional philosophers, analytical intuitions, therefore, lack originality and independence, and philosophers have imposed such a view on us.

### **5-The problem of intuition**

The problem of intuition is formulated as follows:

- 1) If a proposition is epistemologically justified, it is not out of two cases: it is either a posteriori or a priori.
- 2) If a proposition is epistemologically justified, its method is based on intuition, which justifies some propositions.
- 3) If the proposition (the method of intuition justifies some propositions) is justified, its justification is not a posteriori.
- 4) The proposition (the method of intuition justifies some propositions) is epistemologically justified.

5) There are no self-justifying propositions.

It is the result of premises 1 and 3: 6) If (the method of intuition justifies some propositions) is epistemologically justified, its justification is a priori.

From premises 2 and 6, it follows that: 7) If (the method of intuition justifies some propositions) is epistemologically justified, its justification depends on the way of intuition that justifies some propositions.

From Premises 4 and 7, it follows that: 8) Justification (the method of intuition justifies some propositions) depends on the way of intuition that justifies some propositions. From the propositions 5 and 8 this is resulted: 9) Therefore (the method of intuition that justifies some propositions) is not epistemologically justified.

From the propositions 4 and 9, it is followed: 10) (the method of intuition justifies some propositions) is both justified and not justified.

According to premise 8, the justification (the method of intuition justifies some propositions) is based on intuition itself. By definition, the rational intuition of a proposition shows that it is necessarily true. The theory that intuition is strongly associated with necessity or powerful modality is a philosophical theory and cannot be accepted or refuted by reference to experience. In other words, to defend it, we have to appeal to intuition again, which confronts us with a logical circle (Hales, 2000: 139). The result of the above argument is that the belief that (the method of intuition justifies some propositions) leads to a contradiction.

### **Answer to the question of intuition: Bealer's theory**

In response to the above argument, Bealer says: the use of intuition as evidence in philosophy is standard practice, and we see no reason to abandon it. In Bealer's view, a coherent epistemology cannot be achieved without accepting intuition as evidence. It is impossible to engage in philosophy without intuition. Since we are coherently concerned with philosophy and present a reasonable kind of epistemology, the use of intuition will be justified (Bealer, 1987: 331-333). Thus self-justifying feature of intuition does not lead to flawed logic. This answer to the question of intuition is reminiscent of Hume's reaction to the problem of induction. According to Hume, we still trust induction as long as we have no reason to give it up. It is true that the basic premise of induction, namely (the future acts like the past), is itself justified by reference to induction. Therefore, without its acceptance, the possibility of empirical science is eliminated. Since it must not take Quine's indeterminacy of translation seriously, otherwise, it is not possible to translate from one language to another, or Cartesian skepticism about the external world is negligible, so the problem of intuition for philosophical attention is negligible (Hills, 2000: 140). 141). If the foundationalism is correct, at least there is one proposition whose justification depends on nothing but itself. Philosophy as a rational activity is possible when we consider intuition informative (Ibid: 135).

## 6-What is a thought experiment?

The first person to use the term thought experiment was Hans Christian Ørsted, and Ernst Mach later used it for philosophical discussions (Fehigf & Wiltsche, 2013: 70). Thought experiments have a preliminary function, i.e., they are a prerequisite for planning and performing real tests. Unlike the actual test, the result of the thought experiment stems from intuitive insight. Mental travel to possible worlds shows the possibility of examples contradicting the common claim of the actual world. Some thought-experiment is not externally feasible because they are based on ideal, imaginary, and counterfactual positions. For example, Galileo's mental experiment, in which moving objects move indefinitely in a straight line if there is no obstacle in their path, or Einstein's mental experiment on the results of human motion at the speed of light, seems unlikely. Of course, some thought experiments, such as the Newton bucket thought experiment or the Einstein train test, is applicable (Brendel, 2004: 91).

Addressing the issues of epistemology, ethics, and aesthetics within the scope of philosophy, and intellectual progress in these areas is achieved by thought experiments rather than experimental tests. It is through intuition that we know what constitutes virtuous behavior, or Edmund Gettier's thought experiment has taught us that knowledge is not merely justified true belief. The allegory of Plato's cave, Descartes' evil demon, John Locke's prince and the cobbler, Rousseau's state of nature, Putnam's twin earth, etc., are examples of thought experiments, each of which offers us a peculiar rational insight (Hales, 2000). : 137).

## 7- Aims of thought experiment

- 1) Thought experiments can show us possible situations. The discovery of the impossibility of a situation shows how the world cannot be, and the discovery of a fundamental situation shows what the world should be like (Cooper, 2005: 339).
- 2) Through intellectual experiments, we can discover the internal and hidden contradictions of a situation. These contradictions become apparent when we imagine an unusual and new situation. By thought experiment, the criteria for using concepts in everyday situations are violated and its paradoxical results will be manifested. Therefore, thought experiments are essential for the intellectual development of scientific theories.
- 3) Another purpose of the thought experiment is to provide evidence to defend a dubious theory. For example, Newton's thought experiment shows that absolute space is possible.
- 4) The thought experiment can have an educational function; For example, John Locke showed by the thought experiment of the prince and the cobbler that the necessary condition for personal identity is psychological states.
- 5) Some thought experiments show ambiguities and borderline uses of concepts. With thought experiments, the limits of the application of a concept can be

delivered more accurately. For example, based on some thought experiments, we find that it is impossible to have a single intuition of the identity of objects and persons.

- 6) A thought experiment can be used to explain an abstract and complex situation.
- 7) Thought experiments in some theoretical requirements are at least similar to experimental tests. In this regard, firstly, in the thought experiment, the data change based on prior planning, and secondly, in an imaginary situation, the functional dependence of the variables can be shown (Brendel, 2004: 92).

### **8- The role of the thought experiments for determining the application of concepts**

Among the aims we have listed for the intellectual test, we examine the role of the thought experiment in determining the extent to which concepts apply because in philosophy, we deal with concepts. The thought experiment is designed for philosophical analysis of concepts. In the face of the thought experiment, one must intuitively decide whether, in a hypothetical situation, the application of the intended concept is correct. To determine the right and wrong of application of a concept in actual cases, depends on recognizing its correct and incorrect use in non-actual cases. In respect to this matter, counterfactual propositions can be used in the thought experiment (Ichikawa & Jarvis, 2009: 237). Suppose, for example, that in one world, the oceans consist of orange juice instead of water. A person suffocates in that hypothetical world's ocean because his lungs are filled with orange juice. Can it be said that he has drowned? From English literature, the verb "to drown" can be applied to both the actual world and the above hypothetical world. This type of thought experiment can be used to answer the following question: How do the conceptual maps of a word lead to true and justified beliefs even when faced with non-actual situations? Of course, there must be similarities between the counterfactual propositions in the thought experiment and the actual situation (Ibid, 2009: 238).

### **9-Relationship between thought experiment and intuition**

We have already spoken separately about intuition and the thought experiment. Although there is an overlap between these two issues, we will examine the relationship between these two matters from another angle. The primary purpose of the recent discussion is to answer the question of how to formulate a thought experiment to achieve successful intuitive results.

#### **Intuition pump and criterion for the success of the thought experiment**

As we have said, Daniel Dennett thinks that some thought experiments lead to the intuition pump. The intuition pump with imaginary scenarios induces to mind results that have no factual basis. To reach an ideal scientific theory, all possible conditions

and aspects must be anticipated, and thought experiments play a decisive role in this direction (Laszlo, 1973: 79). A well-known example of an intuition pump is the thought experiment of Putnam's Twin Earth: Imagine that on another planet, a replica of earth, there is a fluid flowing in rivers and seas that has properties similar to water on inhabited land, and incidentally, It is called water, but with the difference that the liquid in question is composed of XYZ instead of H<sub>2</sub>O. The inhabitants of the hypothetical planet do not know H<sub>2</sub>O; however, their molecules are similar to the peoples of the earth. On the other hand, there is no difference between the mental states of the people of these two planets about water. Still, for them, the physical referent of water in terms of the constituent elements is different (Putnam, 1975: 223-227). Therefore, there is no biological difference between the inhabitants of the supposed and actual land. Since, according to empirical evidence, 70% of our bodies are made up of water, how is it possible that the elements that make up water on these two planets are different? Still, the inhabitant's molecules of the hypothetical planet and earth are similar. In some thought experiments that are outlined to explain the personal identity, it is used of scientific fictions such as the fission processes, brain transplantation, teletransportation. These kinds of thought experiments do not give us an objective criterion for determining personal identity and suffer from the question-begging. This type of thought experiment is more the result of stipulations that are abstractly imposed on reality than based on the discovery of the fact. Of course, these thought experiments can be defended from a different angle; that is, they are theoretically helpful and show us the boundaries of using a concept. On the other hand, it is possible to design successful thought experiments. Edmund Gettier's thought experiment, for example, is a successful example. With an imaginary scenario, Gettier showed that the traditional definition of knowledge (justified true belief) is not sufficient. He speaks of the conceivability of a situation in which a person has a justified true belief only in terms of chance or coincidence; therefore, in addition to the above components, other factors are needed to acquire knowledge (Brendel, 2004: 98-104).

### **Ways to avoid the intuition pump**

For the thought experiment not to lead to the intuition pump, it is necessary to pay attention to the following:

- 1) We need to know how the change in some relevant data will affect other assumptions in the imaginary scenario.
- 2) There needs to be a logical connection between the imaginary assumptions of the thought experiment and its result.
- 3) Unrealistic conditions or imaginary assumptions must always be irrelevant. In other words, the imaginary assumptions should not be engaged explicitly in the data or the main facts of the case. At the same time, a counterfactual position should not be dismissed as impossible from the beginning.

- 4) Thought experiments based on unlikely and impossible situations are problematic. Still, they can nevertheless show the limitations applying a concept and teach us different ways of looking at a single subject (Brendel, 2004). : 106)

### 10- The place of intuition and thought experiment in Kripke's view

Kripke presented a series of lectures at Princeton University in the 1970s, which were later published in his book *Naming and Necessity*. Contrary to Quine's view, he defended analyticity and essentialism. The three main axes of Kripke's work can be categorized as follows:

- 1) There are intrinsic yet contingent properties through which objects are described.
- 2) Proper names are not clusters of descriptions but rigid designators.
- 3) There are necessary a posteriori facts.

Kripke brings up for discussion the realistic approach to the concept of necessity that had been ignored in the analytical tradition from Frege to Russell and logical positivists. Those who are more tolerant of Quine will eventually acknowledge the necessity of the proposition; That is, one can speak only of necessarily true propositions. But in addition to the necessity in propositions, Kripke believes the necessity of properties or essentialism. Quine's critique of essentialism is that the necessity of knowing a property like F for the object X depends on how we describe X. For example, if we say that the number 9 comes after the number 8, it is necessarily odd. Now, if we describe 9 in terms of the numbers of planets, it is not necessarily odd. Thus there is no objective fact for being odd or even for a number (Gutting, 2009: 31-32). Kripke then critiques the theory of descriptions, common in the analytical tradition, and presents his reasons for justifying essentialism.

### 11- Quine's theory of descriptions and Kripke's critique of it

According to Quine, the way we describe objects and people determines what properties are essential to them. For example, if we describe Nixon as a person who won the 1968 election, then (winning the 1968 election) is a necessary attribute for Nixon. Still, if we call him Nixon, this attribute will no longer be necessary for him because one can imagine that another person other than him could have won the election. Apparently, according to this view, only in mathematics can we talk about the necessary and sufficient conditions for determining the properties of phenomena. According to Kripke, this view is rooted in a misunderstanding of the possible world hypothesis. Referring to everyday knowledge or common sense, Kripke claims that talking about essential properties is meaningful for objects. In other words, regardless of how we describe Nixon qualitatively, it is possible to determine his inherent traits; So that these intrinsic properties in all possible worlds only imply Nixon. Here his defense of essentialism has to do with naming or referring. According to Kripke,

proper names are not descriptions in the first place, but are rigid designators. In everyday life, the referents of proper names are not determined by counterfactual positions. Still, in common usage, the determination of the intrinsic properties of objects depends on the use of proper names. In other words, in our usual conditions, we talk about attributes or events by naming or referring to a person or an object. In the following, again we refer to the same case of Nixon. What is it about Nixon that, apart from possible descriptions of him, can be true in all possible worlds? According to Kripke, some properties such as (being human or not being inanimate) are essential. Kripke relates the above considerations to his theory of necessary a posteriori facts in the sense that, first, (Nixon being human) and (not being inanimate) are essential facts, and second, our knowledge of such metaphysical necessities obtained by empirical evidence (Kripke, 2001: 40-49). Kripke's main reason for proving that "rigid designator theory" provides a more accurate picture than descriptive theory is this: in a chain of human communication, the speaker's referent may be different from what the listener thinks, or gradually end up with the person that is not the purpose of the speaker. For example, the teacher in the classroom says that (George Smith squared the circle) but his intention of (George Smith) is his neighbor. Students who are unaware of this issue develop another meaning in their minds. According to Kripke, the real communication chain should be meaningful, not how the speaker or listener thinks about the referent of names (Gutting, 2009: 42).

## 12- Type identity and necessary a posteriori truths

The possibility of separation of light and electrical discharge or heat and molecular motion is conceivable because, in identity propositions constituted of physical terms, we use contingent properties to fixing the referents of rigid designators. However, if by referring to empirical evidence we realize that the physical-physical identity is true, then the relation between subject and predicate will be necessary. In Kripke's view, the proposition of identity depicts a kind of necessary a posteriori truth. Indeed, if the process of fixing the referent will strictly be done, the connection between the subject and the predicate within the related proposition is necessary (Gutting, 2009: 44). Kripke uses thought experiments to show how the physical referent is fixed. He says: consider a situation where humans were blind and had no perceptual sensitivity to light. In this hypothetical situation, can we say that there are no photons of light? Given that light in the actual world is known as electromagnetic radiation and is referenced through visual perception, so there may be light in that world, but people do not have the perceptual ability to experience it. Now imagine that miraculously on a planet, people could gain visual ability through sound waves. In this case, can light be synonymous with anything that gives us a visual sense? No, because it may be light in reality, but something else gives us causally a visual impression. However, a way of detecting the objective reality of light, fix its referent (Kripke, 2001: 129-130). According to the above thought experiment, the result of Kripke's view is that in the

process of fixing the physical object, instead of relying on its phenomenal appearance, one should pay attention to external reality. In other words, the reality is independent of our perception, and sometimes our perceptions of objects resulted in epistemological deviants from the external world, although this will be gradually corrected by referring to the intersubjective agreement in scientific societies.

### 13- The difference between the two types of identity statements

In the proposition of physical-physical identities, such as "heat is a molecular movement," we are confronted with two possible intuitions. On the one hand, we can consider that what we call heat may not be molecular motion, and in the opposite sense, it is conceivable that molecular motion may not be heat. According to Kripke, the first intuition can be explained away after fixing the referents of rigid designators (i.e., subject and predicate) and proving the necessity of their connection. To rule out the reverse intuition, the following thought steps can be revealed: 1) If a person confuses the fixing of referent process with the discussion of synonymy and considers the term (heat) and (cause F or molecular movement) synonymous, these concepts are replaceable. 2) On the other hand, he can imagine that (something other than molecular motion is the cause of F). 3) As a result, it can be claimed that (molecular motion is not heat). But since reverse intuition is based on confusion the fixing of referent with synonymy, it is not a point of concern (Sher, 1977: 233-234). In the process of discovery, the fixing of the referents of rigid designators in the physical-physical identity statement is a contingent case; however, in the status of reality, the relation of subject and predicate can be necessary. In other words, if the constituents of a given identity proposition are correspond to facts of the external world, both of the above intuitions must be explained away because, according to the theory of (necessary a posteriori truths), the subject and predicate in the identity statement are rigid designators and each of them has a specific and unique referent. So far it has been found that the process of fixing referent for physical phenomena in the step of discovery is quite contingent. However, it is not possible to give an utterly contingent account of the proposition of mind-body identity. We can explain away this intuition that (it may not be the pain identical to the nerve stimulation of c), but it is not possible to explain away this intuition: (nerve stimulation of the c is not identical to pain).

To explain this, we must deal with how to establish the referent of mental states. According to Kripke, in fixing the referent of the mental state, the distinction between appearances and reality is meaningless. In other words, the reality of pain is the feeling of pain, and the subject does not need anything but the phenomenological quality of experience to fix the referent of his pain. But in fixing the referents of the physical phenomena, one can always distinguish between how it appears and its reality. For example, a sensation may have the apparent properties of heat but not caused by molecular motion, but the appearance of the mental state is its main reality. In the identity statement of mind-body, we are faced with two terms, mental and physical.

In referring pain to c nerve fibers stimulation, we encounter a contingent event because the pain may be something other than the arousal of c-nerve fibers. Of course, when it is proved by reference to the fact that pain is the trigger of the c nerve fibers, we are faced with a necessary proposition (Kripke, 2001: 149-154). As we have said, it is impossible to eliminate the intuition that (pain is not the trigger of the c nerve fibers) because the relationship between the mental and physical terms is asymmetric in the mind-body identity. In other words, it can be considered (pain as a trigger of the c nerve fibers), but the opposite case is not possible because the process of fixing the referents of the physical phenomena is different from the mental matter. But in physical-physical identity, the relationship between subject and predicate is symmetrical; that is, just as heat can be called a molecular movement, the opposite of this statement is as well true (molecular movement is heat).

#### **14-Kripke's dualism and its reinforcement with Nagel and Jackson's thought experiments**

Given what has been said, Kripke advocates property dualism. Mental properties are distinct from physical, but both are derived from a single physical reality (Heil, 1998, pp.78-9). Cartesian dualism is based, on the one hand, on the metaphysical distinction between substance and accident, and, on the other hand, is formulated by clear and distinct rule. According to Descartes, at first blush we have a clear and distinct understanding of the mental and physical. Since the properties depend on substances, each of these properties or accidents indicates a separate entity in the external world. Kripke does not believe in the soul as an immaterial substance, but accepts the distinction between the mental and the physical only at the level of properties. He is committed to physicalism because he asserts that the brain necessitates the mental state (Kripke, 2001: 147). However, Kripke criticizes radical physicalism because, according to him, mental state is an irreducible phenomenon. To strengthen Kripke's dualism, we refer to the thought experiments of Thomas Nagel and Frank Jackson.

Thomas Nagel, in his article, *What is it Like to Be a Bat*, uses this thought experiment to emphasizing the irreducibility of mental qualities to physical phenomena: imagine that you have a thorough scientific understanding of the neurological mechanism of the bat's brain. However, can you understand the phenomenological quality of the bat, or do you know what it is like to be a bat? Certainly not because as, a human being, you cannot participate in the bat's first-person experience and see the world through his point of view. The perceptual structure of the bat is different from that of humans. For example, this animal recognizes its distances from objects through its sound system (Nagel, 1974: 438-440).

Frank Jackson also, in his article titled *What Mary Did Not Know*, suggesting this thought experiment: Imagine that Mary as a scientist has been locked in a room since childhood and has never seen a color other than black and white in her life span. Through television, he has acquired a thorough knowledge of the physiology of the

brain and its mechanism for experiencing colors. Coincidentally, one day he leaves the intended room and sees a ripe red tomato for the first time. Mary's phenomenological experience of red has a quality that is different from all physical knowledge of the neurological mechanism of this experience and cannot be inferred from this physical knowledge (Jackson, 1986: 291-294). This thought experiment shows that the phenomenological quality of the experience that occurs in the first-order person is something separate from theoretical knowledge and is not reduced to it. The discussion of the phenomenal quality of mental experience has to do with what Kripke says about fixing the referents of mental states. It is this mental quality that distinguishes the subjective from the objective phenomenon.

### 15-Final considerations

1-There is no doubt that the intuition used by Kripke is not of the type of belief in the mysterious faculty that gives us access to objective entities in the Platonic realm. Using ordinary or common sense intuition, Kripke defends essentialism against the theory of descriptions. In the analytical tradition from the time of David Hume to Frege, Russell, Quinn, and Dennett, there is a severe critique of essentialism. The most prominent of these criticisms can be seen in the theory of descriptions. Kripke claimed that certain names refer to a specific and unique referent in the universe before being defined in the form of a set of attributes. In his view, proper names are rigid designators, and the process of fixing a referent should not be confused with the discussion of semantic synonymy. What Kripke says about the priority of the individual essence of objects over their linguistic attributes is based on the ordinary intuition that we use names to refer to things. It is noteworthy that Kripke considers the process of fixing referents to mental and physical states to be different. In his opinion, in fixing the referents of the physical phenomenon as rigid designators, we are faced with an utterly contingent process because in this realm, there is a gap between reality and how it appears. But in the process of fixing the referents of the mental state, there is no distance between the appearances of phenomena and reality; Because, for example, the reality of pain is the sensation of pain for the subject in the first-person order. What Kripke says about the fixing of the referent of the mental is again based on ordinary intuition because it uses the method of introspection. Daniel Dennett, a staunch opponent of introspection, disparages this kind of intuition with the label of folk psychology. In his view, folk psychology, which explains behaviors with propositional attitudes, is gradually being replaced by scientific psychology or brain physiology. What Dennett says in his critique of folk psychology and the unreliability of introspection is consistent with the process of fixing the referents of the physical. But according to Kripke's intuition about the oneness of the reality of the mental with the appearance of its phenomena, third-person cognition can never be wholly substituted for first-person and subjective knowledge. The question here is whether everyday intuition is sufficient to deal with the mental state and determine its

nature? Due to the difference between fixing a physical and mental referent, ordinary intuition is effective in this regard. Indeed, the use of intuition concerning empirical facts may lead us to erroneous conclusions, which, of course, can be addressed by referring to sensory experience (common sense or laboratory), but to understand mental states, we have no access other than direct and intuitive exposure.

2- In this article, we discussed about the similarity between induction and the problem of intuition. We went on to say that just as induction is the primary method of empirical research, so is intuition an essential tool for philosophical activity; therefore, self-justifying of intuition does not lead to a flawed logical circle. With Kripke's thought, it is possible to adopt an ontological approach to intuition itself. There is no need to solve the problem of intuition from an epistemological point of view. This can be better understood from the thought experiment of transparency in Michael Tye's thought experiment. Imagine that you have an experience of the blue color of the sky and now try to separate the essential properties of this experience from its object. This attempt is unsuccessful because the elimination of the object of experience and mere attention to experience in itself is not possible (Tye, 1995: 30-31). According to this thought experiment, intuition is also inseparable from its object, that is, the reality of mental states. Intuition can be regarded as first-degree knowledge that is accompanied by a sense of certainty, and of course, this knowledge requires an object that is considered a mental state or propositional attitude. Given that in fixing the mental referent, Kripke unites the reality of the mental state with the way it appears, the intuition is also tangled with its object, the mental state. Therefore, instead of the epistemological justification of intuition, the thought experiment of transparency can be used to understand its ontological nature. In other words, intuition is a transcendental truth that is a condition of knowledge; and since the condition of knowledge is not the object of it, thus the circularity of the intuition is due to taking an unjustified epistemological approach to it. If we consider intuition as an object for theoretical knowledge, we are faced with a logical circle, but this circle is, not only destructive, but also at the ontological level, in terms of its priority considered as a condition of knowledge.

3- Kripke uses thought experiments of possible worlds to prove the necessity of the identity proposition. In his view, if the identity statement is true, it is also necessary, that is, it is true in all possible worlds. The most crucial purpose of the thought experiment is to present unfamiliar or unusual situations to reveal the internal contradictions of a theory for teaching us different ways of looking at a single subject. Kripke, for example, uses a thought experiment (a planet with blind people) while explaining the theory of rigid designators. His conclusion from the above thought experiment is that in the process of fixing the referents of a physical phenomenon, one should not rely on the phenomenological appearance of a given object, but the external reality is crucial because it can be imagined that light exists but, people have not the requisite perceptual capacity for to be affected by light and see objects. This

thought experiment is both a coherent and conceivable model and it teaches us how to fix the referents of the physical; and as well the phenomenological appearance of the physical is not a sufficient criterion for fixing the referent. We then used the Nagel and Frank Jackson thought experiments to reinforce Kripke's view of property dualism. These thought experiments also provide us with new ways of looking at the mental qualities that have been neglected in radical physicalism.

### Conclusion

Kripke distinguishes between semantic synonymy and the fixing of referent and defends essentialism vs. the theory of descriptions. Using intuition and thought experiments, Kripke shows that fixing the referent of the mental state is different from the physical phenomenon. This view leads to the theory of property dualism, which is reinforced by the thought experiment of Thomas Nagel and Frank Jackson. In this paper, we try to show that despite all the challenges concerning philosophical intuition and thought experiments, Kripke uses these two tools relatively successfully to critique reductive physicalism. It seems that fixing the referents of the mental in Kripke's view can introduce intuition as a transcendental affair. Therefore, the accusation of logical circle that attributed to intuition resulted from taking an epistemological approach to it. In the ontological dimension, the self-justifying of intuition not only is destructive, but it expresses the primacy of intuition.

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