

CONSCIOUSNESS ELIMINATED IN DANIEL DENNETT



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จุฬาลงกรณ์มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Philosophy
Department of Philosophy
Faculty of Arts
Chulalongkorn University
Academic Year 2018
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การกำจัดลักษณะทางการตระหนักรู้ของสภาวะจิตในทัศนะของเดเนียล เด็นเน็ตต์



วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาอักษรศาสตรมหาบัณฑิต

สาขาวิชาปรัชญา ภาควิชาปรัชญา

คณะอักษรศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย

ปีการศึกษา 2561

ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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เนียด เด็นเน็ตต์. (

CONSCIOUSNESS ELIMINATED IN DANIEL DENNETT)

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ข้อถกเถียงสำคัญประการหนึ่งในปรัชญาจิตได้แก่ปัญหาที่ว่า เราจะอธิบายการปรากฏขึ้นของ ‘ควอลเลีย’ ในกรอบ
กฎเกณฑ์ทางวิทยาศาสตร์ได้อย่างไร ‘ควอลเลีย’ นั้นมักถูกเข้าใจในฐานะคุณสมบัติเชิงปรากฏการณ์ทางอภิวิสัยของสภาวะ
จิต การรับภววิทยาของ ‘ควอลเลีย’ เช่นนี้ ทำให้ดูเหมือนว่าจะไม่สามารถอธิบาย ‘ควอลเลีย’ ได้ด้วยคำอธิบายเชิง
กายภาพ โจเซฟ เลวินและเดวิด ชาล์มเมอร์ได้ยกข้อแย้งที่รู้จักกันว่าเป็นข้อโต้แย้งเรื่อง ‘ช่องว่างของคำอธิบาย’ และ ‘ปัญหา
ยากของลักษณะทางการตระหนักรู้’ ตามลำดับ วิทยานิพนธ์นี้มีจุดประสงค์เพื่อศึกษาและประเมินการตอบโต้ของแดนเนียด เด็น
เน็ตต์ที่มีต่อปัญหาดังกล่าว แนวทางการกำจัดลักษณะทางการตระหนักรู้ของสภาวะจิตในทัศนะของแดนเน็ตต์ที่เรียกว่า ‘อิลูชัน
นิส’ เสนอว่า ‘ควอลเลีย’ นั้นไม่มีอยู่จริง แต่เพียง ‘ดูเหมือนจะมีอยู่’ เด็นเน็ตต์เสนอว่า เราควรเข้าใจ ‘ควอลเลีย’ ใหม่ใน
ฐานะภาพลวงตา การปฏิเสธภววิทยาของ ‘ควอลเลีย’ ในฐานะคุณสมบัติเชิงปรากฏการณ์และเปลี่ยนความเข้าใจใหม่เช่นนี้ จะ
ทำให้เราสามารถอธิบายการปรากฏขึ้นของ ‘ควอลเลีย’ ผ่านกลไกทางกายภาพของสมองได้สำเร็จ ทั้งนี้วิทยานิพนธ์ยังพิจารณา
ข้อวิจารณ์สำคัญที่มีต่อแนวคิดของแดนเน็ตต์ ซึ่งเรียกว่า ‘ข้อแย้งเรื่องข้อมูลจำเป็นที่ทฤษฎีจิตต้องอธิบาย’ ข้อแย้งดังกล่าว
เสนอโดยนักปรัชญาร่วมสมัย เช่น เดวิด ชาล์มเมอร์ และจอห์น เซิร์ด กล่าวว่า การที่แดนเน็ตต์ปฏิเสธภววิทยาของ ‘ควอลเลีย’ ใน
ฐานะคุณสมบัติเชิงปรากฏการณ์นั้น ส่งผลให้ทัศนะของเขาปฏิเสธข้อมูลสำคัญที่ทฤษฎีในปรัชญาจิตจำเป็นต้องอธิบายไป
ด้วย อย่างไรก็ตามจากการศึกษาข้อโต้แย้งของแดนเน็ตต์พบว่า แนวคิด ‘อิลูชันนิส’ ไม่ได้ปฏิเสธข้อมูลสำคัญตามที่ถูก
แย้ง ในทางตรงกันข้าม การปฏิเสธภววิทยาของข้อมูลที่จำเป็นต้องถูกอธิบาย กลับเป็นการเปิดมุมมองใหม่ต่อข้อถกเถียง ซึ่ง
ส่งผลให้แนวคิดของแดนเน็ตต์สามารถบรรลุเงื่อนไขที่ทฤษฎีอื่นไม่สามารถบรรลุได้มาก่อน ได้แก่ (1) ความสามารถในการ
รักษาตัวปรากฏการณ์ของประสบการณ์ทางการตระหนักรู้ตามที่ปรากฏต่อผู้รับรู้ และ (2) ความสามารถในการคงไว้ซึ่ง
คำอธิบายเชิงวิทยาศาสตร์แบบร่วมสมัย วิทยานิพนธ์นี้จึงสรุปว่า แนวทางการกำจัดลักษณะทางการตระหนักรู้ของสภาวะจิตใน
ทัศนะของแดนเน็ตต์นั้น ควรได้รับการพิจารณาอย่างจริงจังในฐานะทฤษฎีดั้งเดิมของการอธิบายการตระหนักรู้ ทั้งนี้เพราะ
แนวทางนี้มีศักยภาพที่จะอธิบายการปรากฏขึ้นของ ‘ควอลเลีย’ ในกรอบกฎเกณฑ์ทางวิทยาศาสตร์ โดยมีการเสียสละน้อยที่สุด
เมื่อเทียบกับแนวทางอื่น ๆ ทั้งในประเด็นเรื่องลักษณะเด่นของ ‘ควอลเลีย’ ตามสามัญสำนึก และในประเด็นเรื่องแนวคิดทาง
วิทยาศาสตร์ที่ยอมรับกันในปัจจุบัน

สาขาวิชา ปรัชญา

ลายมือชื่อนิติ

ปีการศึกษา 2561

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5880109022 : MAJOR PHILOSOPHY

KEYWORD philosophy of mind, qualia, consciousness, illusionism, Daniel

D: Dennett, eliminativist approach

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One of the major debates in philosophy of mind is the complication about how to explain the manifestation of qualia in the scientific image. Qualia have usually been understood as phenomenal properties of mental states; and their resistance against physical explanation is famously demonstrated by Joseph Levine as the explanatory gap and by David Chalmers as the hard problem of consciousness. The aim of this thesis is to study and evaluate Daniel Dennett's response to the complication in this debate with his eliminativist approach on consciousness. The key idea of Dennett's so-called illusionism is that qualia only seem to exist but actually do not. By rejecting the ontology of qualia as phenomenal properties, Dennett proposes that qualia as illusions can be completely explained in terms of physical mechanism of the brain. The thesis also considers the main criticism to Dennett's idea which is referred to as 'the datum objection'. The datum objection, proposed by contemporary philosophers e.g. David Chalmers and John Searle, criticizes that by rejecting the ontology of qualia as phenomenal properties, Dennett denies the crucial data that theory of mind is supposed to explain. Nonetheless, my analysis on Dennett's arguments shows that his view does not deny the crucial data as being opposed. In contrast, his rejection of the existence of the data even introduces a new perspective in this debate and enables him to fulfill two satisfying conditions that other theories cannot achieve before -- that is (1) to preserve the fascinating phenomenon of conscious experience as it appears in the manifest image, and (2) to conserve the convention of contemporary scientific explanation as we know in the scientific image. The thesis then draws a conclusion that eliminativist approach on consciousness in Daniel Dennett should be taken seriously as a default theory. This is because it possesses a potential to explain qualia in the scientific image with minimal compromises from both the folk psychology about qualia and the convention of scientific explanation compared with other approaches.

Field of Study: Philosophy

Student's Signature

Academic Year: 2018

Advisor's Signature

Year:

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Co-advisor's Signature

.....

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the following people:

To my advisor, Prof. Kanit Sirichan, who continuously supports my master study with her precision, motivation, and immense knowledge. Her guidance helps me to strengthen my philosophical reasoning in all the time of research and writing of this thesis. I could not have imagined having a better advisor and mentor for my degree in philosophy.

To my co-advisor, Prof. Yasuo Deguchi, who encourages me to widen my philosophical horizon in various perspectives. Without the opportunity to be his disciple, I would not even dare writing this thesis in English.

To my thesis committee, Prof. Soraj Hongladarom and Prof. Warayuth Sriwarakuel, for their insightful comments and hard questions. They really show me how good philosophers should be.

To my fellow classmates: Khwan, Book, P'On, and P'Nui, for all the fun and struggle we have had together in the last four years. Their presents in class are always the real presents.

To the rest of my teachers, officers, and colleagues at Department of Philosophy, Chulalongkorn University, for their stimulating philosophical discussions and for their generous helps along the way.

Last but not least, to my family: my mom, who always supports me intellectually and spiritually throughout my academic life. Without her assistance, this thesis would not be this grammatically good. And my dad, who makes this scholastic pursuit possible. His financial support is priceless for this great opportunity.

Jittiwat Narakornpaichit

TABLE OF CONTENTS

	Page
ABSTRACT (THAI)	iii
ABSTRACT (ENGLISH).....	iv
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
Chapter 1 Introduction	1
1.1 Background and Significance of the Research Problem.....	1
1.2 Why We Should Study Daniel Dennett.....	6
1.3 Objective of the Study	10
1.4 Scope of the Study	10
1.5 Study Methodology	11
1.6 Expected Benefits	11
Chapter 2 Debates on Consciousness	12
2.1 Complication of Conscious Experience.....	12
2.1.1 The Explanatory Gap & The Hard Problem of Consciousness.....	13
2.1.2 Supportive Thought Experiments.....	15
2.1.3 The Ontological Problem of Qualia against Materialism.....	19
2.2 Responses to the Complication of Conscious Experience.....	20
2.2.1 Reductionist Approach.....	21
2.2.2 Eliminativist Approach.....	26
2.2.3 Non-reductionist Approach	30
2.3 Conclusion	34
Chapter 3 Consciousness in Daniel Dennett.....	36
3.1 Dennett’s Eliminativist Approach	36
3.2 Arguments for Eliminativist Approach to the Complication of Conscious Experience	40
3.2.1 Phenomenal Properties Eliminated	40

3.2.2 Folk Psychology: The Cartesian Theater	43
3.2.3 Scientific Explanation: The Multiple Drafts	46
3.2.4 Thought Experiment: The Photo Sorting A.I.	50
3.3 Arguments for Consciousness as User-Illusion	52
3.3.1 Qualia as ‘Illusory’ Intentional Objects	53
3.3.2 Conscious Experience as User-Interface	55
3.3.3 The Evolution of Consciousness	58
3.4 Conclusion	62
Chapter 4 Evaluation & Conclusion	65
4.1 The Datum Objection	65
4.1.1 David Chalmers’ Argument	66
4.1.2 John Searle’s Argument	67
4.2 Defense of Dennett’s Eliminativist Approach against the Datum Objection	69
4.2.1 Reply to Chalmers’ Argument	69
4.2.2 Reply to Searle’s Argument	73
4.3 Evaluation on Dennett’s Eliminativist Approach	77
4.4 Conclusion	80
REFERENCES	84
VITA	88

Chapter 1

Introduction

1.1 Background and Significance of the Research Problem

Since the rise of natural science, there have always been conflicting views between what man sees in the world and what science explains the world. This conflict has been characterized by Wilfrid Sellars (1962) as *the manifest image* and *the scientific image*. On the one hand, the manifest image is a framework of the first-person perspective that humans ordinarily use to observe and explain phenomena in the world. This framework has been given to us since we are aware of our beings, and its fundamental entities include persons and things as they appear. The explanation based on the manifest image is known as *folk explanation*. It is a common-sense or intuitive understanding from our familiarity of being *man-in-the-world*. On the other hand, the scientific image is a framework from the third-person perspective that humans later construct to observe and explain phenomena in the world. This framework assumes new kinds of abstract fundamental entities, such as mass and energy, in order to explain every phenomenon under one set of consistent physical principles. The explanation based on the scientific image is, accordingly, called *scientific explanation*. It is, however, usually counterintuitive and radically different from our familiarity in common-sense understanding. The conflict between the manifest image and the scientific image, therefore, emerges as we try to understand each phenomenon that appears to us in terms of its physical fundamental entities. Here comes a crash between intuitive folk explanation and counterintuitive scientific explanation.

To solve this conflict, three main strategies are usually applied, namely, *reductionist*, *eliminativist*, and *non-reductionist* approaches.

First, the reductionist approach is typically considered as a default strategy to deal with the conflict. It *accepts* the ontology of the phenomenon that appears in the manifest image and then tries to *reduce* it to established abstract fundamental entities in the scientific image. An advantage of this approach is that it can both preserve the reliability of folk explanation and conserve the convention of contemporary scientific

explanation; there is no need to modify the current set of physical principles in order to explain the phenomenon. The manifestation of physical object, for example, is currently accepted in the scientific image using the reductionist approach. Its ontology has been reduced consecutively to molecules; then to atoms; then to protons, neutrons, and electrons; and finally, to fermions and bosons¹. Therefore, by using the reductionist approach, folk explanation is eventually *identified* with scientific explanation; the ontology of the phenomenon in the manifest image is successfully *reduced* into the scientific image so the conflict is resolved.

Second, the eliminativist approach is considered as an alternative strategy to deal with the conflict. It *rejects* the ontology of the phenomenon that appears in the manifest image and insists only on established abstract fundamental entities in the scientific image. An advantage of this approach is that it can also conserve the convention of contemporary scientific explanation, but with a cost of denying some or all reliabilities of folk explanation. In this case, there is no need to modify the current set of physical principles but to change the way we see the phenomenon instead. The phenomenon of heat, for example, is currently accepted in the scientific image using the eliminativist approach. Its ontology has been eliminated from the scientific image and leave out only physical mechanism behind it. Therefore, by using the eliminativist approach, folk explanation is *replaced* by scientific explanation; the ontology of the phenomenon in the manifest image is *eliminated* and *no longer pose a problem* in the scientific image so the conflict is resolved.

Third and last, the non-reductionist approach is considered as a last resort to deal with the conflict. It accepts the ontology of the phenomenon that appears in the manifest image and posits it under a new kind of abstract fundamental entity in the scientific image. An advantage of this approach is that it can preserve the reliability of folk explanation, but with a cost of altering some or all conventions of contemporary scientific explanation. In this respect, the ontology of the phenomenon is considered as too resistant to reduction and cannot be eliminated so there is a need to modify the current set of physical principles in order to explain it. The phenomenon of gravity, for example, is currently accepted in the scientific image using the non-reductionist

¹ As of mainstream physics model in 2019.

approach². Its ontology is considered as irreducible fundamental force with the posit of *graviton* as its theoretical fundamental entity. Therefore, by using the non-reductionist approach, folk explanation is *added* in scientific explanation; the ontology of the phenomenon in the manifest image is *included* in the scientific image so the conflict is resolved.

In philosophy of mind, the conflict between the manifest image and the scientific image arises when philosophers try to explain the manifestation of the human mind in terms of the physical processes of the body. This so-called *mind-body problem* has been a prolonged argument since Descartes. In *Meditations on First Philosophy*, Descartes (2002) points out that the mind and the body seem to be different in every aspect, so their ontologies should be separated from each other. The mind, on the one hand, includes mental states that happen *inside* and are *private* because they are only available to the subject of that states. Its presence and qualities are also *clear* and *distinct* in the way that it cannot be perceived to be in error. The body, on the other hand, includes physical states that happen *outside* and are *public* because they are available to every observer. Its presence and qualities are *not clear* and *distinct* in the way that it can be doubted even to the owner. Moreover, the mind seems to have properties of its own which is opposed to physical properties. These mental properties are *intangible*, *immeasurable*, and *unpredictable* by any law or standard; while the physical properties, on the contrary, are *tangible*, *measurable*, and *predictable* by physical laws. Accordingly, although the physical processes of the body can be explained in consistence with other physical objects in the world, the mental processes of the mind cannot. The conflict between the manifest image and the scientific image of the mind then occurs, and the mind-body problem poses two major questions. First is the ontological question about the nature of mind and body. Are they separated from each other ontologically? Or can one be reduced or eliminated? Second is the causal question about their relationship. Can mental states really influence physical states, and vice versa? And if they really are, how can we explain this kind of causal relation?

² The non-reductionist approach on gravity is the mainstream view in contemporary physics. However, there is also an alternative hypothesis with eliminativist approach proposed recently by Erik Verlinde. He suggests that gravity is actually an emergence phenomenon. It is not a fundamental force but only a phenomenon resulting from curved space-time.

Nowadays, scientific explanation about physical structures, abilities, and functions of human's brain, especially in neuroscience, undeniably plays a huge role in philosophy of mind. These scientific advances drive most contemporary theories to admit that physical states are *a necessary condition* of mental states. In short, there can be no mind without body. The physical mechanism of brain processes is *the essential cause* of mental states. Nonetheless, the debate is still going on whether or not physical states are also *a sufficient condition* of mental states. Is there still any more necessity to posit the ontology of the mind separated from the ontology of the body? Is the physical mechanism of brain processes the adequate cause of mental states? Or Is there non-physical mechanism that operates over and above physical mechanism?

The responses to this debate divide theories in philosophy of mind into two chief parties, namely, *materialism* and *dualism*. On the one hand, the materialists think that physical states are a *necessary and sufficient* condition of mental states. The manifestation of human's mind can be completely explained in terms of physical processes by either reductionist or eliminativist approach. These materialist theories include, for example, *identity theory*, e.g. J.J.C. Smart (2002), which reduces mental states to be identical with the physical structure and mechanism of the brain; *behaviorism*, e.g. Gilbert Ryle (2002), which reduces mental states to be identical with the observable behaviors; *functionalism*, e.g. Hilary Putnam (2002) and Jerry Fodor (1989), which reduces mental states to be identical with physical functions; and *eliminative materialism*, e.g. Paul Churchland (1981) and Patricia Churchland (1990, 1994), which eliminates mental terms from the theory of mind and leaves out only physical explanation. On the other hand, the dualists think that physical states are a *necessary* but *not sufficient* condition of mental states. The manifestation of human's mind cannot be completely explained in terms of physical processes, so non-reductionist approach must be applied. These dualist theories include, for example, *property dualism*, e.g. Thomas Nagel (1974), which proposes that substance in nature can have both mental and physical properties; *naturalistic dualism*, e.g. David Chalmers (2010), which proposes that mental states should be considered as fundamental entity in nature and its relationship with physical states can be explained by psychophysical laws; and *epiphenomenalism*, e.g. Frank Jackson (2003), which

proposes that mental states are a byproduct of physical states; however, there is only one-way causal relation from body to mind.

In this regard, the major complication in the debate comes from resistance of folk explanation about the mind, or the so-called *folk psychology*. Folk psychology is common-sense or intuitive understanding based on familiarity when we observe our mind from the first-person perspective (in contrast to scientific explanation about brain processes in the third-person perspective). This includes two crucial manifested aspects of human's mind, namely, *intentionality* and *consciousness*. First, intentionality concerns the nature of mental states that always has *directness* or *aboutness*. This aspect of human's mind represents the world and results in propositional attitudes reflected through language such as belief and desire. The questions about intentionality include, for example, how physical states can result in mental representation; how a brain can have a content; and how syntactic processes can give rise to semantic understanding. Second, consciousness concerns the nature of mental states that is *subjective*. This aspect of human's mind consists of mental phenomenon, or the so-called *conscious experience*, that can hardly be reflected through language such as mental image and sensation. The questions about consciousness include, for example, how physical states can result in conscious experience, how a brain can have a subjective mental phenomenon, and how brain processes can give rise to phenomenal properties.

Therefore, in order to successfully resolve the conflict between the manifest image and the scientific image, theories in philosophy of mind have to answer to these complications on both intentionality and consciousness sides. Materialism needs to apply either reductionist or eliminativist approaches to these complications in order to prove that physical states are a *necessary* and *sufficient* condition of mental states; whereas dualism needs to prove that both reductionist and eliminativist approaches do not work, so that physical states are a *necessary* but *not sufficient* condition of mental states, and non-reductionist approach should be applied instead. Yet, most philosophers argue for their positions by emphasizing only either intentionality side or consciousness side. Due to the extensive differences in their arguments and

objections, this thesis chooses to focus on the complication on consciousness side only.

1.2 Why We Should Study Daniel Dennett

The topic of consciousness is the area where dualism with non-reductionist approach, e.g. David Chalmers (2010), seems to have an advantage over materialism with reductionist approach, e.g. David Papineau (1993). This is because folk psychology about conscious experience, particularly the ontology of *qualia as phenomenal properties*³, has an unusually strong resistance to reductive explanation of physical structures, abilities, and functions (more details in Chapter 2). This complication of conscious experience, which is famously demonstrated through *the explanatory gap* (Levine, 2003) and *the hard problem of consciousness* (Chalmers, 2010), pushes most materialist theories to emphasize intentionality side only, while somewhat giving up or even accepting the non-reductionist approach on consciousness side as a last resort. Although once the reductionist approach does not work, the usual procedure is to consider the eliminativist approach as an alternative. However, in philosophy of mind, materialist theories with the eliminativist approach on both intentionality and consciousness sides is not typically taken seriously due to its highly counterintuitive stance to reject the ontology of mental states which, in other words, seems to deny *the obvious*.

Nevertheless, there are still three major advantages to consider materialism over dualism, namely, *parsimony of the theory*, *conformity with the overall sciences*, and *ability to explain causal relation*. These advantages are shared among reductionist and eliminativist approaches since they both conserve the convention of contemporary scientific explanation, while non-reductionist approach does not.

First, materialist theories are *simpler* or *more parsimonious* than dualist theories because they do not presuppose more ontological entity other than the one that already exists in order to explain consciousness. Materialism accepts only the ontology of physical states in their explanation, while dualism assumes the ontology

³ In the context of this thesis, the notion ‘phenomenal properties’ is used to specifically emphasize qualia in ontological sense; while preserving the notion ‘conscious experience’ to refer to the phenomenon of qualia without ontological entailment.

of mental states over and above physical states. According to the parsimony principle or *Occam's razor*, if two or more theories can equally explain the same phenomenon, the theory with fewer assumptions is to be preferred since it does not have the burden to prove those assumptions. For example, an ancient myth which assumes that fairies are the cause of flowers blooming has a burden to prove the existence of those fairies; whereas modern botany can explain this exact same phenomenon without supposing fairies, so it is more rational and persuasive. Therefore, if materialist theories can provide an explanation about consciousness *only as well as* dualist theories, materialism will already win by default. In this case, dualism either needs to prove that materialist theories are not as good as their theories or provides an undeniable evidence that the ontology of mental states are really separated from physical states.

Second, materialist theories *conform with overall sciences* because they treat mental states under the same physical principles as other physical states without exception (Menary, 2009). Materialism sees consciousness as biological ability with some unique aspects but has no crucial difference from other physical abilities. This perspective is compatible with contemporary scientific explanation, especially *evolution by natural selection*, which presupposes that the development of mental states is extended from the development of physical states. On the other hand, dualism sees consciousness as exceptional abilities with its own ontology, properties, and principles detached from other physical abilities. Not only that this view does not conform with overall sciences, but it also further poses a crucial question about the condition of this exception in other established and future sciences. For instance, if we believe that the ontology of mental states must be separated from the ontology of physical states because they are intuitively different in our common sense, why should we accept Einstein's explanation that the ontology of substance is the same thing as the ontology of energy since they are intuitively different as well.

Third and last, materialist theories can simply explain *the causal relation* between mind and body under established physical laws because they regard mental states as do not ontologically separated from physical states. According to materialism, all mental causes can be specified with physical processes which is *the genuine cause*; thus, there is no unusual causal problem between physical and non-

physical entities. For instance, a feeling of pain that cause a subject to cry ‘Ouch!’ can be described as a part of physical mechanism in the brain. That particular brain processes are then the actual cause for the exclamation ‘Ouch!’ so the only causal relation that actually occurs is physical to physical. For dualism, on the contrary, the mental cause, itself, is considered as *the genuine cause*. A feeling of pain is non-physical properties of the mind which somehow causes the physical body to cry ‘Ouch!’ so the unusual causal relation from non-physical to physical, and vice versa, occurs.

Therefore, by preserving the convention of contemporary scientific explanation, materialism has three strong advantages that dualism does not have. These three advantages are also supported by one another, because to conform with overall sciences is to have a simpler theory; and to be able to explain the causal relation by physical laws is to conform with overall sciences. Hence, the eliminativist approach should have been taken seriously as a potential alternative, though it cannot preserve the reliability of folk psychology like the reductionist approach.

Accordingly, there are two main materialist theories with eliminativist approach on consciousness, namely, *eliminative materialism* in Paul Churchland’s and Patricia Churchland’s view; and materialism in Daniel Dennett’s view. Nonetheless, the Churchlands (1981; 1990, 1994) propose the most extreme materialist arguments which totally reject the ontology of all mental states including both intentionality and consciousness without explaining them (more elaboration in Chapter 2). This thesis then chooses to study eliminativist approach on consciousness in Daniel Dennett.

Dennett (1991, 1996b, 2017a) has always been one of the main persistent supporters of eliminativist approach, specifically, on consciousness. His theory can be categorized as a combination of *behaviorism* (influenced by Gilbert Ryle), *teleofunctionalism* (influenced by Charles Darwin), and *verificationism* (influenced by a Wittgensteinian verificationist idea). In comparison to the Churchlands, Dennett proposes less extreme materialist arguments. He naturalizes the ontology of mind by using the eliminativist approach on consciousness side, while using the reductionist approach on intentionality side. In short, Dennett’s key idea is that consciousness is

user-illusion. Qualia, he claims, does not exist but only *seem* to. He supports this proposal by pointing out that it is only our common-sense intuition or folk psychology to accept the ontology of qualia as phenomenal properties. Instead, qualia should merely be regarded as ‘*illusory*’ *intentional objects* of our introspective beliefs; they are not the properties *of* mental states, but the properties (*mis*)*represented* by mental states. According to Dennett, if there are no qualia ontologically, there is no *hard problem of consciousness* at all. Thus, by eliminating the ontology of qualia as phenomenal properties, there are only physical structures, functions and abilities behind the illusions of qualia that need to be explained (more analysis in Chapter 3).

In my view, Dennett’s eliminativist approach on consciousness does not only provide an alternative solution to the complication of conscious experience but also shows *a potential to be a default theory on consciousness*. This is because his view seems to be able to fulfill two satisfying conditions that other theories cannot achieve before -- that is, (1) to preserve the fascinating phenomenon of conscious experience as it appears in the manifest image, and (2) to conserve the convention of contemporary scientific explanation as we know in the scientific image. For the first condition, Dennett’s view is not as extreme as the Churchlands’ eliminative materialism. His theory still attempts to explain every crucial aspect of consciousness even though the rejection of some folk psychology is required in the process. By proposing that consciousness is user-illusion, consciousness eliminated in Dennett is the result of his explanation, not the assumption that there is nothing to be explained in the first place. Consequently, the manifestation of conscious experience still seems to be preserved in his eliminativist approach. For the second condition, Dennett’s view is not as weak as some materialist theories which are willing to compromise the current scientific image. For example, functionalism in Fodor’s view (1989) proposes that mental states can be reduced to functional states of any system with no guarantee that such particular system needs to be physical⁴. In this view, there is then a possibility that consciousness might be functional states of a non-physical system which directly contradicts to the main materialist thesis itself. Dennett’s eliminativist

⁴ Fodor, himself, also considers his view as *non-reductive* materialism. This is because functionalism commits to ‘second-order’ functional states; while only empirically suggests that ‘first-order’ states ought to be physical.

approach, in contrast, does not compromise to any non-physical posit. It strictly conserves the convention of contemporary scientific explanation by even counterintuitively rejecting some folk psychology. Consequently, his theory can retain all three advantages of materialism by keeping the current scientific image intact.

Nonetheless, Dennett's eliminativist approach on consciousness still needs to answer some crucial objections from the non-reductionist approach's supporters. This criticism, which is henceforth referred to in this thesis as *the datum objection*, criticizes that through rejecting the ontology of qualia as phenomenal properties, Dennett denies the crucial data that all theories in philosophy of mind are supposed to explain. David Chalmers (2010), in particular, considers the eliminativist approach in general as denying *the phenomenon*. Dennett's view sees us - humans - like *zombies* with no inner feeling and gives answers to only *the easy problem* while leaving *the hard problem* untouched. John Searle (1997), in addition, critiques directly to Dennett's user-illusion idea that it denies *the existence of the data*. Qualia as and only as phenomenal properties needs explanation; their ontology cannot be questioned or denied because 'where consciousness is concerned the existence of the appearance is the reality' (p. 112).

1.3 Objective of the Study

To study eliminativist approach on consciousness in Daniel Dennett; to analyze its major appeals over other approaches; and to evaluate its crucial objection.

1.4 Scope of the Study

This thesis is based on the assumption that every approach, mentioned above, tries to satisfyingly explain conscious experience in the scientific image. The arguments on the significance of the scientific image in general is beyond the scope of this study. Nevertheless, note that one of the most important aspects of scientific explanation is that it is falsifiable. This notion alone might be a sufficient reason to prefer the scientific image because if we - humans - only stick with the manifest image, we can easily fall into solipsism.

Moreover, this thesis will mainly focus on Daniel Dennett's works on consciousness side only. This includes his eliminativist approach on the complication

of conscious experience and his proposed idea of user-illusion. Dennett's idea on intentionality is outside of the scope of this study. Although Dennett works closely on both consciousness and intentionality, and ultimately, he seems to employ the concept of intentionality to explain consciousness, this thesis will study, analyze, and evaluate only his arguments on consciousness and briefly explain the connection between two sides as needed.

1.5 Study Methodology

The thesis is structured as follows: Chapter 2 is a review of the main debate on the topic of consciousness, including some well-known arguments and thought experiments on the complication of conscious experience; and three approaches to response to this complication as well as their ensuing shortcomings. Chapter 3 is an analysis on consciousness in Daniel Dennett including two main parts of his arguments, namely, his eliminativist approach to the complication of conscious experience and his proposal on consciousness as user-illusion. Chapter 4 is evaluation and conclusion including the investigation on the datum objection; and my proposed answers in order to defend Dennett's so-called illusionist thesis.

1.6 Expected Benefits

- 1.6.1 Understanding Daniel Dennett's eliminativist approach on consciousness as well as his crucial objections.
- 1.6.2 Providing an evaluation on Daniel Dennett's proposal for further study.

Chapter 2

Debates on Consciousness

This chapter reviews the main debates on the topic of consciousness. The content is structured into three sections as follows: The first section elaborates the complication of conscious experience, particularly on the notion of *qualia as phenomenal properties*, through *the explanatory gap* (Levine, 2003) and *the hard problem of consciousness* (Chalmers, 2002). Three well-known thought experiences to support this complication are examined, namely, ‘*What Is It Like to Be a Bat?*’ (Nagel, 1974), ‘*What Mary Didn’t Know*’ (Jackson, 2003), and *the possibility of philosophical zombie* (Chalmers, 1996). The second section explores three main approaches that contemporary philosophers apply to respond to this complication, comprising of reductionist approach e.g. *physicalism* by David Papineau (1993), eliminativist approach e.g. *eliminative materialism* by Paul Churchland (1981) and Patricia Churchland (1990, 1994), and non-reductionist approach e.g. *naturalistic dualism* by David Chalmers (2002). The major objections for each approach are also identified and analyzed. Lastly, the third section wraps up this chapter by proposing that, in general, no approach takes the lead in satisfyingly explaining qualia in the scientific image yet because they either compromise the folk psychology by deflating some aspects of qualia or compromise the scientific explanation by accepting some radical changes in current physical principles.

2.1 Complication of Conscious Experience

In philosophy of mind, the conflict between the manifest image and the scientific image arises when philosophers try to explain the manifestation of human’s mind in terms of physical processes of the brain. In doing so, most philosophers agree that one particular aspect of our mental states is more resistant to physical explanation than the others, namely, *the subjectivity of consciousness*. This subjective aspect can simply be understood as *conscious experience*. Conscious experience is mental phenomenon that merely manifests or appears to perceiver in the first-person perspective. It is, according to Thomas Nagel (1974), the experience of *what it is like to be* in each particular mental state. This includes, for example, the phenomena of

perception such as color, odor, and sound; the phenomena of sensation such as pain, cold, and itchiness; the phenomena of emotion such as anger, fear, and happiness; and the phenomena of thought such as understanding, imagination, and dream⁵.

According to the debate, the unique aspect of conscious experience is that it is usually considered as having *qualia*. Qualia have been seen as *phenomenal properties* of our mind; ones that can be perceived, according to René Descartes (2002), ‘clearly’ and ‘distinctly’ without ‘any doubt’. Redness, for instance, is phenomenal properties which emerges in our conscious experience when we see any red object. These phenomenal properties are what differentiate the experiences of what it is like to see red from seeing other colors. Nevertheless, qualia as phenomenal properties pose a major problem when they need to be described in contemporary scientific explanation. This is because their ontology and characteristics are anomalous from other genuine physical properties. They are subjective and characterized as simple, ineffable, intrinsic, private, and immediately accessible; whereas physical properties are, in contrast, objective and characterized as complex, effable, extrinsic, public, and indirectly accessible (Frankish, 2016).

2.1.1 The Explanatory Gap & The Hard Problem of Consciousness

The resistance of qualia against contemporary scientific explanation is famously demonstrated by Joseph Levine (2003) as *the explanatory gap*; and by David Chalmers (2010) as *the hard problem of consciousness*.

For a start, Levine (2003) points out that there seems to be a major difference between statements like ‘pain is the firing of C-fibers’ and ‘heat is the motion of molecules.’ This difference comes down to, what Levine (p. 355) called, *the felt contingency* that the second statement can be successfully *explained away*, while the first statement cannot. To explain something away means that the explanation has already covered everything that need to be explained without any crucial concept being left out. In the second statement, for example, when scientists explain the phenomenon of heat in terms of the motion of molecules, we have the felt

⁵ These mental phenomena can be seen as different in degree. For instance, the phenomena of thought require more sophisticated processes than the phenomena of perception, in a sense that only complex organisms, e.g. humans, have these phenomena while basic organisms do not necessarily have.

contingency that physical mechanism as its causal role covers everything that needs to be explained. There is no crucial concept about heat left out; thus, the statement is already *fully explanatory*, and the phenomenon of heat is explained away. In the first statement, when scientists explain the phenomenon of pain in terms of the firing of C-fibers, however, we have the felt contingency that the brain mechanism as the causal role only covers one part that needs to be explained. There seems to be some crucial concept about pain left out; thus, the statement has *an explanatory gap*, and phenomenon of pain is not yet explained away. According to Levine, qualia are the crucial concept that has been left out here. Physical mechanism seems unable to explain the existence of these phenomenal properties; hence qualia are the source of the explanatory gap between mental states and brain processes which prevents scientists from explaining away consciousness in the contemporary scientific image.

In addition to Levine's argument, Chalmers (2010) also points out the complication of conscious experience by dividing the problems about consciousness into two levels of difficulties, namely, *the easy problem* and *the hard problem*. The easy problem of consciousness, on the one hand, is to explain physical structures, abilities, and functions that contribute to conscious states. This explanation includes, for example, the ability to react to environmental stimuli, the reportability of mental states, the deliberate control of behavior, and the difference between wakefulness and sleep. According to Chalmers, explaining these physical structures, abilities, and functions is relatively easy because it can be conducted by studying computational or neural mechanism of brain processes. The standard methods of cognitive science will give answers to these questions; thus, the easy problem does not resist to current scientific explanation. The hard problem of consciousness, on the other hand, is to explain conscious experience. This explanation includes, for example, the rise of qualia from brain processes, the description of phenomenal properties in physical terms, and the identification of qualia with physical functions. According to Chalmers, explaining conscious experience is definitely hard because even though scientists can explain every computational or neural mechanism of brain processes, they are still unable to explain anything at all about these subjective phenomena. The ontology of qualia seems to be something over and above the study of physical structures, abilities, and functions. As a result, the standard methods of cognitive

science are unable to simply give answers to these questions; thus, the hard problem does remarkably resist to contemporary scientific explanation.

The argument for the complication of conscious experience can be formulated as follows:

- (1) Conscious experience has qualia.
- (2) Qualia cannot be explained by physical structures, abilities, and functions.
- (3) Contemporary scientific explanation can only describe physical structures, abilities, and functions.
- (4) Therefore, contemporary scientific explanation is insufficient for explaining conscious experience.

2.1.2 Supportive Thought Experiments

The complication of conscious experience is intuitively supported by three well-known thought experiments, namely, '*What Is It Like to Be a Bat?*' (Nagel, 1974), '*What Mary Didn't Know*' (Jackson, 2003), and *the possibility of philosophical zombie* (Chalmers, 1996).

First, '*What Is It Like to Be a Bat?*' is proposed by Thomas Nagel (1974) to back up the idea that the objective concepts of physical mechanism will never be able to completely cover the subjective concepts of qualia. This thought experiment is based on the folk psychology that our experience of '*what it is like to be*' in the first-person perspective cannot be explained or expressed in the third-person perspective. In this case, Nagel asks us to imagine ourselves to be a bat. He specifically chooses a bat because it is a mammal which is relatively close to our species and it shows some potential behaviors of having conscious experience. Moreover, scientists already have adequate knowledge about how a bat differently perceive things from us. We know that a bat uses a mechanism called *echolocation* to be able to navigate in a completely dark night and to target its preys. This echolocation works by producing very high frequency sound (ultrasound) or sonar from a bat's larynx, sending out via its mouth and nose, then listening to echoes reflecting from surroundings through a hanging skin on its external ears called tragus. By this process, a bat can then interpret the

echo into somewhat ‘an image’. The most imaginable picture of this mechanism would be like when a doctor uses ultrasound device to see an unborn baby during pregnancy.

According to Nagel, we have quite a lot of information about how a bat’s echolocation works in the third-person perspective; however, we still cannot explain what it is like to be a bat in the first-person point of view. Although scientists already describe in detail the physical mechanism behind echolocation and we can, to some extent, imagine what it is like *for us* to navigate using sonar, we are still unable to imagine what it is like *for a bat* to have qualia of echolocation. Humans would never be able to experience ‘an image’ from the ultrasound like a bat does; and vice versa, a bat would never be able to experience an image from the multicolor eyes like a human. Therefore, contemporary scientific explanation which emphasizes only the third-person point of view, Nagel argues, is insufficient to describe the first-person conscious experience of ‘what it is like to be’. In other words, there is an explanatory gap between subjectively experiencing qualia by oneself and imagining qualia from objective anecdotes of the others. Understanding physical structures, abilities, and functions thus covers the objective concepts only, whereas the subjective concepts concerning qualia are still left unexplained.

The argument for the thought experiment of ‘What Is It Like to Be a Bat?’ can be formulated as follows:

- (1) Contemporary scientific explanation can only describe how a bat’s echolocation works in the third-person perspective by using the objective concepts.
- (2) Explaining how a bat’s echolocation works by using the objective concepts does not contain the subjective concepts of qualia or experience of what it is like to be a bat in the first-person perspective.
- (3) Therefore, the subjective concepts of qualia cannot be explained by the objective concepts in contemporary scientific explanation.

Second, ‘What Mary Didn’t Know’ is proposed by Frank Jackson (2003) in order to show that the physical knowledge is not the same as the phenomenal

knowledge about qualia. This thought experiment is based on the folk psychology that we can know every physical mechanism behind conscious experience without actually knowing the qualia or the experience of what it is like to be in that mental state. 'What Mary Didn't Know' is rather similar to 'What Is It Like to Be a Bat?' in a sense that they both shows that the objective concepts of contemporary scientific explanation are insufficient to understand the subjective concepts of qualia. However, in this case, Jackson shifts an attention from the inability to explain qualia in the third-person perspective to the limitation of acquiring the phenomenal knowledge about qualia through the physical knowledge.

In this thought experiment, Jackson asks us to imagine Mary, a know-it-all neurophysiologist who lives in black-and-white room for all her life. Mary intensively studies on all possible physical knowledge so she literally knows everything about structures, abilities, and functions of brain processes as well as outward reactive behaviors and expressions for being in each particular mental state. In other words, she is omniscient God who comprehends every bit of physical truths about being conscious. Now imagining Mary gets out of her black-and-white room and sees redness of roses for the first time. According to Jackson, Mary still seems to learn something new that she never knew before. Although Mary already got all physical knowledge concerning redness inside her head, for instance, that red light has wavelength interval between 700 to 635 nm with frequency interval between 430 to 480 THz, she still seems to be blind from the phenomenal knowledge about redness until she has direct experience of these phenomenal properties firsthand. Therefore, knowing every physical truth, Jackson argues, is insufficient for knowing everything about being conscious. There is still phenomenal truth about qualia that can only be acquired through direct experience. In other words, there is an explanatory gap between phenomenal knowledge and physical knowledge. Studying physical structures, abilities, and functions thus only contributes to the physical knowledge, while the phenomenal knowledge is still inaccessible.

The argument for the thought experiment of 'What Mary Didn't Know' can be formulated as follows:

- (1) If physical knowledge is all knowledge about being conscious, then Mary would not learn something new when she experiences qualia for the first time
- (2) But Mary still learns something new when she experiences qualia for the first time.
- (3) Therefore, physical knowledge is not all knowledge about being conscious.

Third and last, the possibility of philosophical zombie is proposed by David Chalmers (1996) to prove the point that it is conceivable to have all physical structures, abilities, and functions as well as outward behaviors and expressions without actually having inner conscious experience. This thought experiment is based on the folk psychology that mind and body can be imagined as two separated beings, and one can still exist without the other. In this case, Chalmers asks us to imagine a zombie. This so-called philosophical zombie cannot be differentiated from normal human being in the third-person point of view because it has all the same biological structures as human being and even has all the same behavioral reactions. For example, if you pinch the zombie, it will cry 'Ouch!' and push you away. Nevertheless, the difference between philosophical zombie and human being can be identified in the first-person perspective. Human being, on the one hand, has qualia and experience of what it is like to be in pain, while the philosophical zombie, on the other hand, does not. The zombie cries 'Ouch!' and pushes you away without any sensation of pain 'inside'; while you notably feel the pain when cry 'Ouch!' and push whoever pinched you away. Hence, although human's and zombie's physical structures, abilities, and functions are the same, there is only what it is like to be a human being while nothing is like to be a zombie. This is because a zombie does not have qualia, whereas human being does.

According to Chalmers (2002, p. 249), since it is *conceivable* to have a philosophical zombie, it is also *metaphysically possible* to have one. For instance, in some planet far away, organisms there could have the same physical evolution as organisms in our world, however, with no mental evolution. 'Human' on that planet is then a zombie with a body like us but without a mind. Therefore, the explanation

about physical states, Chalmers argues, is insufficient for understanding mental states because qualia, in particular, can be imaginable as separated from the physical processes of the body. In other words, there is an explanatory gap between the manifestation of qualia and the mechanism of physical states. Studying physical structures, abilities, and functions thus only answers the easy problem of consciousness, while the hard problem is left unexplained.

The argument for the thought experiment of the possibility of philosophical zombie can be formulated as follows:

- (1) It is conceivable that there is a zombie with the same physical structures, abilities, and functions as well as outward behaviors and expressions as human being but without qualia.
- (2) If it is conceivable that there is a zombie without qualia, it is also metaphysical possible.
- (3) If it is metaphysical possible that there is a zombie without qualia, then qualia are separated from physical states.
- (4) Therefore, qualia are non-physical states.

2.1.3 The Ontological Problem of Qualia against Materialism

The complication of conscious experience supported by three intuitive thought experiments poses a crucial problem about qualia to all theories in philosophy of mind. Nevertheless, materialism with reductionist and eliminativist approaches is undeniably the main target of this complication since the presence of this explanatory gap between qualia and brain processes provides a great support to dualism with non-reductionist approach. As Chalmers (2002, p. 250) points out, the arguments for the complication of conscious experience usually starts from *an epistemic gap* between mental states and physical states then entails *an ontological gap*. The epistemic gap concerns our inability to understand or explain one domain in terms of the other; while the ontological gap concerns the nature of things in the world. In this respect, the epistemic failure to explain qualia in terms of brain processes suggests a strong persuasive reason to conclude that the ontological nature of the mind is separated from the ontology of the body. All three thought experiments mentioned above entail this ontological conclusion.

First, Nagel's 'What Is It Like to Be a Bat?' points out the explanatory gap between subjective concepts and objective concepts in order to prove the ontological gap between the first-person ontology and the third-person ontology. Second, Jackson's 'What Mary Didn't Know' illustrates the differences between phenomenal knowledge and physical knowledge in order to endorse the idea that phenomenal properties are ontologically separated from physical properties. Third and last, Chalmers's possibility of philosophical zombie demonstrates the conceivability of physical states without mental states, then shifts the argument to metaphysical possibility and concludes that the ontology of qualia is non-physical.

Therefore, the complication of conscious experience is initially *an epistemic problem* about qualia which eventually implies *an ontological problem*. The folk psychology about the ontology of *qualia as phenomenal properties* then becomes one of the most problematic aspect when they need to be explained in the contemporary scientific image. Materialism, which rejects the ontological gap between mental states and physical states, consequently, suffers this intuitive resistance to any reduction and elimination; whereas dualism, which accepts the ontological gap between mental states and physical states, in contrast, benefits from this resistance as one of the most significant supports for their theories.

The dualist argument that shifts the epistemic problem about qualia to the ontological problem against materialism can be formulated as follows:

- (1) There is an epistemic gap between qualia and brain processes.
- (2) If there is an epistemic gap between qualia and brain processes, there is an ontological gap between mental states and physical states.
- (3) Materialism proposes that there is no ontological gap between mental states and physical states.
- (4) Therefore, materialism is false.

2.2 Responses to the Complication of Conscious Experience

Similar to the responses in other conflicts between the manifest image and the scientific image, theories in philosophy of mind apply three main strategies to solve

the complication of conscious experience, namely, reductionist, eliminativist, and non-reductionist approaches. The reductionist and the eliminativist approaches, on the one hand, are endorsed by materialism. Although these two approaches are usually considered as more persuasive in other areas because both of them can conserve the convention of contemporary scientific explanation, they become the direct victims of the ontological problem of qualia. The non-reductionist approach, on the other hand, is endorsed by dualism. Although this approach is usually considered as a last resort in other areas because it requires radical modification in contemporary scientific explanation, it can simply take the ontological problem of qualia for granted.

This section explores all three approaches, each of their main representatives, and their major objections, including reductionist approach e.g. *physicalism* by David Papineau (1993), eliminativist approach e.g. *eliminative materialism* by Paul Churchland (1981) and Patricia Churchland (1990, 1994), and non-reductionist approach e.g. *naturalistic dualism* by David Chalmers (2002).

2.2.1 Reductionist Approach

The reductionist approach in general responds to the complication of conscious experience by accepting the explanatory/epistemic gap between qualia and brain processes but refuting the ontological gap (Chalmers, 2002). This approach agrees that the hard problem of consciousness is a real challenge but insists that eventually it can be reduced to the easy problem. In terms of thought experiments, the supporters of reductionist approach argue that the subjective experience of what it is like to be a bat can be identified with the objective mechanism of echolocation. Mary, despite her ignorance of some phenomenal knowledge when she stays inside her room, only comprehends already-known physical knowledge in a new light when she gets out. And although the philosophical zombie is epistemically conceivable, it is not metaphysically possible. In other words, the reductionist approach proposes to conserve the convention of contemporary scientific explanation by accepting the ontology of qualia as phenomenal properties but trying to *reduce* them to a type of physical properties under current established sets of physical principles and abstract fundamental entities. According to Frankish (2016), this view can then be called

conservative realist because while still holding on to *conservative* explanation, it allows qualia in the manifest image as *real* genuine properties in the scientific image.

One of the key representatives of reductionist approach is *physicalism* by David Papineau (1993, 2003, forthcoming). He suggests that qualia and brain processes are only epistemically different but ontologically identical. The explanatory gap simply occurs due to human's intuitive tendency towards *dualist commitments*, while in reality, phenomenal properties are merely physical properties. Papineau supports his proposal by arguing that the identification between the ontology of things in the manifest image and the scientific image is a common practice in other fields such as salt and NaCl, water and H₂O, lightning and atmospheric electrical discharge, and gene and DNA. This matching process, (Papineau, forthcoming, p. 6) claims, cannot be intuitively realized by *a priori reasoning* but by *a posteriori observation*. In other words, empirical evidence is a necessary condition for us to be able to draw an abductive inference for this equivalence; we need to see both of their causal actions happening simultaneously in order to conclude that they are the same thing. When scientists reckon that NaCl is salt, for example, they do not merely know these identicals by philosophical analysis but by empirical experiment. Scientists first notice that NaCl is always coincident with salt and both of them produce the same effects, then they come to the conclusion that these two are ontologically the same thing. Back to consciousness, although qualia can be recognized through two different aspects, namely, *the phenomenal concepts* and *the third-person concepts*, it does not necessarily mean that they have to be two separated entities as well. Neuroscientists can also sensibly make an identification between 'the qualia of pain' and 'the firing of C-fibers' once they observe that the phenomenal concepts of pain always coincide with the third-person concepts of the firing of C-fibers. With this identification from a posteriori observation, Papineau, thus, proposes that phenomenal properties are, in fact, physical properties. Qualia are not special properties of our mind but physical properties of our brain.

According to Papineau, our felt contingency that there is an epistemic/explanatory gap between mental states and physical states is then not due to the fact that there is some concept left unexplained, but due to our common-sense

intuition that mind and body cannot be the same entity from the beginning. He calls this folk psychology, *the intuition of distinctness* (forthcoming, p. 9). It only shows our instinctive tendency towards *dualist commitments* which also reflect in our language. For example, even devoted materialists sometimes mistakenly use the terms ‘give rise to’, ‘cause’, or ‘yield’ when they talk about the relationship between mental states and physical states, such as brain processes ‘give rise to’ conscious experience. In contrast, these terms would never be mistakenly used like NaCl ‘gives rise to’ salt, or DNA ‘causes’ gene since NaCl is salt, and DNA is gene. This intuition of distinctness about phenomenal concepts, Papineau suggests, can be explained by sociopsychological and biological theories such as the endorsements from cultural and religion, the manifestation of natural-born dualists, and the structure of brain’s cognitive architecture. In short, human’s brain is wired up by natural selection in a way that mental states appear to separate from physical states; and our cultural and religion intuitively pick up this distinction and support it with further metaphysic beliefs. For Papineau, these theories still need further supports; nevertheless, with this assumption, materialism can solve the ontological problem of qualia by maintaining the identification between qualia and brain processes even with intuitive epistemic resistance.

In sum, the reductionist approach solves the complication of conscious experience by *identifying* folk psychology about qualia with contemporary scientific explanation about brain processes. Consequently, the ontology of qualia as phenomenal properties in the manifest image is *reduced* to the ontology of physical properties in the current established scientific image.

The argument for physicalism in Papineau’s view can be formulated as follows:

- (1) The identification in scientific theory is not intuitively realized by a priori reasoning but by a posteriori observation.
- (2) Although the phenomenal concepts about qualia intuitively resist the third-person concepts about brain processes, qualia are observed to coincide with physical processes of the brain.
- (3) Therefore, qualia are ontologically identical to brain processes.

Nonetheless, the major criticism to the reductionist approach on the complication of conscious experience is that it compromises most of its own advantages and can be collapsed to two other approaches depending on its intensity of ontological commitment. This similar objection is proposed by both the non-reductionist approach's and the eliminativist approach's supporters. The former sees that the reductionist approach loses most of its materialist spirit and is even compatible with the non-reductionist approach; while the latter sees that the reductionist approach already adopts eliminative explanation in some aspect in order to maintain its materialist view.

In this regard, although the reductionist approach is usually attractive in other fields because it can maintain both folk explanation in the manifest image and contemporary scientific explanation in the scientific image, it cannot do both simultaneously on the ontological problem of qualia. The reason is the differences between phenomenal properties and physical properties are significant to the point that the reduction is impossible without compromising one side or the other. To fully preserve the folk psychology, on the one hand, identifying qualia as physical properties requires scientist to loosen some crucial concepts of normal physical properties. If pain-ness is to be redefined as physical properties, for example, the phenomenal concepts must be added in the concepts of physical properties and be universally applied to all established physical objects. In this case, every physical object then unorthodoxly has phenomenal aspects as their basis. To conserve the contemporary scientific explanation, on the other hand, identifying qualia as physical properties requires us to deflate their distinctive characteristics. If pain-ness is strictly physical properties as others, it cannot retain its phenomenal concepts as claimed to manifest in folk psychology. In this case, phenomenal properties then paradoxically lose phenomenal aspects as their basis. Therefore, with compromise from neither side, the reduction of qualia is impossible. The reductionist approach, thus, absorbs the most attacking effect from the ontological problem of qualia and exposes itself to a dilemma. It promises to save both the contemporary concepts of physical properties as well as the distinct characteristics of phenomenal properties; however, it cannot keep both sides of this promise at the same time. This approach is subsequently on the

verge of collapsing into either non-reductionist or eliminativist approaches depending on their compromising degree.

In the first way, the non-reductionist approach's supporters e.g. David Chalmers (2002) suggests that reductive explanation that the reductionist approach provides is more or less like non-reductive explanation. He argues that the explanatory gap between qualia and brain processes is different from the epistemic gap in other domains. The identification between gene and DNA, for example, is not *epistemically primitive* because it can be deduced empirically from physical knowledge of one to the other. Whereas the identification between qualia and physical processes of the brain is *epistemically primitive* because one side of these identicals cannot be deduced from physical knowledge. With this asymmetry, the matching between phenomenal concepts and physical concepts, Chalmers claims, is then a sort of *fundamental laws*. Since this kind of laws usually connects two distinctive entities, it follows that the reductionist approach, in some respect, already accepts that phenomenal properties are significantly different from physical properties. Therefore, the ontological commitment that qualia are physical properties is only to hold on to materialism, whereas the reductionist approach, in fact, already loses most of its materialist spirit. This is because its theories, to a certain degree, gives up reductive explanation and is even more compatible with the non-reductionist approach.

In the second way, the eliminativist approach's supporters e.g. Keith Frankish (2016) points out that the reductionist approach usually adopts some of eliminative explanation in their theories already in order to maintain its materialist view. To illustrate, Frankish compares the impossibility of this ontological reduction of phenomenal properties with psychokinesis. In his thought experiment, when you see a psychic who seems to be able to move physical objects with his mind, there are three main ways that you can comprehend this. First, you can accept that psychokinesis is real and add this force along with gravitational force. This view is non-reductionist approach, or *radical realist*. Second, you can accept that psychokinesis is real but tries to reduce it to gravitational force. This view is reductionist approach, or *conservative realist*. Third and last, you can deny the reality of psychokinesis, accept that you are mistaken, and posit it as illusion. This view is eliminativist approach with the so-

called *illusionist thesis*. According to Frankish, the difficulty of the reductionist approach on the ontological problem of qualia is that it misguidedly accepts non-reductive assumption about phenomenal properties as *genuine properties*. So much as reducing psychokinesis to gravitational force is impossible, to reduce phenomenal properties to physical properties is also impossible. In consequence, theories with reductionist approach eventually need to give up folk psychology about qualia in some (if not all) aspects in order to keep contemporary scientific explanation intact. In other words, it must admit that we - humans - are somewhat *mistaken* or *misrepresented* qualia in the first-person perspective; some of qualia's characteristics are not actually occurred as they seem. This explanation is then more or less adoption of eliminative explanation, and thus can be seen as the eliminativist approach, specifically, with illusionist thesis. Daniel Dennett is considered as one of the key supporters of this view -- more elaboration in Chapter 3.

2.2.2 Eliminativist Approach

The eliminativist approach in general responds to the complication of conscious experience by denying the explanatory/epistemic gap between qualia and brain processes as well as the ontological gap (Chalmers, 2002). This approach rejects the hard problem of consciousness from the beginning and insists only on the easy problem. In terms of thought experiments, the supporters of eliminativist approach argue that the objective mechanism of echolocation are essentially everything that needs to be explained in order to comprehend the subjective experience of what it is like to be a bat. Mary is not ignorant of any phenomenal knowledge when she is restricted in her room since physical knowledge is fundamentally all that need to be known. And, after careful consideration, the philosophical zombie is not epistemically conceivable, and accordingly is not metaphysically possible, because mental states cannot be separately understood apart from physical states. In other words, the eliminativist approach proposes to conserve the convention of contemporary scientific explanation by denying the ontology of qualia as phenomenal properties and accepts only the ontology of physical properties under current established sets of physical principles and abstract fundamental entities. This view can then be called *conservative*

anti-realist because it rejects qualia in the manifest image as *real* genuine properties in the scientific image in order to hold on to *conservative* account.

One of the key representatives of eliminativist approach is *eliminative materialism* by Paul Churchland (1981) and Patricia Churchland (1990, 1994). Although the Churchlands' argument mainly focuses on intentionality side with the complication of propositional attitudes; it can also be inferred to consciousness side with the complication of conscious experience. In short, eliminative materialism suggests that neuroscience will ultimately reveal everything that needs to be known about consciousness. The Churchlands support this proposal by arguing that theories that depend on folk explanation about both the world and our mind will be eventually replaced by scientific theories. Folk explanation, on the one hand, is based on common-sense understanding, and it is unreliable in Churchlands' view. Historically, folk-based theories about the world are mostly wrong, and they usually deceive us from what is right. For example, the geocentric theory, which proposes that the earth is the center of the universe, comes from blindly accepting the intuitive manifestation of the world as we observe. Accordingly, the manifest image that we - humans - perceive is doubtful and should be carefully examined. Scientific explanation, on the other hand, demystifies these wrong theories and provides the right picture of what the nature actually is. The truth in scientific theories, however, do not depend on our common-sense understanding and often turns out to be counterintuitive. Consequently, although the scientific image is often contrary to our intuition about the nature of things, it is more reliable and should be considered as a default⁶.

According to the Churchlands' argument, since the ontology of qualia is presupposed by folk psychology, it can then be eliminated together with its outdated folk-based theory and replaced by new scientific ones. This ontological elimination is also a common practice in other areas. For example, *the phlogiston theory* once posits 'flammable element' as a fundamental substance which is essential to explain

⁶ The Churchlands' claim does not mean that the *current* scientific theories are ultimately right and true. In this respect, the less-persuasive or outdated scientific theories are commonly replaced by the new and more-persuasive ones as well. Nevertheless, by preferring scientific theories over folk-based theories, the Churchlands only suggest that we - humans - should adopt a new mindset to explain natural phenomena based on empirical evidences. This scientific mindset is more reliable and less likely to prone to unnecessarily errors.

combustion. This *explanatory posit*, nonetheless, has been completely replaced by ‘chemical elements’, e.g. hydrogen, nitrogen, and oxygen, in the modern chemistry theory with no notion of ‘flammable element’ left. With this example, we can see that the previously presupposed ontology is eliminated because it becomes unnecessary or even obstructs the new system. In other words, there is no reason to talk about them anymore since it just resists the new explanation. Back to the complication of conscious experience, phenomenal properties which resist physical explanation can be considered in the same way. Now that the proper scientific theory about consciousness such as neuroscience is in progress, we can just reject the ontology of qualia and ignore their phenomena since the emphasis on them will only slow down scientific progress. For the Churchlands, human’s mind is after all the products of nature, so there should be no privileged exception. Clinging to qualia is, therefore, a remaining of old folk psychology about our mind which deceives us from the real nature. Their elimination is then necessary in order to open up the way for contemporary scientific explanation to reasonably describe consciousness in terms of physical processes of the brain.

In sum, the eliminativist approach solves the complication of conscious experience by *replacing* folk psychology about qualia with contemporary scientific explanation about brain processes. The ontology of qualia as phenomenal properties in the manifest image is *eliminated* in order to conserve the current established scientific image.

The argument for eliminative materialism in Churchlands’ view can be formulated as follows:

- (1) The ontology of qualia as phenomenal properties is a presupposition by folk psychology.
- (2) Folk-based theory is mostly wrong and should be replaced by scientific theory.
- (3) Therefore, the ontology of qualia can be eliminated along with its outdated theory.

Nonetheless, there are two major criticisms to theories with eliminativist approach on the complication of conscious experience. The first objection is proposed

by Stephen Stich to critique specific at the Churchlands' argument; while the second one is, referred to in this thesis as, *the datum objection* which attacks the eliminativist approach as a whole. Only the former is demonstrated in this section; whereas the latter has in-depth analysis in Chapter 4 since it significantly opposes to Dennett's eliminativist approach as well.

For the first objection, Stephen Stich (1996), who also calls himself a weak eliminative materialist, poses a suspicion on the Churchlands' claim about the ontological elimination. He points out that there are actually two types of theoretical replacement, namely, the *ontological radical* and *the ontological conserved*. The ontological radical, on the one hand, is a theoretical replacement that the presupposed ontological posit from the old theory need to be eliminated. For example, in the replacement of the phlogiston theory by the modern chemistry theory illustrated above, the assumed ontology of 'flammable element' needs to be eliminated along with its old theory because it does not fit in the new theory and even contradicts with the new chemical element system. Clinging to the old ontological posit in this case will only drag down the ongoing progress. The ontological conserved, on the other hand, is a theoretical replacement that the presupposed ontological posit from the old theory is still the same one in the new theory. For example, the consecutive replacements of the geocentric theory (the earth is the center of the universe) by the heliocentric theory (the sun is the center of the universe) and then by the big bang theory (no center of the universe), the ontology of the earth, the moon, the sun, and all the stars is still the same. In this case, the key idea is changed, however, the old ontological posit is preserved because it can fit in the new theory and does not drag down the ongoing progress.

In philosophy of mind, according to Stich's argument, although the replacement of folk-based theory by scientific theory (and, in the same way, old scientific theory by newer scientific theory) is inevitable, it is still insufficient to completely deny the ontology of qualia. Stich proposes that in order to decide whether the ontology of each mental state should be eliminated or not, we must see its practical uses in semantics and investigate its ontological necessity in scientific explanation in the long term. For instance, once scientists are able to explain the

concept of ‘pain’ without referring to the qualia of ‘pain’, then we can eliminate qualia ontologically. Unfortunately, our scientific theory about human’s mind has just begun and we do not have enough evidence to make this decision yet. Therefore, the clear-cut verdict about the ontology of qualia as well as other mental states still depends on future scientific discoveries since the Churchlands’ argument alone cannot necessarily lead to ontological elimination.

2.2.3 Non-reductionist Approach

The non-reductionist approach in general responds to the complication of conscious experience by willingly accepting the explanatory/epistemic gap between qualia and brain processes as well as the ontological gap (Chalmers, 2002). This approach endorses that the hard problem of consciousness is a real challenge and insists that it is essentially detached from the easy problem. In terms of thought experiments, the supporters of non-reductionist approach favor that the subjective experience of what it is like to be a bat cannot be understood with the objective mechanism of echolocation. Mary is truly ignorant of some phenomenal knowledge which cannot be acquired through physical knowledge. And the philosophical zombie is epistemically conceivable as well as metaphysically possible. In other words, the non-reductionist approach proposes to loosen the convention of contemporary scientific explanation by accepting the ontology of qualia as phenomenal properties and posits them apart from physical properties under new revised sets of principles and/or abstract fundamental entities. According to Frankish (2016), this view can then be called *radical realist* because it prefers *radical* explanation by upholding qualia in the manifest image as *real* genuine properties in the scientific image.

One of the key representatives of non-reductionist approach is *naturalistic dualism* by David Chalmers (2002, 2010). He proposes that scientists should posit phenomenal properties as *fundamental properties* and draw up a new set of *psychophysical principles* in order to explain the relationship between qualia and brain processes. Chalmers supports his proposal by arguing that this non-reductive expansion of the scientific image is a natural choice. For example, when electromagnetic radiation was discovered in the 19th century and could not be explained in terms of scientific theories at that time. James Maxwell then proposes to

add electromagnetic charges and electromagnetic forces into physics as fundamental entities. In the same way, for Chalmers, it is thus sensible to adopt non-reductive explanation in philosophy of mind since qualia significantly resist contemporary scientific explanation. By accepting phenomenal properties as the basic entity alongside mass, space-time, and electromagnetic charge, scientists will have no need to explain qualia in physical terms anymore. In addition, they will even gain a platform to explain other high-order mental phenomena by referring to these phenomenal properties as a basis.

According to Chalmers, although qualia are the first *non-physical* fundamental entity, they are still compatible with other conventional physical entities. Scientists just need to establish *psychophysical principles* to bridge the gap between the non-physical ontology of qualia and the physical ontology of the brain. How brain processes give rise to conscious experience then can be explained by these principles. They will become the basic laws of nature, similar to gravitational laws, laws of thermodynamics, and Maxwell's equations. Moreover, these psychophysical principles do not necessarily interfere with established physical laws. All physical theories can still be conserved with only psychophysical theory added on top. Chalmers (2010) proposes three initial candidates for these psychophysical principles, namely, *the principle of structure coherence*, *the principle of organizational invariance*, and *the double-aspect theory of information*. In short, he suggests that there are two aspects of information including physical and phenomenal; one embodies in physical processes while the other emerges as conscious experience. These two aspects naturally coincide in the way that neuroscientists can then empirically relate physical structures, abilities, and functions that give rise to each particular awareness to its specific coherent conscious experience. Thus, scientists can eventually formulate predictive equations to forecast the rise of exact qualia from exact physical organization. For Chalmers, these psychophysical principles are still in need of considerable developments; however, with this non-reductive initiation, qualia can definitely be explained in the scientific image.

In sum, the non-reductionist approach solves the complication of conscious experience by *adding* folk psychology about qualia together with contemporary

scientific explanation about brain processes. Consequently, the ontology of qualia as phenomenal properties in the manifest image is *included* in the revised scientific image.

The argument for naturalistic dualism in Chalmers' view can be formulated as follows:

- (1) Qualia cannot be explained by physical structures, abilities, and functions in the current scientific image.
- (2) If the current scientific image cannot explain the phenomenon, new fundamental entity and principle can be added in.
- (3) Therefore, the ontology of qualia as phenomenal properties should be added into the revised scientific image as non-physical fundamental properties.

Nonetheless, the major criticism to the non-reductionist approach on the complication of conscious experience is that it radically gives up the whole current physical framework in order to explain qualia. This non-reductive proposal does not imply only small adjustments in the scientific image but requires considerable alterations, or the so-called *paradigm shift*, down to the very foundation of contemporary physics. Most of these objections have already been stated as the advantages of materialism in Chapter 1, including *the parsimony of the theory*, *the conformity with the overall sciences*, and *the ability to explain causal relation*. This section then emphasizes only *the causal relation objection* which is the most vulnerable aspect of every dualist theory with non-reductionist approach.

To elaborate, the causal relation objection is one of the oldest criticisms against dualism since Descartes' philosophy. This objection is regarded as one part of *the mind-body problem* concerning how to explain the relationship between mental states and physical states. Nevertheless, it has just been highlighted lately with the rise of natural science, especially, the established laws of physics. As materialist supporters e.g. Papineau (forthcoming) articulates, the causal relation objection is based on one of the fundamental axioms, namely, *causal closure of physical*. This axiom claims that the previous physical states are already a sufficient cause of the following physical states. In other words, all physical effects are the result of physical

causes with no place for the possibility of other non-physical causes. The causal closure of physical is strictly applied to all current physical entities and principles both in macrolevel or microlevel; from the orbit of planets to the movement of electrons. This undeniably includes the physical mechanism of our body and the neural processes of our brain. On the topic of consciousness, the non-reductionist approach's proposal consequently faces a dilemma from this axiom. The supporters either need to deny the causal closure of physical in order to make an anomalous exception for qualia as possible non-physical causes; or accept the causal closure of physical and suggest that qualia actually have no causal power. The former is called *interactionism*; whereas the latter is called *epiphenomenalism*.

Interactionism, on the one hand, can preserve the folk psychology that phenomenal properties actually have causal significance. For example, when you get pinched, the qualia of pain-ness genuinely cause you to cry 'Ouch!' and retract your arm away. Nevertheless, this position requires considerable alterations of the whole current physical framework. The contradiction with the causal closure of physical raises a critical question to the condition of this exception; if mental states can be the cause of physical states, why scientists should rule out the possibility of other non-physical causes in other fields. According to Papineau (forthcoming), nowadays interactionists avoid this complication by rejecting Descartes' easy target, *substance dualism*. Instead, they accept other less-obvious dualism like *neutral monism*, or *panpsychism*. However, once theories with non-reductionist approach posit that the ontology of qualia is non-physical, there is no avoidance from this objection. Despite being fundamental, phenomenal properties still need to have causal relation with other fundamental physical properties somehow even in microlevel. Thus, the causal closure of physical is defied in any case of interactionism.

Epiphenomenalism, on the other hand, can conserve the causal closure of physical and is considered as less radical on altering the current physical framework (Jackson, 2002). However, this position loses most of its dualist spirit because it denies the folk psychology that phenomenal properties actually have causal impacts. For example, when you get pinched, the qualia of pain-ness arise in your mind, but neither genuinely cause you to cry 'Ouch!' nor retract your arm away. In this case, the

physical processes of the brain instead cause your physical reactions, while qualia are merely byproduct with no real causal power. Therefore, qualia are just ‘danglers’ with no psychological significance and are subjected to *Occam’s razor*. Their ontology is only there to conform with folk psychology, but their causal relation paradoxically opposes common-sense intuition. Positing qualia as physical properties is then even more intuitive in this respect because at least they can have real causal relation. Thus, the folk psychology is, to some extent, challenged in the case of epiphenomenalism.

2.3 Conclusion

In philosophy of mind, the complication of conscious experience concerning the ontological problem of qualia is one of the most important debates on consciousness side. This complication starts from the folk psychology that qualia have a strong resistance to physical structures, abilities, and functions described by contemporary scientific explanation. This epistemic resistance has been emphasized by Joseph Levine (2003) as *the explanatory gap* and by David Chalmers (2002) as *the hard problem of consciousness* with three well-known supportive thought experiments, namely, ‘*What Is It Like to Be a Bat?*’ (Nagel, 1974), ‘*What Mary Didn’t Know*’ (Jackson, 2003), and *the possibility of philosophical zombie* (Chalmers, 1996). The epistemic/explanatory gap between qualia and brain processes then further implies the ontological gap; qualia are considered as genuine phenomenal properties of our mind which separate from other physical properties.

Consequently, reductionist, eliminativist, and non-reductionist approaches are three main strategies that have been applied to respond to this complication. First, reductionist approach e.g. *physicalism* by David Papineau (1993) accepts that qualia are genuine properties but tries to reduce them to physical properties. He proposes that we can ontologically identify qualia with brain processes even with intuitive epistemic resistance. Regardless, this approach has been criticized that their reduction is not possible without compromising either some folk psychology or contemporary scientific explanation. Their position, despite appealing at first glance, thus, is more likely to collapse with two other approaches. Second, eliminativist approach e.g. *eliminative materialism* by Paul Churchland (1981) and Patricia Churchland (1990, 1994) denies that qualia are genuine properties and only accepts the ontology of

physical properties. They propose that qualia are the old ontological posits which should be eliminated along with their outdated folk-based theory and replaced by contemporary scientific theory. However, this approach has been criticized that its argument on the ontological elimination is not conclusive, and it denies qualia which are the crucial data that needs explanation (more elaboration in Chapter 4). Third and last, non-reductionist approach e.g. *naturalistic dualism* by David Chalmers (2002) endorses that qualia are genuine properties and posits them over and above physical properties. He proposes that qualia should be regarded as fundamental entity alongside mass, space-time, and electromagnetic charge. Nevertheless, this approach has been criticized for its radical compromise of the current scientific image. The ontology of qualia as non-physical entities either contradicts with the causal closure of physical or have no causal impact at all which is then subjected to Occam's razor.

Therefore, in general, no approach on the complication of conscious experience takes the lead in satisfyingly explaining qualia in the scientific image yet. This is because they either need to compromise the folk psychology by deflating some (if not all) aspects of conscious experience or compromise the scientific explanation by accepting some radical changes in current physical principles. Nonetheless, it is quite conclusive that no approach can totally save both sides with zero compromise; since proper reductive explanation, which is typically a default response in other areas, does not work on the ontological problem of qualia. This failure of the reductionist approach pushes most materialist theories to emphasize intentionality side only, while somewhat gives up or even accepts the non-reductionist approach on consciousness side as a last resort. Nevertheless, the eliminativist approach is still an attractive alternative due to its advantages in conserving the current scientific image. Only if this approach can satisfyingly give contemporary scientific explanation about qualia, it will have a potential to be a default theory on consciousness.

Accordingly, in Chapter 3, the thesis studies eliminativist approach on consciousness in Daniel Dennett. Since his idea tackles the complication of conscious experience by rejecting the ontology of qualia but still insisting that they are illusions. In my opinion, Dennett's so-called *illusionist thesis* has a potential to fulfill the satisfying conditions on both sides with minimal compromises.

Chapter 3

Consciousness in Daniel Dennett

This chapter analyzes Daniel Dennett's view on the topic of consciousness, specifically, on his eliminativist approach with the so-called *illusionist thesis*. The content is structured into four sections as follows: The first section introduces the overall idea of Dennett's eliminativist approach and formulates his arguments into two key parts. The second section focuses on the first part of Dennett's arguments which consists of his eliminativist approach to the complication of conscious experience including his denial on the ontology of qualia as genuine phenomenal properties; his criticism against the folk psychology of how consciousness arises i.e., *the Cartesian Theater*; his suggestion on the alternative scientific explanation of how consciousness arises i.e., *the Multiple Drafts*; and my adaptation of his supportive thought experiment, namely, *the photo sorting A.I.* The third section elaborates the second part of Dennett's arguments which contains his proposal on consciousness as *user-illusion* including his idea on qualia as '*illusory*' *intentional objects*; his analogy on conscious experience as *user-interface*; and his provided scientific supports using evolution theory. Lastly, the fourth section wraps up this chapter by proposing that Dennett's eliminativist approach with illusionist thesis has a potential to satisfyingly explain qualia in the scientific image. His view is obviously able to conserve the convention of contemporary scientific explanation and seems to preserve the manifestation of qualia as illusions as well.

3.1 Dennett's Eliminativist Approach

Daniel Dennett has always been the main supporter of eliminativist approach on the topic of consciousness. He is well-known for flatly denying qualia as phenomenal properties in *Quining Qualia* (2002); refusing the hard problem of consciousness in *Explaining the "Magic" of Consciousness* (2003a); and expressing his true appreciation towards the convention of contemporary scientific explanation in *Consciousness Explained* (1991). Similar to other theories with eliminativist approach, Dennett's view, nevertheless, is considered as an extreme solution to the complication of conscious experience. His view has not been taken seriously because

it is highly counterintuitive and is criticized that it denies *the crucial datum* that all theories in philosophy of mind are supposed to explain (more elaboration in Chapter 4). However, the recent work of Keith Frankish (2016) helps soften Dennett's position down and points out its remarkable appeal. Instead of strictly *eliminativism*, Frankish coins the word '*illusionism*' and categorizes Dennett as one of the main supporters of this position. Dennett willingly accepts this new label in his recent work (2016), and announces that illusionism should be taken seriously as a default theory on consciousness. This thesis henceforth defines Dennett's eliminativist approach as *illusionist thesis*.

The main idea of Dennett's illusionist thesis, in short, is that *qualia only seem to exist but actually do not*. His analogy (2003a, 2016) for this is conscious experience is like a '*stage*' magic. A '*real*' magic, on the one hand, is a group of phenomena that cannot be explained on physical grounds. A '*stage*' magic, on the other hand, is a group of phenomena that *seems* unable to be explained on physical grounds at first but can actually be *explained away* once we discover mechanisms behind how it is done. As we commonly maintain, there is no place for the ontology of the '*real*' magic in contemporary scientific explanation; there are only the manifestations or the phenomena of the '*stage*' magic from equipment and mechanisms behind them. For example, when we see a magician floating in the air, we do not naively believe that he casts a '*real*' magic to defy the law of gravity. In contrast, we uphold that this floatation is a '*stage*' magic. Although it undeniably *seems* to us that the magician is floating, this *illusion* can still be explained on physical grounds. Similarly, for Dennett, there is no place for the ontology of the '*real*' qualia in current scientific explanation; there are only the manifestations or the phenomena of the '*stage*' qualia in the first-person perspective from brain processes and mechanisms behind them. Although it undeniably *seems* to us that our conscious experience has phenomenal properties, this *illusion* can still be explained on physical grounds.

With this picture in mind, Dennett consequently considers Chalmers' division between *the easy* and *the hard problems of consciousness* as misleading. By insisting that physical structures, abilities, and functions epistemically and hence ontologically separate from the manifestation of qualia, Chalmers just unnecessarily pushes the

extension of scientific explanation into mystery realm. Dennett (1996a) compares this misdirection with *the hard question of vitalism*. In this example, vitalist maintains that ‘life’ cannot be completely explained on physical grounds. The easy problem of life is to describe mechanisms such as metabolism, immune system, growth, reproduction, etc.; however, these explanations combined, vitalist claims, still do not solve the hard problem of life which is to *be alive*. In this case, there can be a ‘non-life’ zombie. We can intuitively imagine a system with all these related physical functions in place without actually has ‘life’. Vitalism, therefore, mistakenly concludes that ‘life’ is something over and above physical grounds. It then posits the ontology of *vital spirit* apart from physical processes in order to explain the phenomenon of living. According to Dennett (2003a), Chalmers’ proposal falls in to this very same trap. It simply surrenders to the hard problem of consciousness even before scientists can provide a complete understanding for the easy problem. On the contrary, for Dennett, the easy problem is all it takes to explain conscious experience. It is too soon to give up contemporary scientific explanation to the hard problem without a proper fight.

From my analysis, Dennett’s arguments on consciousness can be divided into two major parts. The first part is his eliminativist approach to the complication of conscious experience; and the second part is his proposal on consciousness as *user-illusion*. This section presents the overall picture, while further elaboration for the first and the second parts are in section 3.2 and 3.3 respectively.

In the first part, Dennett (1991, 2002) argues that it is only our *common-sense intuition* or *folk psychology* to believe that conscious experience ontologically has qualia as phenomenal properties. There is no substantive supportive argument for this belief other than the claim on *acquaintance* and *familiarity* that we have them (Chalmers, 2003). For Dennett (2017b), the acceptance of this intuition is a crucial mistake and a result of bad theorizing. It is only by intuitively accepting the ontology of qualia and positing them as genuine properties in contemporary scientific explanation that the hard problem of consciousness arises. If we reject this folk psychology from the start, there will be no problem at all. Therefore, Dennett’s eliminativist approach responds to the complication of conscious experience by specifically *rejecting the ontology of qualia as genuine phenomenal properties*. As a

result, whether these phenomenal properties can be explained by physical structures, abilities, and functions or not becomes irrelevant. Then, even though the notion that ‘contemporary scientific explanation can only describe physical structures, abilities, and functions’ is true, the argument for the complication of conscious experience does not necessarily lead to the conclusion that contemporary scientific explanation cannot explain conscious experience.

The first part of Dennett’s illusionist thesis concerning his eliminativist approach to the complication of conscious experience can be formulated as follows:

- (1) It is only common-sense intuition or folk psychology to posit that conscious experience has qualia as phenomenal properties [eliminativist approach].
- (2) If there are no qualia as phenomenal properties, conscious experience can be explained by physical structures, abilities, and functions [rejecting the hard problem].
- (3) Therefore, contemporary scientific explanation is sufficient for explaining conscious experience.

In the second part, Dennett (2016, 2017a) proposes that consciousness is *user-illusion*. Although in the first part he argues that qualia as phenomenal properties do not exist, his eliminativist approach still insists that they *seem* to. The idea of user-illusion, as Frankish (2016) points out, aims to explain conscious experience by replacing *the hard problem of consciousness*: the ontological problem of how and why qualia as phenomenal properties can emerge from brain processes, with *the illusion problem*: the epistemic problem of how and why conscious experience manifests to us as having qualia as phenomenal properties. As the analogy of *a stage magic* suggests, Dennett offers to solve the complication of conscious experience in the same way as contemporary scientific explanation gives answers to other illusions. Even if qualia as ‘genuine’ phenomenal properties cannot be explained by physical structures, abilities, and functions; qualia as the so-called ‘illusory’ *quasi-phenomenal properties* do not necessarily suffer the same treatment. This is because, as illusions, the only aspect that needs explanation is the mechanisms behind *the (mis)representation*. According to Dennett, physical structures, abilities, and functions

have no difficulty explaining these mechanisms. Therefore, the phenomenon of conscious experience with qualia as illusions does not resist the convention of contemporary scientific explanation.

The second part of Dennett's illusionist thesis concerning his proposal on consciousness as user-illusion can be formulated as follows:

- (1) Conscious experience *seems* to have qualia, but qualia as phenomenal properties do not exist; thus, they have to be regarded as illusions [user-illusion proposal].
- (2) Qualia as illusions can be explained by physical structures, abilities, and functions [the illusion problem].
- (3) Therefore, contemporary scientific explanation is sufficient to explain conscious experience.

3.2 Arguments for Eliminativist Approach to the Complication of Conscious Experience

The key idea in the first part of Dennett's illusionist thesis is his eliminativist approach's notion that 'the ontology of qualia is only based on our common-sense intuition or folk psychology'. To endorse his point, Dennett presents a careful reconsideration of what we usually take for granted about our conscious experience and theorizes a possible alternative within contemporary scientific explanation. This section further elaborates Dennett's major arguments on this part in four subsections, including, his denial on the ontology of qualia as genuine phenomenal properties, his criticism against the folk psychology of how consciousness arises i.e., *the Cartesian Theater*, his suggestion on the alternative scientific explanation of how consciousness arises i.e., *the Multiple Drafts*, and my adaptation of his supportive thought experiment, namely, *the photo sorting A.I.*

3.2.1 Phenomenal Properties Eliminated

For Dennett (2017b), our intuitive acceptance that our conscious experience ontologically has qualia as genuine phenomenal properties is the main source of the hard problem of consciousness. If we reject this folk psychology and resist its ontological implication, there will be no problem at all. To support this proposal,

Dennett's eliminativist approach, thus, reconceptualizes qualia as, what Keith Frankish (2016) calls, *quasi-phenomenal properties*; not genuine phenomenal properties but physical properties that have been introspectively (*mis*)represented to be phenomenal. For example, redness is, in fact, physical properties that induces the representation of phenomenal red; it is not the properties of our mental states but the properties (*mis*)represented by our mental states. The crucial idea here is that it is our *intuitive epistemic mistake* to posit these quasi-phenomenal properties as genuine phenomenal properties in the first place.

In Dennett's view (1991), we have quite a strong reason to doubt the ontology of 'things' in our first-person perspective, e.g. hallucination, afterimage, and dream. This intuitive epistemic mistake can date back to John Locke's notion of *secondary qualities*. For Locke (1824), secondary qualities are emergent phenomena that are not really 'out there' objectively but emerge subjectively from the relationship between observer and physical objects. Physical objects, in Locke's words, have 'powers' to produce 'ideas' or 'sensations' in our mind. These ideas or sensations are then the result of the way we - humans - perceive physical objects. They, in contrast to *primary qualities*, do not tell us anything about the nature of physical properties in the world; instead, they tell us more about how we interpret the world. According to Dennett (1991, 2016), we are, nevertheless, always mistaken about these secondary qualities. As Locke points out, they are not the properties of physical objects as they manifest to us; however, they do not have to be the properties of our mind either. It is hence our intuitive epistemic mistake to believe that if secondary qualities are not the properties 'outside', they must be the properties 'inside'. Locke's proposal only entails that some phenomena are the result of our mind; it does not entail that our mind ontologically has phenomenal properties. Therefore, what we can conclude from our introspection is only that our conscious experience *seems* to have qualia as phenomenal properties. Dennett suggests us to stop here at this conclusion without further assuming that these phenomenal properties necessarily exist.

Furthermore, Dennett (1991, 2002) argues that the manifestation of qualia cannot be acknowledged separately from their respective *reactive dispositions*; thus, even if phenomenal properties exist, their assuming independent ontology have no

real psychological significance. From evolution perspective, qualia of each color, for example, will not have any purpose if there is no organism with perfectly-matched color-detector. It is, hence, a wrong idea to think that phenomenal properties already exist independently, then our color-receptors happen to find and make use of them. In the other way around, the more appropriate picture is that the mechanism of color-receptors instead evolves to detect some beneficial surface reflections in nature, then signifies them as different qualia in order to intuitively have proper reactions. Redness of apple, for instance, coevolves for the benefit of both apple tree and apple eaters. It indicates that the apple is ready for consuming so its seeds can be spread and grown in different locations. Consequently, there will be no 'redness' for animals, such as cats and dogs, who do not take any advantages from seeing red in the first place. Although the species that can detect red apple can now see other red objects, the qualia of redness would not have any psychological significance unless they result in some respective reactive dispositions.

In this regard, Locke's thought experiment (1824) of *inverted qualia* is then impossible⁷. Although it is intuitively imaginable that a person can have only his qualia inverted, Dennett points out that, after reconsideration, the person's reactive dispositions including his behavioral reactions, judgements, and memories about that qualia, must subsequently be inverted as well. In this way, even the person, himself, would not introspectively have any clue of this inversion. For instance, if one day you wake up and subjectively perceive the tree as red, the sky as yellow, and the sun as blue; from folk psychology, you would think that you will be able to spot these abnormalities right away and puzzle with your inverted qualia. Nonetheless, this would not be the case because to have a real psychological significance, all phenomenal properties are still necessarily entangled with their specific behavioral reactions, judgements, and memories. Therefore, if greenness of the tree always gives you a calm sensation, when your qualia are somehow inverted so green becomes red,

⁷ The inverted qualia example is one of the oldest and most important thought experiments. It initially suggests that two people can possibly have different or even inverted qualia of the very same notion. For instance, the subjective phenomenon that John sees in first-person perspective might be different from what Susan sees even though they both call their phenomena 'redness'; John might correctly see red and call it 'red', whereas Susan actually see green but call it 'red'. This intuitive possibility then further develops to the idea that qualia are separated from other physical mechanisms of the brain so that they can be independently inverted.

your association of calmness with greenness must be swapped with redness as well; thus, redness now reminds you of calm sensation. Then since all reactive dispositions associated with the qualia are overturned correspondingly, the detection of inverted qualia is, in fact, impossible. You would not be able to introspectively spot that the tree becomes 'red' because redness now gives you the same behavioral reactions, judgements, and memories as if you still see the 'green' tree.

Accordingly, Dennett (1991) challenges the consistent supporters of phenomenal properties, or what he calls *qualophile*, to demonstrate some good arguments or thought experiments that can prove the ontology of qualia independently from all reactive dispositions. Unless that could be done, what we can conclude here is that phenomenal properties are merely seeming; and their assuming independent ontology is unnecessary because it provides no real psychological significance. It is thus just our common-sense intuition or folk psychology to believe that our conscious experience ontologically has qualia as genuine phenomenal properties.

3.2.2 Folk Psychology: The Cartesian Theater

For Dennett (1991), the misbelief about the ontology of qualia as genuine phenomenal properties is contributed by the overall misunderstood folk psychology of how consciousness arises. People, in this respect, typically assume that the mechanisms behind the manifestation of their conscious experience must somehow conform with what they subjectively perceive in the first-person perspective. For example, when I am visually conscious of external objects, it seems like there is 'Me' sitting inside my head and looking out from my eyes. When I am visually conscious of 'internal objects', this 'Me' then similarly looks at some *figments* inside my head so I can 'see' some mental images. This intuitive picture leads to a wrong assumption that, in order to explain how consciousness arises, there must be some specific entity, whether physical or not, which is 'Me'; and there must be some substantial built-up of mental phenomena for 'Me' to perceive.

Dennett (1991) illustrates this folk psychology through the idea called *the Cartesian Theater*. The Cartesian Theater composes of three major components,

including *the Theater, the Screen, and the Audience*⁸. First, the Theater represents *the center point* where all raw data need to come together in one place at one time. It is where ‘Me’ situated and makes sense of all mental phenomena. Second, the Screen represents *the re-presentation of mental phenomena* for ‘Me’ to perceive. It endorses the idea of phenomenal properties on which qualia of sensation, emotion, and perception need to be literally projected in order to be conscious of. Third and last, the Audience represents *the entity which is the essence of ‘Me’*. It implements the ideas of high-order thought which are responsible for perceiving, judging, reacting, and most important of all, making unconscious processes conscious.

As the name suggests, for Dennett, the Cartesian Theater is the inheritance of Descartes’s dualist thesis (2002). For dualism, on the one hand, this folk psychology does not pose any crucial problem in their theories because the mind as an independent non-physical entity can be where the Cartesian Theater happens. Phenomenal properties are considered as non-physical properties of our mind; so, their means of re-presentation on the Screen for the Audience are over and above physical processes of our brain. For instance, the visual signal of red object enters the retinas and gets sent to the brain; then the mind somehow projects this redness non-physically and makes sense of it. In dualist view, a combination of non-physical mind and physical brain is, therefore, used to describe how consciousness arises. The mechanism of the brain can be explained by physical structures, abilities, and functions; but the mechanism of the mind is posited as a mystery beyond our physical knowledge. For materialism, on the other hand, the idea of the Cartesian Theater is problematic. The Theater, the Screen, and the Audience empirically contradict how the brain physically works; and without allowing the mind to be an independent non-physical entity, there is no place for further mysterious mechanisms. In materialist view, only physical processes are responsible for how consciousness arises. Qualia as genuine properties, thus, have no mean for their re-presentation on the Screen for the Audience. Even so, materialist theories with reductionist approach still seem to fall for this folk psychology. They deny the ontology of the mind, but instead of totally

⁸ Dennett states only two parts of the Cartesian Theater in his summary, including the Theater and the Audience (1991, p. 165); while the idea of the Screen is already integrated in the Theater. However, this thesis separates the idea of the Screen out to emphasize the ontology of qualia in this folk psychology.

eliminating the idea of the Cartesian Theater all together, they substitute what the non-physical mind is supposed to do with some physical brain parts. By clinging to this picture, these materialists subsequently face the hard problem of consciousness; they do not only suffer the strong reductive resistance surrounding the Cartesian Theater, but also blind to alternative scientific explanation of how consciousness arises.

To back up the significance of this elimination, Dennett (1991) points out one of the most crucial philosophical problems that comes with the Cartesian Theater, namely, *the infinite regress of homunculi*. Homunculus is a term for a 'little person'. The infinite regress of homunculi is the idea that there is a little person inside our head, and this little person also has another little person inside his head, and so on. The key objection here is that the Cartesian Theater cannot actually clarify how consciousness arises because it merely presupposes the existence of 'conscious' homunculus without explaining how this homunculus can become 'conscious' in the first place. In other words, when we intuitively posit qualia as genuine phenomenal properties projected on the Screen, we also simultaneously posit that there is the 'conscious' Audience to make sense of this re-presentation. For example, in order for a person to have a visual consciousness of phenomenal 'red' properties, a homunculus in his head with a 'visual conscious' ability is required to 'look' at this 'redness' and be conscious of it. Hence, although human's ability to be conscious of phenomenal properties can be explained by the ability of this homunculus, the homunculus' ability to be 'conscious' of these phenomenal properties is still a mystery which needs proper explanation.

Consequently, explaining how consciousness arises with the Cartesian Theater results in a dilemma. In the one way, we must posit that we as a human already possess a homunculus with irreducible 'conscious' ability. Dualist theories seem to happily choose this path when they accept the non-reductionist approach. The non-physical mind is the 'conscious' homunculus; however, we will never know how the mind can become 'conscious'. Such mechanism is beyond physical explanation; thus, it is one of many mysteries of the mind. In the other way, we face the infinite regress of homunculi. Materialist theories with reductionist approach is likely to choose this

path by suggesting that some particular part of the brain, e.g. cerebrum, is this ‘conscious’ homunculus, then trying to reduce each specific ‘conscious’ ability further to more and more homunculi in microlevel. However, this solution only postpones a problem rather than solves it because eventually this reduction will hit neural level, and now we have to either posit a huge number of homunculi with pieces and bits of ‘conscious’ ability, or further reduce this ability in chemical level and physics level respectively. This absurd pursuit to find homunculus within homunculus, thus, goes on and on forever without actually explaining how consciousness arises.

Therefore, in one sense, the idea of the Cartesian Theater as a whole is begging the question. It supposes to explain how consciousness arises; however, its major component, namely, the Audience is already presupposed to be conscious. In Dennett’s view, any theory that still magically posits ‘conscious’ ability in its explanation does not even start to explain consciousness at all. The assumption about homunculus needs to end somewhere and replaced by unconscious mechanisms. This elimination can then be done at the very start by discarding the overall idea of the Cartesian Theater altogether. Neuroscientists should not waste their time trying to explain the Theater, the Screen, and the Audience *by* scientific explanation; instead they should *replace* this folk psychology *with* proper scientific explanation.

3.2.3 Scientific Explanation: The Multiple Drafts

According to Dennett, the Cartesian Theater and its components are misleading folk psychology that need to be eliminated for good. The eliminativist approach is the only way to explain the manifestation of conscious experience without positing the ontology of qualia as phenomenal properties. Dennett (1991) consequently proposes an alternative scientific explanation, namely, *the Multiple Drafts* to replace this folk psychology. The Multiple Drafts is a demystified version of how consciousness arises, and its main idea is opposed to the Cartesian Theater in every aspect. Although this alternative is undeniably counterintuitive, it is heavily supported by scientific studies, especially, on neuroscience and computational models (Stich, 1996). The Theater, the Screen, and the Audience are no longer needed; thus, there is no more reductive resistance that opposes to the physical mechanism of the

brain. Dennett's replacement for each component of the Cartesian Theater can be understood respectively as follows:

First, instead of the Theater where all raw data need to come together in one place at the same time, the Multiple Drafts proposes that there are only *numerous multitrack processes* of interpretation and elaboration of mental activities. Each part of the brain works in parallel with no definite central point⁹. Different sensory inputs e.g. vision, sound, and olfactory, for example, can be interpreted at each of their respective sensory cortex at different times; and as soon as these interpretations are ready, they can become available right away *in personal level* with no need to combine anywhere *in sub-personal level*¹⁰. As the name suggests, there are, thus, only multiple 'drafts' with bits-and-pieces of unconscious processes in the brain. There is no single 'final product' which can be specifically pinned point at in the Theater.

Second, instead of the Screen where qualia need to be projected and re-presented to the Audience, the Multiple Drafts proposes that there are only informative processes of mental activities. Each part of the brain is an *information* processor, not a *presentation* processor. Visual image, for example, is transduced once at retinas then sent as electrical signals, not as pictorial signs. Indeed, qualia subjectively manifest in our conscious experience in personal level; however, this manifestation does not necessarily materialize, neither physically nor non-physically, anywhere in sub-personal level. There are, thus, only unconscious 'informative drafts' in the brain. There are no phenomenal properties which needs to be literally shown on the Screen.

Third and last, instead of the Audience who is responsible for being conscious of qualia on the Screen, the Multiple Drafts proposes that there are only *unconscious and unintentional competitions* within and between processes. Each part of the brain is on constant contests to provide its information to be manifested in personal level.

⁹ In this regard, what Dennett suggests can be comparable to what Quine did in epistemology. There is only the so-called *narrative center* which does not necessarily based on one particular physical or non-physical center. See Dennett (2017a).

¹⁰ According to Dennett (1996b), the explanation about mental states can be categorized in two levels, namely, personal level and sub-personal level. Personal level refers to an explanation in the manifest image including people and their sensations; while sub-personal level refers to an explanation in the scientific image including behind-the-scenes mechanisms e.g. neural activities of brain processes.

This manifestation, however, does not require ‘conscious’ homunculus in sub-personal level to make senses of or decide the ‘final product’. The ‘winning drafts’ only need to be recognized once in the first-person perspective with self-organizing mechanism of neural network behind them to automatically decide and prioritize these winners. The drafts with low relevance at each particular moment are falling out and allow the drafts with more significance to manifest. In addition, there is no permanent ‘winning drafts’; the winners at each moment quickly fade away and open up for new drafts to replace them. The draft of ‘pain’, for example, has a high priority when it manifests and can completely overwrite other drafts. This draft, nevertheless, is eventually replaced by others once the cause of pain is removed. There are, thus, only unconscious ‘competitive drafts’ in the brain. There is no ‘conscious’ homunculus acting as the Audience to make these unconscious processes conscious.

The idea of the Multiple Drafts has strong supports from contemporary scientific studies, especially, *connectionism*. Connectionist models reveals that the brain is working in a holistic approach by a network composed of billions of simple neurons (Bechtel, 1993; Stich, 1996). In micro level, each neuron only contains the so-called *activation value* which it computes from its neighboring units. The mechanisms behind each input and output are consequently a result of the influence that each neuron affects one another through the so-called *relevant strength* or *weight* according to its inherited activation value. In this model, sensation of ‘pain’, for example, imposes a specific value to the *input units*. This numerical value can be seen as an *informative representation* of ‘pain-ness’. The input units then disperse this value in the neural network until it reaches the *output units* such as reflective reaction to remove the sources of pain, verbal reaction of saying ‘Ouch!’, etc. The ‘decision’ between particular input and ‘appropriate’ outputs depends on the degree of the relevant strength or weight that passes through *hidden units*. These hidden units necessarily shape the ‘appropriate’ outputs in each particular case because their inherited activation values represent previously ‘learned’ reactions from past experiences. ‘Pain-ness’ at value of ‘0.1’, for instance, might activate the hidden units that lead to ‘crying’ output in newborn baby. However, these inherited activation values can be altered from learning process or biological changes after sometimes;

thus, 'pain-ness' at value of '0.1' does not activate the hidden units that lead to 'crying' output anymore but leading to saying 'Ouch!' reaction instead.

Furthermore, connectionist theory also revolutionizes the way we understand how the brain works in macro level. In this picture, each part of the brain specializes in some specific respects with no particular part that can be pinpointed as the essential source of conscious experience. The mechanisms behind different kinds of perceptual consciousness e.g. visual consciousness, auditory consciousness, and olfactory consciousness are equally distributed to almost every part of the brain. To illustrate, a *cerebrum* which is the largest part of human brain is divided structurally into two symmetrical hemispheres. Each hemisphere composes of four lobes including *frontal lobe*, *parietal lobe*, *temporal lobe*, and *occipital lobe*. Although all lobes can be separated by structure, they cannot be separated by function. Each lobe specializes in one or two specific functions; and each function also overlaps with two or more lobes. For instance, visual cortex is situated in occipital lobe; auditory cortex and olfactory cortex are partially in temporal lobe; and somatosensory cortex is located in parietal lobe. Therefore, one rich moment of conscious experience including what you see, what you hear, what you smell, and what you touch, is associated to almost every part of the brain. In contrast to the folk psychology, there is no central lobe where all of these different perceptual consciousnesses come together; and there is no single specific part which is responsible for making unconscious processes conscious.

In sum, Dennett's eliminativist approach replaces the folk psychology of how consciousness arises i.e., the Cartesian Theater with the alternative scientific explanation i.e., the Multiple Drafts. In this picture, conscious experience is not one single 'final product' happening at the central Theater, but instead the works of numerous parallel 'drafts' distributed from every part of the brain. Qualia never materialize on the Screen as genuine phenomenal properties in sub-personal level, but instead are the manifest image of 'informative drafts' in personal level. And there is neither non-physical nor physical 'conscious' Audience, but instead multiple unconscious units which unintentionally compete to be the 'winning drafts'. For Dennett, the brain is a machine composing of numerous machines. Each component of this machine, however, does not need to be conscious of anything. This idea,

though can be understood as *homuncular functionalism*, does not trigger an infinite regress. The brain only consists of many ‘specialist homunculi’ that perform specific functions. Each of them can be reduced further to more fine-grain operations; nevertheless, none of them has non-reducible ‘conscious’ ability. Their functions can be explained by physical mechanism; thus, unlike the Cartesian Theater, the Multiple Drafts does not resist contemporary scientific explanation.

3.2.4 Thought Experiment: The Photo Sorting A.I.

In recent years, Dennett’s idea of the Multiple Drafts has gained more strong empirical supports from the application of new computational models in modern computer science and engineering (Bechtel, 1993; Stich, 1996). Connectionist theory provides a leap success in the development of artificial intelligence (A.I.); and the replica of neural network has become a basic building block for a combination of hardware and software that can somewhat ‘think’ for itself. Thanks to the new method of programming called *deep learning*, the big leap of advance is possible. Instead of one-by-one if-clause algorithms, connectionist networks use a series of simple nodes to weigh the significance of each data. The A.I. subsequently ‘learns’ and ‘decides’ to respond with each specific data by strength, weight, and frequency of inputs and outputs. This paradigm shift in the development is more than success that so many machines now pass *Turing test*, and scientists need to revise the standard of what can be called *strong A.I.* In the other way around, the advance of A.I. technology also provides possible alternative explanation for some aspects of human’s consciousness which are considered as a mystery before. By reverse-engineering connectionist computational models, scientists are able to bridge the gap between the manifestation of conscious experience and the mechanism of the brain. One example is *the ability to sort the photos* which crucially endorses that the ontology of qualia as phenomenal properties does not need to be projected or re-presented in sub-personal level in order to be visually conscious of.

The thought experiment presented in this section, namely, *the Photo Sorting A.I.* is my adaptation of Dennett’s example called, *the CADBLIND system* (1991). Dennett uses this thought experiment to illustrate that the act of ‘showing’ in the Cartesian Theater can be simply replaced by the act of ‘telling’ in the Multiple

Drafts¹¹. In other words, qualia of sensation, perception, and emotion can be fully conscious of as *information*, instead of *presentation*. Thus, the projection of phenomenal properties on the Screen for the Audience is unnecessary and even redundant to explain how consciousness arises. Although my adapted thought experiment may lose some aspects of Dennett's notions which relate to his previous context such as mental images and mind's eyes, it provides a more up-to-date example with a real practical success in my opinion.

In this thought experiment, let us compare the adopted folk psychology versus the actual scientific explanation behind how the A.I. sorts the photos. *Google Photo*, a popular photo album application, for example, can recognize what is in each photo and categorize it accordingly. Most of the time, it can correctly identify different people, animals, and objects thanks to its behind-the-scenes artificial intelligence. The key algorithm here is to compare a new upcoming photo with all previous photos in the database, then labels it with the same keyword(s) to the most similar ones. The question is how Google Photo's A.I. recognizes, identifies, and compares all these photos in their database.

On the one hand, the adopted folk psychology is to think that the A.I. works like a 'conscious' homunculus; it needs to literally 'see' each photo in order to sort it correspondingly. To illustrate the absurdity of this premise, let us imagine the A.I. robot with a high-definition camera sits in front of two 4K TVs. When someone submits a new photo in, the picture is *shown* on the first TV screen. The A.I. then quickly browses the database for the most similar photo on the second TV screen, compares these two photos pixel by pixel, and labels the new one in appropriate categories. From this imagination, we can now see that the folk psychology of the Cartesian Theater is ridiculous and composes of so many redundant steps. It requires a camera and TVs on a presupposition that the A.I. will not be able to recognize, identify, or compare photos unless it is *shown*.

¹¹ By the notion 'telling', Dennett (1991) does not mean that neuron is 'talking' to each other in some kinds of language. As oppose to Jerry Fodor's language of thought (1989), neural communication can be understood in a form of physical pattern, frequency, and intensity. There is no need for a complex semantic behind a syntax. The syntax itself can contain enough information for simple computation which together gives rise to complex system. This topic is another ongoing problem in philosophy of mind concerning intentionality; however, it is beyond the scope of this thesis.

On the other hand, the actual scientific explanation is to understand that what the A.I. does is sorting the data rather than literally sorting the picture. In other words, the A.I. recognizes, identifies, and compares *representative information* of the photo, not the photo itself. To illustrate this premise, let us imagine the A.I. machine with a high-speed fiber connection links to the photo's database directly. When someone submit a new photo in, the picture is transduced to binary codes and is 'told' through the cable. The A.I. then quickly searches the database for the most similar representative information, compares these two binary codes bit by bit, and label the new one in appropriate categories. With this practical example, we can now see that the scientific explanation of the Multiple Drafts is not only a possible way but a more attractive way to reach the very same result. It is much simpler and direct; there is no need for a TV since nothing needs to be *shown*; and there is no need for a camera since no one is *seeing*.

Therefore, the act of 'showing' can be evidently replaced by the act of 'telling' in the photo sorting A.I., and so does the human's brain. Qualia can be transduced once at their respective sensory then can be sent and received as representative information. Although phenomenal properties do indeed 'show' themselves in personal level, this does not necessarily mean that they have to be *shown* in sub-personal level. The behind-the-scenes mechanism of neural network can just 'tell' the information to each other rather than projecting qualia on the Screen for the 'conscious' Audience. With this eliminativist approach, how consciousness arises can then be explained without the ontology of qualia. It is thus only our common-sense intuition or folk psychology to believe that our conscious experience ontologically has qualia as genuine phenomenal properties.

3.3 Arguments for Consciousness as User-Illusion

The key idea in the second part of Dennett's illusionist thesis is his proposal that 'qualia are merely illusions'. To justify this point, Dennett leans on the concept from intentionality side and hypothesizes some possible contemporary scientific explanation for this so-called *user-illusions*. This section elaborates Dennett's major arguments on this part in three subsections, including, his idea on qualia as '*illusory*'

intentional objects, his analogy on conscious experience as *user interface*, and his supportive scientific explanation with theory of evolution.

3.3.1 Qualia as ‘Illusory’ Intentional Objects

Although his eliminativist approach strongly denies the ontology of qualia, Dennett still emphasizes that they *seem* to exist. The manifestation of conscious experience is subjectively real; however, it does not compose of genuine phenomenal properties as it appears. To clarify this point, Dennett (2016, 2017a) proposes that consciousness is *user-illusion*. Qualia are *illusions epistemically mistaken by the user* because their ontological implication is only based on our common-sense intuition or folk psychology. By rejecting their ontology, qualia in our conscious experience can then be described in contemporary scientific explanation like other illusions. There is no more *hard problem* of how phenomenal properties emerge from brain processes; there is only, as Frankish (2016) points out, the *illusion problem* of how and why conscious experience manifest to us as having these phenomenal properties.

To further elaborate this intuitive epistemic mistake, Dennett (1991, 2017b) applies the concept from intentionality side¹². He proposes that qualia are only ‘*illusory*’ *intentional objects* of our introspective beliefs. This proposal can be considered as reducing the complication on consciousness side to intentionality side. As Chalmers (2002, p. 252) formulates in this quote “one way...is to argue that there is some intermediate X such that (i) explaining function suffices to explain X, and (ii) explaining X suffices to explain consciousness”. For Dennett, this intermediate X is *our beliefs about consciousness* with the emphasis that they are *misled* and *unreliable*. These instinctive beliefs are the reason why we (*mis*)*represent* qualia as phenomenal properties in the first place. Accordingly, qualia are intentional objects of our introspective beliefs which are ‘illusory’ because they are made out of nothing. For example, when we see or imagine a red apple, our brain does not have to render ‘redness’ as genuine phenomenal properties existing anywhere; neither as physical pigments nor mental figments. We only have a belief about an apple with red-properties, then (*mis*)*represent* this redness as properties of our mind. Therefore,

¹² Dennett’s arguments on intentionality are beyond the scope of this thesis. His main idea on the emergence of intentionality is called *intentional stance*. See Dennett (1987).

qualia are not phenomenal properties *of* mental states, but phenomenal properties *(mis)represented by* mental states. Although this intentional object of our introspective belief is red, neither the belief nor its *proximal causes* have to be red¹³. We usually think that these phenomenal properties are *the distal causes* of our beliefs about qualia; however, Dennett (2015b) suggests that we should turn our thought the other way around. Our introspective beliefs, or specifically *our intuitive expectations*¹⁴, instead are the cause of these illusions of qualia.

In this regard, Dennett (2017b) points out that it is normal to talk about intentional objects without implying their existences. The arguments about this subject can be referred back to Willard Van Orman Quine (2001). In usual case, the intentional objects are typically matched with their distal causes which are physical objects. There is no problem in this case because the ‘objects’ that our intentions point to physically exist; thus, the talks about them are meaningful since we have the basic references to empirically prove their truth values. On the contrary, when it comes to non-existent intentional objects such as illusions, there are no distal causes which are physical objects. The problem is that now our intention points to nothing so the meaningful talks about them are questionable since there are no basic references to prove their truth values. Nevertheless, Quine sheds some light on this problem by separating the linguistic view from their ontological assumptions. The propositions, themselves, already give the sufficient meaning to the intentional objects; thus, their distal causes do not need to exist as the basic references. Consequently, intentional objects can be *fictional*. We can meaningfully believe, think, and talk about them without provoking their ontology. Sherlock Holmes, for example, does not exist but his name is still meaningful with many verifiable truth values such as he lives at 221B Baker Street and has a best friend named Watson. For Dennett, our beliefs, thoughts, or talks about qualia do not have to point to any existent properties in the same way. As ‘illusory’ intentional objects, qualia are not made out of anything, neither physical nor non-physical. In a short reply about his position (2015a), Dennett states that “...mind are elements in good standing in the manifest image, along with voices,

¹³ According to Dennett (2017b), the proximal causes mean the physical mechanism of brain processes behind human’s abilities to believe and represent; while the distal causes mean the ‘objects’ which causally activate or stimulate these mechanisms.

¹⁴ Dennett explains this point with the idea of Bayesian’s expectations. See Dennett (2015b).

colors, opportunities, dollars, promises, songs, and poems...”. With this notion, human’s mind is, thus, real; however, their realness is not something over and above our *make-believe*. Believing in phenomenal properties is then like believing in properties of fictional characters. They are meaningful but do not necessarily exist¹⁵.

Therefore, when Dennett insists that qualia are ‘illusory’ intentional objects, what he means is that they are not *objectively real* as independent properties separated from their observer. Instead, qualia are only *subjectively* and *intersubjectively real*, not in a sense of private non-physical properties, but as one of human’s make-believe. Nature makes each person instinctively believe in qualia by (mis)representing them as phenomenal properties in the first-person perspective. Then, when people try to communicate their ‘inner’ feelings, the make-believe spreads from subjective reality to intersubjective reality. For example, pain is not subjectively real only to a baby who feels it, but also intersubjectively real to the parents who recognize the pain. Although the phenomenon of pain undoubtedly appears only to the baby, the concept of pain is recognized by all individuals. The baby may not understand the concept of pain yet; and a *congenital analgesia* patient, who from birth insensitive to physical pain, may never know *what it is like* to feel pain. Nonetheless, pain will remain both subjectively and intersubjectively real in human society as long as there are people who can feel and recognize this concept¹⁶.

3.3.2 Conscious Experience as User-Interface

In Dennett’s view, although qualia are merely illusions, their manifestations are beneficial. To clarify this point, Dennett proposes that consciousness is *user-illusion* in one more sense. Qualia are *the first-person perspective’s illusions of the user*. Conscious experience is like *user interface (UI)* which helps us bring out the most potential of our brain; nevertheless, it simultaneously *blinds* and *tricks* us - the users - from what they really are. To illustrate the possibility of this user-illusion in contemporary scientific explanation, Dennett (1991, 2017a) suggests that the

¹⁵ Dennett recommends a method to study conscious experience through verbal reports on our beliefs about qualia. He calls this method, heterophenomenology; and claims that it is the only scientific way to study consciousness as seriously as possible. See Dennett (1991, 2003b, 2007, 2018)

¹⁶ The intersubjective reality of qualia is debatable. Nonetheless, whether the result is positive or negative, it does not affect the main idea of illusionist thesis, which proposes that qualia should be understood as fictional make-believe.

relationship between brain and consciousness should be comprehended in the form of an interaction between hardware and software. He defines consciousness as a *virtual machine*. The virtual machine is simply an operating system (OS) that runs on a suitable physical structure. Instead of directly operating on physical wires and chips like an actual machine, the virtual machine indirectly runs on algorithms and patterns. This layer of software consequently has its own functions and operations which *seem* to separate from the hardware that it runs on. Nevertheless, the utility of the software still depends on the organization of the hardware in complex two-ways synchronization. On one direction, the hardware must be arranged in a specific configuration that it can create, support, and run the software; whereas, on another direction, the software must be able to control, manipulate, and make use of the hardware's potential.

One interesting aspect of this notion is that although only the hardware is physical while the software is obviously not, their interaction can still be satisfyingly explained on physical grounds. When you look at your computer, for example, what you literally see is just a pile of hardware. The software cannot be found anywhere until you set up your hardware correctly, switch it on, and access it through abstract representations. In this regard, the influence that the software has on physical world is undeniably real; however, it is not *a causal effect* between physical objects and non-physical objects. In fact, the software is only *the manifest image* of physical processes. The mechanism of hardware that display in terms of software is instead *the genuine causes* of the physical effects. For Dennett, the relationship between consciousness and brain perfectly fit in this description. The body is physical while the mind is obviously not; the brain is a necessary condition for consciousness to manifest and operate; and although the influence between the two is real, it does not have to be a causal effect which will contradict *the causal closure of physical*. Consciousness is only *the manifest image* of brain processes. As a program does not cause a hard disk to spin, a spin of a hard disk instead makes a program possible; the mind does not cause the body to move, the movements of the brain instead make consciousness possible.

Accordingly, since consciousness is the software that runs on the hardware -- the brain, the manifestation of conscious experience is, for Dennett (2015b, 2017a), like user interface (UI). Similar to app icons on our smartphone's screen which help us recognize, navigate, and unleash the power of our phone, qualia in our conscious experience help us perceive, control, and bring out the potential of our brain. In this regard, although engineers can make a direct change in the hardware to yield some desirable effects, user interface is designed to make the same operation easier and more efficient for common people who do not have any knowledge about hardware's mechanism. In the same way, a direct stimulus in the brain has been proven to result in some specific reactive behaviors; however, the manifestation of conscious experience is evolved by natural selection to make the same operation easier and more efficient for us - humans - who do not necessarily know anything about brain processes. In short, for Dennett (2015b, p. 8) consciousness is, thus, "the brain's effective user-illusion". Qualia are illusory not only because they are abstract representations that do not actually exist like app icons, but also because they *blind* and *trick* us - the users - from the behind-the-scenes mechanisms which they actually manifest from. In smartphone, for instance, when we explore the user interface, what really happens is algorithms in software level and electrical currents in hardware level; yet we never literally see how these background processes actually work. Similarly, when we explore our conscious experience, what really happens is the beliefs in our mind (software level) and electrical signals and chemicals in our brain (hardware level); still we never ever introspectively realize how these background processes actually work. Therefore, studying consciousness from the first-person perspective never yields any information about the actual mechanisms behind our mind and brain in the same way as digging in user interface will never yield any information about the actual mechanisms behind software and hardware. Through the manifestation of conscious experience, we - humans - can then manipulate and control our body intuitively and effectively without any revealing insight into the physical processes and mechanisms behind them.

Nowadays, Dennett's ideas of the virtual machine, the user interface, and the user-illusion become more convincing than ever with practical examples from technological advancements. The development of *virtual reality (VR)*, in particular,

opens up new perspective about computer that is far more than number cruncher. Although computer mechanically processes information in binary, 0 and 1, this information now can be manifested in terms of visual and sound in almost real time. The combination of right hardware and software has then been proven to be able to manifest in totally different phenomenon from what they really are. In virtual reality, sometimes simulated objects and properties seem so real that we think they actually exist. Likewise, in our conscious experience, phenomenal properties can look so real that we think qualia must exist. However, now that even computer can produce an ‘illusory’ reality, it is not so much counterintuitive anymore if human’s brain can also make one.

3.3.3 The Evolution of Consciousness

To elaborate how human’s consciousness becomes user-illusion in contemporary scientific explanation, Dennett (1991, pp. 171-226; 2017a) applies Darwin’s theory of evolution. He suggests that human brain is the suitable hardware evolved by *natural selection*; while consciousness is the effective software evolved by *meme selection*. The significant point Dennett wants to prove here is that ‘conscious’ being can possibly be evolved from *unconscious* and *unintentional* processes. In other words, human’s mind is neither special nor different from any other organs or behaviors. Consciousness, in short, evolves because it is an instrument of our survival. It is simply one of many successful features that develops to increase human’s chance of surviving in the same way as bird’s wings and dog’s barks. Moreover, from an evolution point of view, consciousness is not one definite feature that organisms either have it or not. It is rather a bundle of abilities which separately and gradually evolves since the beginning of life. Mental states get more and more complex from generation to generation; they come in degree with no definite borderline that divides between conscious and unconscious beings. Indeed, by comparing both peripheral edges of the spectrum, we will see the differences dramatically. For example, if we put human’s consciousness on the one end, it is quite hard to define ameba as having any conscious at all on the other end. Nonetheless, if we study step-by-step backwards, we will see that even ameba has shown some precursor of ‘conscious’ abilities already since it seems to, in a sense, ‘know’ when to flight or fight.

Dennett's proposal on the evolution of human's consciousness can be divided into two main stages. The first stage explains how natural selection shapes up the brain into the suitable hardware; while the second stage theorizes how meme selection develops in human's brain and becomes the effective software.

In the first stage, the most important step that Dennett points out is a change from *hardwired* to *plastic* mechanism in brain's evolution. Although hardwired ability is light weight and energy-efficient, it is not adjustable to fluctuated environment and requires a lot of time for each alteration. In this respect, hardwired strategy is only good for simple organisms with fast reproduction cycles such as bacteria, worm, and bug. In more complex organisms, on the contrary, depending on hardwired mechanism is not the best survival strategy. For example, a bird that can eat only berries will be extinct when there are no more berries left in its habitat. While a bird that can adjust to eat other fruits will survive and reproduce. Natural selection, thus, unconsciously and unintentionally drives animals' brains towards more flexible mechanism so animals can partly adjust themselves to certain conditions they encounter. In other words, they can *learn* new abilities on top of the hardwired skills in order to live in new *niches*. This is called *brain-plasticity*; but it comes with high cost. The flexible brain requires more time to develop and is energy-consumed. Consequently, the ratio between hardwired and plastic mechanism is different in each organism depending on its fittest niches.

In this regard, the plasticity of the brain is very crucial because it opens up a possibility of evolution within the brain. In hardwired mechanism, evolution only takes course in species level. An animal with the fittest hardwired behavior will survive and carry on its species' trait through genetics, while the opposite does not. In plastic brain, however, evolution can also take course inside an individual. A behavior with competitive outcome will survive and carry on in that individual, while the opposite does not. This behavior can then be passed down to offspring and become species' trait with no need of genetic modification. The plasticity of the brain, therefore, speeds up the evolution process at a rate that can never happen by genetics so new various abilities can evolve in a much shorter period.

For Dennett, human's brain becomes the suitable hardware for consciousness, thanks to this plasticity. Human has the most flexible brain among other animals, and it allows us to learn numerous new tricks at a much faster rate. Why we need to have such a huge plastic brain in the first place is still a controversy; however, once we have a great capacity of adjustable hardware, it is not hard for a possibility of a new system to evolve and utilize this hardware for the best survival uses. This new system that our ancestor unconsciously and unintentionally happens to learn is like a utility software which works even better than hardwired hardware. This software does not only maintain an advantage from precursors of consciousness, but it also enhances them. For instance, it makes prediction in long term future possible. This foresee ability allows human to decide what to act and plan for different possible outcomes. Like playing chess, it is crucial to be able to predict our opponent's next moves; nevertheless, it is even better for us to plan our own next move and further moves after. Therefore, some plasticity in the brain makes learning possible, and with super plastic brain in human, we do not only learn new tricks but also *a completely new fast-learning system*. This new learning system is what Dennett refers to as a *virtual machine*; and it helps speed up the evolutionary process once again with an even more flexible software-like utilization.

In the second stage, Dennett (2017a, pp. 205-247) proposes that the software that runs on our brain is unconsciously and unintentionally evolved by *meme selection*. Meme is defined as behaviors or ideas that can be copied and transmitted within cultures. If gene is a backbone of natural selection, meme is a backbone of cultural selection. It spreads conceptually, not genetically, as information¹⁷ from person to person. Meme selection speeds up human's learning processes and improves our abilities to adapt in a matter of seconds instead of generations. According to Richard Dawkins (1976) who coins the term, although meme is not a living thing, it acts like one. Numerous memes compete for survival in their own niches. Similar to virus, meme replicates itself, not in host's cells, but in host's thoughts. Each meme tries to survive and reproduce, not its genetic codes, but its informative codes. It, nonetheless, does not care whether its host will be dead or alive. In meme's point of

¹⁷ For Dennett (1991), meme has information in a sense that it carries prescription of a way to do things.

view, improving survival rate of its host is not a reason why each meme is selected for. Instead, improving survival rate of each meme, itself, is the reason. This process results in meme selection including the formation of new memes, the change within memes, and the loss of uncompetitive memes.

For Dennett, meme is the software that invades and takeovers human's super plastic brain. It installs itself as a virtual machine, not physically, but psychologically so there is nowhere in the brain that meme spatially situates. In this regard, the most significant meme is *words*. Human and words live in symbiosis. On the one hand, words are the most effective way for human to learn from the past and plan for the future. Thanks to words, human can specify things with precision as well as convey abstract ideas, such as nation and money, which holds our community together. On the other hand, words also take control of our brain, use us as a host, and shape up our psychology. Human's super plastic brain is the most suitable habitat for words to survive and reproduce new ideas within a person and among people.

Accordingly, words make language possible, and human's brain is shaped by language since we are young. Language does not change only our 'outward' communicative behaviors but also our 'inward' psychological processes. From evolution perspective, even protolanguage in animals is beneficial for communicating with itself. For example, when a dog barks to warn its pack, it also warns itself to prepare for danger. Hence, in a course of conveying information into surroundings, the subject also receives that particular information and builds a *virtual wire* that connects between what happens and what to do next. In human with language, this so-called *auto-stimulation* then moves inward. Instead of talking aloud, we evolve to 'talk' with ourselves silently. This 'silent talking' is both a blessing and a curse. On the one hand, it is very beneficial because now we can think of one thing and speak of the opposite i.e., lying for our own benefit. On the other hand, we cannot control our thought even though we sometimes want it to stop. This may be because words and other memes try to replicate themselves all the time and human's brain is such a fit habitat for them. With this illustration, the train of thoughts is then possible; and subsequently makes an unconscious system believes that he or she is a 'conscious' being.

Therefore, the combination between natural selection and meme selection can unconsciously and unintentionally shape human's brain into the suitable hardware with words and languages as the effective software. Human's consciousness consequently arises from this complex system. In this regard, although words are the most important meme that invade our brain and shape our mind, they are not necessarily the only kind. Pictures, diagrams, and drawings, for example, are other memes that also contribute to human's languages. Picture means thousand words; thus, it is no wonder why some memes should be represented as visuals rather than sentences. These manifestation helps offload our brain and manage it in an intuitive way. Human's brain, even though is not designed to be a word processor or a graphic maker, is the most powerful computational process. Consciousness is then the most efficient operating system that can bring out the brain's maximum potential with conscious experience as its successful user interface.

3.4 Conclusion

Eliminativist approach on consciousness in Daniel Dennett responds to the complication of conscious experience by specifically rejecting the ontology of qualia as genuine phenomenal properties. The main idea of his so-called *illusionist thesis* can be divided into two major parts. In the first part, Dennett argues that it is only our common-sense intuition or folk psychology to believe that conscious experience ontologically has qualia. Without intuitively accepting the ontology, there is consequently no *hard problem* of how phenomenal properties can emerge from brain processes. To endorse this point, Dennett presents a careful reconsideration of what we usually take for granted about our conscious experience. He points out that, from introspection, we can only conclude that conscious experience *seems* to have phenomenal properties; while most of our ontological implication merely comes from the folk psychology of how consciousness arises i.e., *the Cartesian Theater*. To eliminate this misleading idea, Dennett replaces it with the alternative scientific explanation i.e., *the Multiple Drafts*. With this picture, phenomenal properties do not have to be projected on the Screen in the Theater for the 'conscious' Audience. Instead, qualia can be the manifest image of informative Drafts which competitively work in a holistic approach from numerous unconscious simple units. This idea is

supported by contemporary scientific explanation, especially, *connectionism* and *computational models*. One of the successful examples has been demonstrated by my adaptation of Dennett's thought experiment, namely, *the photo sorting A.I.*

In the second part, Dennett proposes that consciousness is *user-illusion*. Although his eliminativist approach rejects qualia ontologically, Dennett still emphasizes that they *seem* to exist. Like other illusions, the manifestation of qualia can be described in contemporary scientific explanation. There is only *the illusion problem* of how and why conscious experience manifests to us as having these phenomenal properties. To endorse this point, Dennett leans on the concept from intentionality side. He suggests that qualia are '*illusory*' *intentional objects* of our introspective beliefs. They are *fictional* properties which we instinctively (*mis*)*represent* but still can meaningfully believe, think, and talk about without provoking their ontology. In the first sense, qualia are, thus, *illusions epistemically mistaken by the user*. As user-illusion, phenomenal properties do not actually exist yet their manifestation still beneficial. Accordingly, Dennett further proposes that conscious experience is like *user interface (UI)*. Human brain is the suitable *hardware* evolved by *natural selection*; whereas consciousness is the effective *software* evolved by *meme selection*. In the second sense, qualia are, thus, *the first-person perspective's illusions of the user*. They help us - the users - bring out the most potential of our brain as well as intuitively and effectively manipulate and control our body. However, their manifestation also paradoxically *blinds* and *tricks* us from the behind-the-scenes mechanisms that they actually manifest from.

Therefore, in my opinion, Dennett's eliminativist approach shows a potential to satisfyingly explain qualia in the scientific image. On the one hand, it is quite conclusive that his view can fully conserve the convention of contemporary scientific explanation. Dennett obviously does not compromise any current physical principles in order to explain qualia. In contrast, he chooses to compromise some common-sense intuition or folk psychology, specifically, the ontology of qualia as phenomenal properties instead in order to keep the convention. On the other hand, the illusionist thesis offers a positive promise to preserve the manifestation of conscious experience by seeing qualia as illusions. With proposed user-illusion idea, Dennett insists on the

significance of qualia as they appear even though he strongly denies their existence. Nevertheless, in this respect, Dennett's eliminativist approach still needs to answer some crucial objections, especially, from the non-reductionist approach's supporters. The most significant criticism is referred to in this thesis as *the datum objection*. Chapter 4 provides my analysis and my defense against this objection, and finally concludes with my evaluation including supportive thought experiments for the illusionist thesis.



Chapter 4

Evaluation & Conclusion

This last chapter consists of my evaluation on consciousness in Daniel Dennett and the conclusion for the thesis. The content is structured into four sections as follows: The first section investigates the major criticism of Dennett's eliminativist approach, namely, *the datum objection* including Chalmers' and Searle's arguments. The second section provides my answers to both arguments in order to defend Dennett's illusionist thesis. The third section supports Dennett's idea of user-illusion with my thought experiment on *the phenomenon of face-detecting*; and accordingly evaluates that the eliminativist approach with illusionist thesis can, to a certain degree, fulfill two satisfying conditions which are (1) to preserve the fascinating phenomenon of conscious experience and (2) to conserve the convention of contemporary scientific explanation. Lastly, the fourth section concludes this thesis by suggesting that consciousness eliminated in Daniel Dennett should be taken seriously as a default theory in philosophy of mind because it can satisfyingly explain qualia in the scientific image with minimal compromises.

4.1 The Datum Objection

One of the major criticisms that Dennett's eliminativist approach on consciousness still needs to answer is referred to in this thesis as *the datum objection*. This objection argues that qualia are *the crucial data* that need to be explained in order to understand consciousness; yet the eliminativist approach flatly denies them. There are two main contemporary philosophers who endorse this objection including David Chalmers (2002, 2010) and John Searle (1997). From my interpretation, Chalmers' argument emphasizes mostly the importance of *the phenomenon* which generally criticizes the eliminativist approach as a whole; whereas Searle's argument emphasizes specifically the importance of *the ontology* in order to attack Dennett's idea of user-illusion in particular. In this regard, note that both Chalmers and Searle argue for the datum objection in both senses and do not separate between the phenomenon and the ontology of qualia; however, for clarification, this thesis highlights on these distinctions in their arguments to answer them respectively.

4.1.1 David Chalmers' Argument

The datum objection in Chalmers' version emphasizes the importance of the phenomenon. It argues that by rejecting qualia, the eliminativist approach denies *the phenomena* which all theories in philosophy of mind are supposed to explain. This objection poses a challenge to what Chalmers generalizes as *type-A materialism*. According to Chalmers (2002, pp. 251-253), type-A materialism rejects the hard problem of consciousness rather than solving it. This materialist view suggests that once we already explain all physical structures, abilities, and functions [the easy problem], there is no more phenomenon left to be explained [the hard problem]. For Chalmers, type-A materialism, thus, flatly denies 'the experience' which is the heart of this complication. The hard problem of consciousness, he affirms, is well-established due to the fact that human's conscious experience obviously has these subjective phenomena which cannot be simply explained by physical structures, abilities, and functions. Therefore, qualia are a *basis* and an *uncontested truth*. They are not an *explanatory posit* from common-sense intuition or folk psychology that can be eliminated. In contrast, they are an *explanandum* or the phenomenon that needs explanation in its own right (2010, p. 16). By counterintuitively rejecting qualia, type-A materialism then begs the question by answering only the easy problem while leaving the hard problem unanswered. Dennett, who has been categorized as a type-A materialist, only presupposes that phenomena which are not verifiable cannot be real. For Chalmers (2010, p. 12), how Dennett equates qualia with the ability to discriminate and report about qualia is wrong. He consequently denies the most obvious phenomenon and leaves the most important datum unexplained.

Another way to illustrate Chalmers' argument is this. As the eliminativist approach eliminates conscious experience, it views us - humans - as *philosophical zombies* with no inner feeling (1996). Philosophical zombie is a system that has physical structures, abilities, and functions as well as outward behaviors and expressions exactly like human. The only difference between the two is the subjective phenomena happening in the first-person perspective. Human being has qualia and experience of what it is like to be in pain, for example, while the philosophical zombie has none. Both human and zombie says 'Ouch!' when get pinched, but only

human feels the pain ‘inside’. To be human is then to have qualia of sensation, emotion, and perception. Rejecting that our conscious experience has qualia subsequently means that humans are not different from zombies with no mental phenomenon happening ‘inside’ at all. Instead of trying to explain how and why human is different from zombie, the eliminativist approach, hence, merely proposes that we are actually zombies. This view denies the phenomenon which is the datum that differentiates the two rather than explaining it.

In order to explain consciousness without denying the phenomenon, Chalmers (2010) with non-reductionist approach, on the contrary, proposes to loosen up contemporary scientific explanation to include phenomenal properties as fundamental properties alongside electromagnetic forces, mass, and space-time. In this regard, qualia as they appear can preserve their status as the datum and become the non-reducible explanandum in their own right. Chalmers’ solution to the complication of conscious experience is elaborated in Chapter 2.

David Chalmers’ argument for the datum objection can be formulated as follows:

- (1) Qualia are not the explanatory posit, but themselves the explanandum or the phenomena that need explanation [Chalmers’ objection].
- (2) The eliminativist approach (type-A materialism) rejects that conscious experience has qualia.
- (3) Therefore, the eliminativist approach denies the phenomenon and leaves the crucial datum unexplained.

4.1.2 John Searle’s Argument

The datum objection in Searle’s version emphasizes the importance of the ontology. It argues that by rejecting qualia, Dennett’s eliminativist approach denies *the existence of the data* which all theories in philosophy of mind are supposed to explain. This objection poses a challenge directly to Dennett’s idea of user-illusion. It refutes the notion that conscious experience can only *seem* to have qualia without actually *having* them. According to Searle (1997, p. 112), “where consciousness is

concerned the existence of the appearance is the reality”. Qualia as they appear cannot be questioned or denied. If we perceive our conscious experience as having phenomenal properties, it must have phenomenal properties. This is not a matter of common-sense intuition or folk psychology as we believe them to be that way. Whether the belief about phantom pain is reliable or not, for instance, the experience of pain is real. Consequently, the subjective ontology of ‘pain-ness’, at least to the sufferer, must exist.

Searle (1997, pp. 111-112) supports his claim by arguing that, in other illusory cases, there is always a difference between appearance and reality; yet in case of qualia, there is none. As an example, we can posit sunset as illusion because there seems to be sunset even though in reality the sun does not really set anywhere. In contrast, when our qualia of sunset *seem* red, they *are* actually red; there is no other reality to compare that they are not. By seeing sunset as illusion, scientists subsequently offer an alternative explanation for this phenomenon. They do not deny the existence of the data by rejecting the appearance of the sun moving out of the sky. By seeing qualia as illusion, Dennett, on the contrary, denies the existence of the data. The appearance of red is, itself, the existence of redness, and we cannot differentiate and separate one from the other. Therefore, the subjective ontology of qualia is the most important aspect of human’s conscious experience and the crucial datum that theory of mind needs to explain. By proposing that qualia are mere illusions, Dennett’s eliminativist approach is then self-refuting. It flatly denies even the existence of the most obvious data; and instead of solving the complication of conscious experience, it refutes the problem in the first place¹⁸.

In order to explain consciousness without denying the ontology of qualia, Searle (1997, pp. 113-114), on the contrary, proposes to add *ontological subjectivity* in contemporary scientific explanation alongside established *ontological objectivity*. He suggests that we need to distinguish the notions of objectivity and subjectivity in

¹⁸ Searle also criticizes Dennett’s theory on consciousness that it is only a version of Strong A.I. and subjects to *Chinese Room* thought experiment. He opposes that the syntax of the software is not sufficient for the emergence of semantic content in human’s conscious mind. Nonetheless, this criticism is more related to the complication on intentionality side; thus, this thesis decides to opt out this argument. See Searle (1997).

epistemic sense from ontological sense. Natural science indeed endorses objectivity in epistemic sense; it aims to find the truths without bias. Nonetheless, scientific ‘objective’ method does not have to limit their studies to only ‘objective’ entities. Scientists can apply ‘objective’ method to study ‘subjective’ entities as well. In other words, for Searle, it is an epistemic objectivity that people have sensation of pain, whereas the existence of pain-ness is ontological subjectivity. By accepting the possibility of subjective entities, qualia as they appear can then preserve their status as the datum. Searle calls his position *biological naturalism* which can be seen as an interlude between non-reductionist and reductionist approaches.

John Searle’s argument for the datum objection can be formulated as follows:

- (1) Qualia are the most important data that need explanation [the datum proposal].
- (2) There is no difference between appearance and reality in our conscious experience, thus if qualia seem to exist, they do exist [Searle’s objection].
- (3) Dennett’s eliminativist approach sees consciousness as user-illusion and denies the existence of qualia.
- (4) Therefore, Dennett denies the existence of the data that theory of mind is supposed to explain.

4.2 Defense of Dennett’s Eliminativist Approach against the Datum Objection

In my opinion, Dennett’s eliminativist approach on consciousness *does not deny the datum*. On the contrary, his idea, in a sense, even agrees with the key proposal of the datum objection. It stresses that qualia are the crucial data that need explanation by suggesting that they are mere user-illusion and not actually existing. To elaborate my defense, this section provides the answers for Chalmers’ and Searle’s arguments, respectively.

4.2.1 Reply to Chalmers’ Argument

From my analysis, Dennett’s eliminativist approach does not deny *the phenomenon* even though it indeed rejects that conscious experience ontologically has qualia as genuine phenomenal properties. The datum objection in Chalmers’ notion

seems to focus only on the first part of Dennett's argument and overlooks the second part. Chalmers correctly categorizes Dennett as a type-A materialist since his view really refutes the hard problem of consciousness; however, with the proposed *user-illusion* idea, Dennett's illusionist thesis still preserves *the phenomenon* of conscious experience as the datum. To clarify this point, some major differences between two types of eliminativist approach, namely, *eliminativism* and *illusionism* must be taken into consideration.

Eliminativism, on the one hand, tackles the hard problem of consciousness by not only rejecting the ontology of qualia but also *ignoring* the phenomenon of conscious experience altogether. Paul Churchland's and Patricia Churchland's *eliminative materialism* (1981; 1990, 1994) is a good example to the point. As mentioned before in Chapter 2, the Churchlands solve the complication of conscious experience by arguing that the folk-based theory explaining both the world and our mind will be eventually replaced by scientific theory. Since the ontology of qualia is *an explanatory posit* from folk psychology, it will be eliminated along with its outdated folk-based theory and replaced by new scientific ones. Now that the proper scientific theory about consciousness such as neuroscience is in progress, for the eliminativist thesis, the emphasis on *the phenomenon* of qualia will only slow down scientific progress. What scientists should do is to ignore the phenomenon and focus on studying physical structures, abilities, and functions of brain processes further and deeper until consciousness is finally explained away.

Illusionism, on the other hand, tackles the hard problem of consciousness by rejecting the ontology of qualia but still *keeping* the phenomenon of conscious experience. As being emphasized in the second part of Dennett's argument in Chapter 3, the illusions of qualia are still the crucial data that need scientific explanation. In this respect, Dennett's eliminativist approach only refutes qualia as genuine phenomenal properties by suggesting that their ontology is the explanatory posit from our common-sense intuition or folk psychology. His key argument here is that our *intuitive epistemic mistake* tricks us to believe that our conscious experience ontologically has phenomenal properties, while in fact what we can conclude from our introspection is that it only *seems* to be that way. For Dennett, by refusing the

ontology of qualia, we are able to explain conscious experience by means of current scientific explanation. As user-illusion, consciousness can be explained like other illusions by discovering the mechanisms behind the (mis)representation. For the illusionist thesis, the emphasis on *the ontology* of qualia then only poses the wrong questions which distract scientific progress from the right questions. What scientists should do is to deny the existence of qualia and specifically focus on studying physical structures, abilities, and functions of brain processes to uncover the mechanisms behind the (mis)representation, so that consciousness can be explained away.

In this regard, the philosophical zombie illustration subsequently paints a wrong picture of the eliminativist approach with illusionist thesis. According to Dennett (1991), we - humans - are zombies; however, that does not mean that we have no phenomenon happening 'inside'. In contrast, human and philosophical zombie alike, do have inner feeling, but this feeling is mere illusion. For Dennett, if zombie can have outward behaviors, especially, verbal expressions like human, it must have mental representation as we do. Zombie that cries 'Ouch!' when gets pinched, for example, must at least have a belief about pain. This introspective belief can then be (mis)represented as an illusion of 'pain-ness' happening to that zombie in its first-person perspective. Consequently, there is no difference between human and zombie since qualia are also 'illusory' intentional objects of our introspective beliefs. Zombie is instinctively *tricked* that it has these phenomenal properties, and so do we. For the illusionist thesis, we - humans - are considered as zombies only because there are no non-physical properties of the mind over and above physical processes of the body. *What it is like to be human* does not necessarily depend on having qualia as genuine phenomenal properties but instead, it is like to be us when a system has proper physical processes with introspective representational mechanism. Therefore, rejecting the ontology of qualia does not mean that we are zombie with no inner feeling in Dennett's view.

Accordingly, the fact that Dennett's eliminativist approach denies phenomenal properties as the datum is correct. Illusionism shifts the datum from the ontology of *qualia as phenomenal properties* to the phenomena of *qualia as illusions*. This can be

recognized as the replacement of *the hard problem of consciousness* with *the illusion problem*. There is no need to explain how and why qualia as phenomenal properties can emerge from brain processes; only how and why qualia as illusions manifesting in our conscious experience needs to be explained. Nevertheless, the obvious point here is that *the illusionist thesis does not deny the phenomenon*. Although this view rejects qualia as phenomenal properties, it does not in any way ignore the phenomenon of conscious experience. On the contrary, illusionism even stresses the significance of the phenomenon by proposing that qualia are illusions. Dennett still explains qualia though from the different perspective by suggesting that qualia are ‘*illusory*’ *intentional objects* of our introspective beliefs; qualia moreover are effective yet deceptive *user interface*. Hence, the notion that the eliminativist approach (or type-A materialism) necessarily leaves the datum unexplained is not true. In accordance to Chalmers’ argument, it seems that qualia can be both *the explanatory posit* and *the explanandum*; it is our intuitive epistemic mistake to posit qualia as phenomenal properties, however, this (mis)represented phenomenon is still the crucial datum that needs to be explained.

Therefore, Chalmers’ argument for the datum objection does not pose any problem to Dennett’s eliminativist approach. His objection only successfully shoots down eliminativism but not illusionism. By viewing qualia as the old explanatory posit from folk-based theory, the eliminativist thesis really denies the datum because it ignores the phenomenon of conscious experience. In contrast, the illusionist thesis does not ignore the phenomenon because it still emphasizes the illusions of qualia as the crucial datum. In other words, eliminativism eliminates all *the talk* about qualia along with their ontology, while illusionism does not. They both deny the ontology of qualia as phenomenal properties, but only the illusionist thesis maintains the talk about qualia as ‘*illusory*’ intentional objects of our introspective beliefs. Thus, Dennett’s eliminativist approach does not deny the phenomenon and leaves the datum unexplained as Chalmers criticized.

The answer to Chalmers’ argument can be formulated as follows:

- (1) To deny the datum is to ignore the phenomenon that needs to be explained [the explanandum].

- (2) Dennett's illusionist thesis, unlike the eliminativist thesis, still explains the phenomenon of conscious experience by regarding qualia as illusions.
- (3) Therefore, consciousness eliminated in Daniel Dennett does not deny the datum.

4.2.2 Reply to Searle's Argument

From my study, Dennett's eliminativist approach does deny *the existence of the data* when it rejects qualia as genuine phenomenal properties of conscious experience. Nevertheless, the notion of 'existence' that Dennett chooses to reject seems to be different from what Searle opposes.

In my view, to respond to Searle's argument, Dennett can simply agree with Searle that there is no difference between appearance and reality *in the first-person perspective*. The redness of sunset is really introspectively red, so Searle's objection is true if these phenomenal properties *exist in the phenomenon* of our conscious experience. In this respect, there is no reason why Dennett needs to reject this notion since his illusionist thesis accepts that qualia introspectively *appear as they are*. However, when Dennett claims that consciousness is user-illusion, he does not deny the ontology of qualia in the same sense as Searle advocates. As Frankish (2016, pp. 16-17) points out, what illusionism proposes is that we can *represent* reddish experience without actually *having* reddish experience. The fact that qualia represented by our conscious mind are red does not necessarily mean that there needs to be 'redness' as genuine phenomenal properties in our mind. The disparity between appearance and reality, according to the illusionist thesis, is then the disparity between the qualia as they appear *in the first-person perspective* and the representation mechanisms of mental processes and brain processes as they actually operate *in the third-person perspective*. As elaborated in Chapter 3, for Dennett, phenomenal properties do not have to substantially re-present on the Screen for the 'conscious' Audience in sub-personal level. Instead, the phenomenon of qualia as illusions can be the result of multiple competitive Drafts which only appears like user interface in personal level. Therefore, qualia are illusions because they *subjectively* appear as phenomenal properties, but these phenomenal properties do not *objectively* exist.

Searle's argument on appearance and reality then does not add up any more problem to Dennett's eliminativist approach. It only reflects the dissimilar assumptions between these two views: whereas, for Searle, the appearance in the first-person perspective must also be regarded as 'existing' and 'real', for Dennett, the only phenomenon that can be regarded as 'existing' and 'real' is the one that can be objectively verified.

Accordingly, Searle's notion of 'the existence of the data' can be interpreted in two senses. In the first sense, it means 'the phenomenon'. Since, for Searle, the appearance in the first-person perspective must be regarded as 'existing' and 'real', denying the ontology of qualia is then *equal to* denying the phenomenon of conscious experience. For example, when he says that the *existence* of pain is the crucial data, what he means is that *the phenomenon* of pain needs an explanation. Dennett's eliminativist approach which rejects that conscious experience ontologically has qualia as genuine phenomenal properties is, hence, misunderstood as denying even the most obvious phenomenon, or in Searle's words, *the existence of the data*. Nonetheless, as the answer for Chalmers' argument above, Dennett's view is far from denying the phenomenon. Illusionism, unlike eliminativism, rejects qualia ontologically but *does not ignore* the phenomenon of conscious experience. It argues that qualia *do not objectively exist* because they cannot be regarded separately from the observers, thus their *subjective existence should be considered as illusions*. As a result, the illusionist thesis can separate the phenomenon of conscious experience from the ontology of phenomenal properties. Denying the ontology of qualia is then *not equal to* denying the phenomenon. Therefore, Dennett's eliminativist approach does not deny the existence of the data in the first sense.

In the second sense, Searle's notion of 'the existence of the data' claims beyond 'the phenomenon'. It proposes that the ontology of qualia is *a necessary condition* for explaining conscious experience. In this respect, qualia must be regarded *as and only as phenomenal properties*. Although these properties do not exist objectively, *they must be posited as existing subjectively*; not as mere phenomena that can be regarded as illusions, but as the properties *of* our mind. Searle's view (1997, pp. 111-112) endorses this interpretation when he suggests that

we cannot question the first-person appearance and see qualia as illusions. If our conscious experience *seems* to have phenomenal properties, it must *have* phenomenal properties. To support the existence of these properties, Searle even proposes to add *ontological subjectivity* in scientific explanation. Moreover, Chalmers' insistence on qualia as the datum can also be interpreted in this second sense. Qualia, he elaborates, are important not only because of their phenomenon, but also because of their ontology. Chalmers' reason is that 'whenever a subject has a phenomenal property, the subject is acquainted with that phenomenal property' (2003, p. 250). We acknowledge that these phenomenal properties exist as we are *directly acquainted* with them. Therefore, according to both Searle and Chalmers, the notion of 'the existence of the data' can be interpreted as not only equal to 'the phenomenon', but also directly refers to 'phenomenal properties' themselves. Consequently, qualia as and only as phenomenal properties are the fundamental data; their ontology as they appear cannot be questioned or denied.

From my analysis, this second sense is where Dennett's eliminativist approach flatly denies the existence of the data. He rejects that qualia as phenomenal properties are the datum and only accepts the phenomenon of conscious experience without ontological entailment. His main argument here is that our common-sense intuition or folk psychology makes us believe in the ontology of qualia, whereas what we can merely conclude from our introspection is it only *seems* to be that way. As opposed to Searle and Chalmers, Dennett's ontological denial is beneficial in my opinion. If some phenomena resist contemporary scientific explanation, rejecting their ontology is not denying them but initiating new possible way to explain them. Accordingly, my proposal is that *Dennett denies the existence of the data (the ontology) in order to explain the data (the phenomenon)*. He rejects the ontology of qualia but does not leave the phenomenon of qualia unexplained.

In this respect, viewing qualia as phenomenal properties is not a necessary condition for explaining conscious experience but, on the contrary, *an obstacle*. As Frankish (2016, pp. 15-16) points out, insisting on phenomenal properties as the datum comes with many metaphysical assumptions. For instance, in order to confirm the existence of phenomenal properties, we must posit a special kind of *immune-to-*

error epistemic access which makes us *directly acquainted* with them. This infallible epistemic access is the only way for us to confirm that we do not introspectively misrepresent the ontology of qualia in our conscious experience in any way. Nevertheless, Frankish argues that our normal mental representation is proven fallible to this ontological detection, e.g. hallucination, afterimage, and dream. It then can neither be identical to this immune-to-error epistemic access nor be used to claim the existence of phenomenal properties. In addition, even if we have this special direct epistemic access over and above normal mental representation, it has no psychological significance. This is because when we need to think and talk about qualia, we still have to form our beliefs and desires in order to indirectly access them. Therefore, maintaining qualia as phenomenal properties usually presupposes an anti-materialist view from the beginning. There is no way that human as a physical being can have this infallible epistemic access to non-physical properties, unless human has non-physical mind to directly acquaint with qualia in the first place.

By refuting phenomenal properties as the datum, Dennett then removes *an obstacle* from the complication of conscious experience. Without this ontological denial, the replacement of the old unsolved question, *the hard problem*, by the more positive question, *the illusion problem*, would not be possible. In this regard, the ontology of qualia is not a necessary condition to explain conscious experience as Searle and Chalmers suggest. Instead, the denial of their existence is *a necessary condition* to explain consciousness in contemporary scientific explanation.

Therefore, Searle's argument for the datum objection does not pose any problem to Dennett's eliminativist approach. He correctly criticizes Dennett for denying the existence of the data; however, this ontological denial does not necessarily leave the datum unexplained. In contrast, Dennett denies the existence of the data in order to explain the data. Only through rejecting phenomenal properties as the datum, Dennett's illusionist thesis can open up a new perspective that enables him to explain qualia as illusions. The advantages of this ontological denial can also be seen in other cases as will be further elaborated in the next section.

The answer to Searle's argument can be formulated as follows:

- (1) For Searle, there is no difference between appearance and reality; thus, the ontology of qualia as phenomenal properties is a necessary condition for explaining conscious experience.
- (2) For Dennett, the difference between appearance and reality is what qualia seem to appear in the first-person perspective and its mechanism which is what actually happens behind-the-scenes in the third-person perspective; thus, the ontology of qualia as phenomenal properties is not a necessary condition, but an obstacle, for explaining conscious experience.
- (3) Therefore, consciousness eliminated in Daniel Dennett indeed denies the ontology of the datum, but it does not deny the datum.

4.3 Evaluation on Dennett's Eliminativist Approach

In my view, Dennett's eliminativist approach has a potential to fulfill two satisfying conditions that other theories cannot achieve. His illusionist thesis shows promising advantages to (1) preserve the fascinating phenomenon of conscious experience as it appears in the manifest image, and to (2) conserve the convention of contemporary scientific explanation as we know in the scientific image. To support this proposal, this section presents my thought experiment aiming to prove that the tendency to reject the existence of the data and posit the phenomenon as illusion is *a typical choice* that can bring out these two advantages. Nevertheless, we - humans - were not born with this position as a default; in contrast, we need to *learn* to become *familiar* with this tendency in order to embrace its benefits.

To elaborate, let us consider a thought experiment on *the phenomenon of face-detecting*. As everyone knows, we - humans - have a remarkable ability to spot faces, especially humans' faces. It is highly effectual that we tend to see faces everywhere such as an elder's face on a tree's trunk, a lover's face on a cloud, or even Jesus's face on a toast. These faces are undeniably 'real' in a sense that some naïve people, especially children, will intuitively insist that there are actually 'real' faces there. As we grow up, however, we start to *learn* to become *familiar* with the idea that most faces, which are not connected with necks, should be considered *as illusions*. When we see a face on a tree trunk, for example, we normally do not ask ourselves how and

why this tree can *have* a face. Instead, what we wonder is how and why these *illusions of faces* appear to us. In other words, we learn to replace *the hard problem of faces* with *the illusion problem of faces*. There is no ‘real’ face on a tree; there is only our *epistemic mistake to (mis)represent* a certain pattern on a tree as a face.

In this regard, it is true that sometimes these ‘illusory’ faces are so real that we have to look at them twice. Sometimes even when we stare hard at them, we are still not so sure whether they are actually ‘real’ faces or not. However, the act of rejecting the ontology of some faces and positing their phenomena as illusion is *a typical choice*. This is because there are two substantial advantages from seeing them this way.

The first advantage is that *the perceiver can keep insisting on the phenomenon as it appears*. If you see a face on a tree trunk, the fact that you see ‘the face’ is undeniable. What can be denied is the fact that the tree actually *has* a face. You can show this illusory face to your friend and even appreciate how funny it is together. However, this does not necessarily mean that you both accept that ‘this funny face’ actually exists.

The second advantage is that *the perceiver can keep intact contemporary scientific explanation as he knows*. Only through rejecting the ontology of face, current scientific explanation can successfully explain this illusory phenomenon. This face-detecting ability provides a survival advantage for our species by helping us spot either our friends or enemies especially in hostile environment. This ability is evolved by natural selection, inherited from generation-to-generation through our genes, and programmed in our brain from the moment we were born. We are then predetermined to *expect* to see faces. This instinctive expectation makes us (mis)represent that there are faces everywhere. In contrast, if we still insist that the tree actually *has* a face, we cannot reach this logical explanation. We need to explain how the tree can develop a face, and it may lead to some mysterious posit such as tree spirit which results in significant change in contemporary scientific explanation.

Back to the complication of conscious experience, regarding qualia as illusions is *not a typical choice yet*. On the contrary, it is even counterintuitive to look at them that way. Nevertheless, in my opinion, Frankish (2016, p. 20) is correct in

stating that, “The question is not whether illusionism is intuitively possible, but whether it is rationally compelling.” In this regard, the illusionist thesis is *rationally compelling* because it opens up a new perspective for the once considered impossible problem. Accordingly, we should consider *the phenomenon of qualia-detecting* in the same way as the phenomenon of face-detecting. By *learning* to become *familiar* with the idea that some qualia are illusions, we can benefit from these two advantages as well.

First, *the perceiver can keep insisting on the phenomenon of conscious experience as they appear*. If you see redness of roses, for example, the fact that you see that qualia are undeniable. What can be denied is that conscious experience actually *has* qualia as genuine phenomenal properties. You can appreciate how beautiful these ‘red’ roses are; however, this does not necessarily mean that this ‘redness’ actually exists. Consequently, by positing qualia as illusions, we do not have to deflate the wonder of these phenomenal properties. We can just embrace them as they appear and choose to explain how and why our brain (mis)represents them to be that way.

Second, *the perceiver can keep intact contemporary scientific explanation as he knows*. In this respect, it is taken for granted that Chalmers and Searle mutually agree that we should maintain contemporary scientific explanation as *a default* since the standard methodology is to try using *conservative explanation* first before proposing *radical explanation*. Chalmers (2010, p. 15) confirms this, as quote, “It would be wonderful if reductive methods [with conservative explanation] could explain experience, too; I hoped for a long time that they might.” The reason why Chalmers and Searle favor the non-reductionist approach is because to them qualia cannot be properly and satisfyingly explained by conservative explanation yet. That is why some radical explanation is required. Nonetheless, by viewing qualia as illusions, contemporary scientific explanation can more-than-ever possibly, if not successfully, explain the phenomenon of conscious experience. As Dennett suggests, consciousness as user-illusion can be evolved by natural selection to help us perceive, control, and bring out the potential of our brain. In the same way as the phenomenon of face-detecting, we are predetermined to *expect* to see qualia. This instinctive expectation

makes us (mis)represent qualia in our conscious experience. Consequently, by positing qualia as illusions, we do not have to jump to the conclusion that there is a hole in our current scientific explanation. We then can focus on studying the physical mechanisms behind how and why our brain (mis)represents qualia to be that way.

Therefore, with the illusionist thesis, Dennett's eliminativist approach can, to a certain degree, fulfill two satisfying conditions that other theories cannot achieve before, namely, (1) to preserve the fascinating phenomenon of conscious experience and (2) to conserve the convention of contemporary scientific explanation. The only compromise in the process here is the folk psychology about the ontology of qualia as genuine phenomenal properties. In my opinion, this compromise is worth comparing to the advantages gained. Otherwise, on the one hand, we have to deflate some (if not all) fascinating phenomenon of conscious experience like the reductionist approach and the eliminativist approach with eliminativism. The former identifies phenomenal properties as physical properties and still confronts the hard problem of consciousness. Whereas the latter ignores the subjective phenomena altogether and instead encounters the datum objection. On the other hand, we have to accept some radical changes in current physical principles like the non-reductionist approach. Although this last-resort strategy can answer the complication of conscious experience, it requires a paradigm shift in the scientific image. With these options in comparison, Dennett's eliminativist approach with illusionism is, thus, the most attractive solution to the complication of conscious experience. This is because it can satisfyingly explain qualia in the scientific image with minimal compromises.

4.4 Conclusion

This thesis starts from introducing the conflict between the manifest image and the scientific image in Chapter 1. The conflict is further used as a framework to understand the debate in philosophy of mind, or the so-called *mind-body problem*. Consciousness and intentionality are highlighted as two major complications in this ongoing debate. The responses to these complications divide philosophers into two chief parties, namely, *materialism* and *dualism*. Afterward, the chapter contains my intention to focus my study on consciousness in Daniel Dennett. This is because

Dennett's theory shows a potential to explain consciousness while also saving all three advantages of materialism which dualism, on the contrary, lacks.

In Chapter 2, the thesis specifically reviews the debate on consciousness. The investigation includes the main arguments for the complication of conscious experience, three well-known supportive thought experiments, and three major strategies to solve this complication, namely, reductionist, eliminativist, and non-reductionist approaches. The result of this review suggests that none of the three approaches on the complication of conscious experience take a lead in satisfyingly explaining qualia in the scientific image yet because they either need to compromise the folk psychology by deflating some (if not all) aspects of conscious experience or compromise the scientific explanation by accepting some radical changes in current physical principles. Nevertheless, it is quite conclusive that no approach can entirely save both sides with zero compromise since proper reductive explanation, which is typically a default response in other areas, does not work on the ontological problem of qualia.

In Chapter 3, the thesis subsequently studies eliminativist approach on consciousness in Daniel Dennett. My analysis divides Dennett's arguments into two major parts including his eliminativist approach to the complication of conscious experience and his proposal on consciousness as user-illusion. The result of this study suggests that Dennett's so-called *illusionist thesis* shows a potential to satisfyingly explain qualia in the scientific image. On the one hand, Dennett can conclusively conserve the convention of contemporary scientific explanation. He obviously does not compromise any current physical principles in order to explain qualia. On the other hand, his illusionist thesis offers a positive promise to preserve the manifestation of conscious experience. With the proposed *user-illusion* idea, Dennett insists on the significance of qualia as they appear even though he strongly denies their existence.

In this Chapter 4, the thesis further evaluates Dennett's argument on consciousness. This evaluation begins with my analysis of the major criticism to the eliminativist approach, namely, *the datum objection*; and my answers to defend Dennett's illusionist thesis.

The first argument proposed by David Chalmers argues that by rejecting qualia, the eliminativist approach denies *the phenomenon*. Nonetheless, from my study, Dennett's illusionist thesis does not *ignore* the phenomenon like the eliminativist thesis. Although Dennett denies the ontology of qualia as genuine phenomenal properties, he still insists on the significance of their manifestation as user-illusion. Hence, consciousness eliminated in Dennett is the result of his explanation, not the assumption that there is nothing to be explained in the first place. Consequently, the answer to Chalmers' argument is that Dennett does not deny the phenomenon. Qualia are still the crucial datum in his eliminativist approach, not as phenomenal properties, but as 'illusory' intentional objects of our introspective beliefs.

The second argument proposed by John Searle argues that by rejecting qualia as phenomenal properties, Dennett denies *the existence of the data*. To my understanding, Dennett's illusionist thesis indeed rejects the ontology of qualia; yet, my proposal is that *he denies the existence of the data in order to explain the data*. This ontological denial enables him to answer the complication of conscious experience from a new perspective by replacing *the hard problem of consciousness* with *the illusion problem*. There is no need to explain how and why qualia as phenomenal properties can emerge from brain processes; only how and why qualia as illusions manifesting in our conscious experience needs to be explained. Consequently, the answer to Searle's argument is that although Dennett denies the existence of the data, he does not deny the data. Qualia as illusions are now the crucial datum; and contemporary scientific explanation has better chance to explain the mechanisms behind this (mis)representation than ever before.

My evaluation on Dennett's eliminativist approach then finalizes with a supportive thought experiment on *the phenomenon of face-detecting*. This analogy shows that the act of rejecting the existence of the data and positing the phenomenon as illusion is *a typical choice* that we need to *learn* and become *familiar* in order to embrace its benefits. These advantages are that (1) the perceiver can keep insisting on the phenomenon as it appears and (2) the perceiver can keep intact contemporary scientific explanation as he already knows. Accordingly, the result of my evaluation

suggests that Dennett's illusionist thesis can benefit from these two advantages in the same way. Although seeing qualia as illusions is still not a typical choice yet and, on the contrary, even counterintuitive, its effect is rationally compelling that we should learn to become familiar with the consciousness as user-illusion idea.

In conclusion, consciousness in Daniel Dennett is one of the most counterintuitive response to the complication of conscious experience; however, in my opinion, it is the best possible scientific solution as well. His view should be taken seriously, not only as an alternative explanation, but also as *a default theory* in philosophy of mind. This is because Dennett's eliminativist approach with illusionist thesis possesses a potential to satisfyingly explain qualia in the scientific image with *minimal compromises*. His view is able to fulfill two satisfying conditions that other theories cannot achieve before -- that is (1) to preserve the fascinating phenomenon of conscious experience as it appears in the manifest image, and (2) to conserve the convention of contemporary scientific explanation as we know in the scientific image. In this regard, the only compromise is the folk psychology about the ontology of qualia as genuine phenomenal properties. However, if we resist this intuitive ontological entailment, the complication of conscious experience can finally be answered, and consciousness can eventually be explained away.

Lastly, this is not to say that Dennett's eliminativist approach on consciousness has solved all difficulties about mental states. According to the illusionist thesis, Dennett just reduces the complication on consciousness side to intentionality side. There are still some intentionality-related questions left behind, for example, how human's brain can (mis)represent phenomenality, or whether qualia as illusions have mental content or not. According to Dennett (2016, p. 4), these are *the hard question* (but not the hard problem) that still need proper scientific explanation. Moreover, the consequence of consciousness eliminated on other philosophical areas still needs further studies and evaluations. This includes, for instance, the idea of self and responsibility which entail ethical implication.

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