

What, Then, is Consciousness?

By Fasiku Gbenga,

Introduction

Consciousness is one of the ubiquitous phenomena which when subjected to any kind of systematic study and analysis becomes elusive to comprehend, describe and explain. It is in this respect that the kind of puzzlement and difficulty encountered in understanding and defining consciousness is compared with that which is encountered in understanding and defining time. It is said, for example that “in thinking about consciousness, the puzzlement one finds oneself in is rather like St. Augustine’s riddle in his contemplations about the nature of time: When no one asked him, he knew what it is; being asked, however, he no longer did.”¹ As David Chalmers notes, “consciousness is a fascinating but elusive phenomenon: it is impossible to specify what it is, what it does, or why it evolved.”² One may, however, wonder why consciousness, something so familiar and commonly close to us, brews problems. Contemporary literature is replete with rigorous attempts inquire what makes consciousness, and what sort of problems it creates. However, these efforts have not yielded the desired result because the object of inquiry is itself opaque. ‘What is ‘consciousness?’’ is a question whose answer is not obvious. Hence, attempts to resolve it result in searching for an unknown object by groping in the dark. The focus of this paper is to elucidate the problem of identifying the object of enquiry in consciousness studies. It identifies and critically discusses the different conceptions of consciousness and draws out the sense in which defining consciousness is really a problem of consciousness.

The general problems of consciousness

What could be regarded as the general problems of consciousness are multifaceted. I would like to categorize some of these problems into two. The first, concerns the epistemological issues on the concept of consciousness. Parts of the problems are to answer the questions: What are the various conceptions of consciousness? How does one distinguish among these conceptions? How does one know that she is conscious? How does one relate this knowledge to others? The second category, concerns the ontological issues about the phenomenon referred to as ‘consciousness’. What kinds or forms of phenomena does the concept ‘consciousness’ refer

to? What are the differences among these kinds of phenomena? There is the further problem which is that given some properties of consciousness, consciousness is supposedly a distinct kind of phenomenon, different from matter. Given this supposition, the question is, ‘how are we to understand the causal relationships between consciousness and matter and, in particular, the causal relationship between consciousness and the brain?’ What are the properties of consciousness? Do these properties exist? Why does their existence create problems?

Max Velmans identified three fundamental issues that are often regarded as parts of the problems of consciousness. These are: ‘what is the function of consciousness? How, for example, does it relate to human information processing?’; ‘what forms of matter are associated with consciousness – in particular, what are the neural substrates of consciousness in the human brain?’ and; ‘what are the appropriate ways to examine consciousness, to discover its nature? Which features can we examine with first-person methods, which features require third-person methods, and how do first-and third-person findings relate to each other?’³ The issues raised in by Velmans can be grouped into two categories. The first category of issues are about what consciousness does; the functions of consciousness. The second category bothers on the ontology of consciousness; the nature of the phenomenon called ‘consciousness’. These issues are embedded in the questions earlier highlighted as the problems of consciousness, and which David Chalmers⁴ summed up as the ‘easy’ and ‘hard’ problems of consciousness. However, while these issues about the nature of consciousness and what consciousness does are worthy of consideration on their own, it is important that we are clear about what ‘consciousness’ is. This quest to answer the question – ‘What is ‘consciousness’?’ is at the base of the problems of consciousness. Let us elucidate what this problem entails.

What is ‘consciousness’?

‘Consciousness’, like many other terms, “does not admit of a definition in terms of genus and differentia or necessary and sufficient conditions.”⁵ The question ‘what is ‘consciousness’?’ is at the base of what are identified as the problems of consciousness in philosophy. There is no generally agreed definition or a set of definitions of ‘consciousness’ in philosophy and within the diverse fields concerned with consciousness. This is because it is not possible to state the definition of ‘consciousness’ in terms of ‘An X is a Y’, where ‘X’ is the definiendum (genus),

and ‘Y’ is the definiens (differentia, a property). As Max Velmans and others have pointed out, the definition of consciousness is hard to come by, partly due to the fact that consciousness is a global term, but it is contextually defined.⁶ This is odd because given that we have “psychological data” about what it is like to be conscious or to have consciousness to serve as the basis for an agreed definition,”⁷ one expects that definitions of ‘consciousness’, which include, at least, all examples of the psychological data – properties, features and characteristics – associated with consciousness, would suffice as the definitions of the term. However, until now, the prospects for reaching any single, agreed-upon, theory-independent definition of consciousness appear remote.⁸

Moreover, there is no agreed meaning of ‘consciousness’. The concept, ‘consciousness’, R.J Gennaro observes, is notoriously ambiguous⁹ because there are diverse meanings attributed to it. As a result, ‘the term means many different things to many different people, and no universally agreed “core meaning exists;’ and, ‘it is not even clear whether everyone means the same thing by the term consciousness, even within the bounds of a single discipline’¹⁰. For instance, Ram Vimal lists and discusses forty diverse meanings attributed to the term¹¹; while some of these meanings are only subtly different from one another, others are mutually incompatible. The forty meanings are grouped into two based on what each of them attributes to consciousness.¹² One group consists of meanings of consciousness that attributed various functions to consciousness. In this case, consciousness is not an entity or a property in the world, but some functions of entities or phenomena that already exist, and to explain it does not involve an expansion of a physical ontology. Consciousness is, thus, defined as a process that emerges from interactions of the brain, the body and the environment; as a result, a report or an outcome of some complex neuro-biological processes.¹³ Consciousness is the ability to discriminate stimuli, to report information, to monitor internal states or to control behaviour¹⁴. The second group consists of definitions of consciousness as an irreducible fundamental mental entity or phenomenon. Consciousness as an entity or a phenomenon, to explain it, requires an expansion or a re-conception of a physical ontology in order to accommodate the new entrant. Hence, ‘Consciousness’ is defined as ‘experience’; as ‘something that it is like to be something’¹⁵; as ‘phenomenal experience’¹⁶; as ‘self (subjective or first person experience of subject) or self-awareness denoted by ‘I’¹⁷ and; as ‘awareness of awareness’¹⁸. There are fundamental

ontological and epistemological issues that ensue in the distinctions among the various meanings attributed to ‘consciousness’, we shall return to these shortly.

It is important to point out that none of the definitions and or meanings is offered as *the definition* of ‘consciousness’, rather, the meanings are said to be attributed to the term. To attribute a meaning to a term is to ascribe the meaning to the term, and this is based on assumptions and contexts of the person making the attribution or ascription. This implies that none of the meanings or definitions attributed to ‘consciousness’ is the meaning or definition of ‘consciousness’. This suggests that the quest for the definition of the term, different from what is attributed to the term, is yet to be addressed. As earlier asserted, the consensus view is that everyone knows what it is, but there is no agreement on its definition, and this undefinability of ‘consciousness’ is taken as one of the problems of consciousness.

However, I think the quest for the definition of ‘consciousness’ is based on an erroneous view that there must be a generally acceptable definition of ‘consciousness’. I do not think that the undefinability of the term ‘consciousness’ should create an insurmountable problem of consciousness. I accept that one sense of offering a definition of a term is to give its meaning¹⁹. This may suggest that there is the core meaning of a term which definitions attempt to uncover. But, given the diversity in the definitions of the term ‘consciousness’, and the fact that there is no agreement about its core meaning, the following are the possible inferences to arrive at: first, that there is no core meaning to seek for; ‘the term ‘consciousness’ means different things to different people’; what passes as a definition of ‘consciousness’ is dependent on who, when, where and how it is defined. One possible implication of this is that when giving meaning or definition of ‘consciousness’, we are open to what Robinson calls the “danger of circumscribing nature within the bounds of our own nature”²⁰, which ultimately confines or cloaks possible discourses of consciousness to the narrow sphere of the definer. This is the point being made in “Consciousness Across Cultures”²¹, that different kinds of questions arise when ‘consciousness’ is defined across cultures. The second inference is that there is the objective meaning of ‘consciousness’. In other words, the claim that there is no definition of ‘consciousness’ is just the fact that we are yet to arrive at a definition that can give an adequate representation of this objective core meaning or, what Vimal calls, optimal definition²². The former is not philosophically enterprising because of its implied contextual relativism, which may not help in proffering solution to the problem at hand. The latter inference assumes the ontology of the

objective or the core meaning of ‘consciousness’, existing out there as parts of the furniture of the universe or as some sort of entities in the Platonic world of forms. This assumption needs to be proven.

An attempt towards providing this proof was offered by Vimal in his attempt at providing a general definition of consciousness which includes most views and the context in which the term ‘consciousness’ is used results in defining ‘consciousness’ as “a mental aspect of an entity (system or process), which is a conscious experience, a conscious function, or both, depending on the context.”²³ Vimal argues that this definition accommodates most views on consciousness, because any investigator’s finding related to consciousness has to be conscious function, conscious experience or both depending on the context of investigation. For example, “if the dominating view is materialist or functionalist, then consciousness is likely to be considered as conscious function. If the dominating view is dualist or idealist, consciousness is more likely to be considered in terms of conscious experience. If the dominating view is dual-aspect, panpsychist, panprotopsychist, panexperimentalist or panprotoexperimentalist, consciousness is likely to be considered as both conscious experience and conscious function.”²⁴ The problem with Vimal’s general definition is that what we seek is the definition of ‘consciousness’, what he presents us with is how the word is used in different contexts. Note that in a particular context, a word could be used to mean or refer to, what is, within that context, taken to be its meaning or referent. This does not imply that the contextual meaning is the core meaning or general definition of the word. Also, if Vimal’s definition is further explicated, it would show that it is less general than it claims. For instance, if each context expatiates its conviction of what ‘consciousness’ should refer to or how the word is to be used, each context would take consciousness to be distinct kinds; then ‘upon what common ground is the general definition general?’ What general phenomenon is defined, and in what general way has it been defined? So, Vimal’s supposed general definition of ‘consciousness’ fails as core definition of ‘consciousness’, it is just a collated different senses of ‘consciousness’ that are derived from the different contexts, and this does not amount to a core definition.

One may, however, wonder whether there is indeed a core meaning of consciousness. One way of justifying the ontology of the core meaning of ‘consciousness’ is to argue that the objective or core meaning of ‘consciousness’ is that which everyone knows about the term, but

unable to express. This, however, begs the question; it is the ontology of the core meaning that needs to be ascertained. Another possible argument to justify that there is a core meaning of consciousness is that the core meaning of ‘consciousness’ is a phenomenon that is beyond human comprehension. As a result, definitions of ‘consciousness’ offered by human beings cannot represent it. This argument merely qualifies the ‘core meaning’, it does not answer the ontological question about what is the core meaning of ‘consciousness’ and, whether there is such a phenomenon as parts of the objective fabrics of the world. Without explaining this ontology, the claim that the core meaning is beyond human comprehension still begs the question.

The claim that there is the core meaning of ‘consciousness’ could be supported with the argument that challenged the assertion that ‘consciousness’ is ambiguous. As Michael Antony argues, there is a general sense of ‘consciousness’ that enjoys widespread use.²⁵ This is premised on the fact that titles of journals, books, articles, etc, containing the word ‘consciousness’ in diverse fields suggests that there is a general sense of ‘consciousness’ that applies to all or most of the titles covered by the term. Moreover, in the diverse titles containing ‘consciousness’, even if there are different senses of the word, it is not the case that the word simultaneously expresses its varieties of senses or definitions. Thus, Antony agrees with the view that an ambiguous expression ‘resists as it were, the simultaneous activation of more than one of its senses.’ He further asserts that “occurrences of ‘consciousness’ within such works typically have the same meaning as in the works’ titles. The general sense of ‘consciousness’ thus begins to appear pervasive indeed.”²⁶ Antony, therefore, concludes that ‘consciousness’ is not in any sense ambiguous. It is, however, *non sequitor* that because titles in diverse fields containing ‘consciousness’ have a general sense of consciousness, then there is a general sense of consciousness involved in the different occurrences of ‘consciousness’. In fact, it is just because the several occurrences of ‘consciousness’ in diverse titles across different fields has diverse senses or meanings that make the quest for the universally acceptable definition of ‘consciousness’ really a problem. Moreover, the different distinctions made even within a particular field also points to the fact that several appearances of ‘consciousness’ within a field have different senses or meanings. What are distinguished as different kinds of consciousness, are not the meanings or definitions of ‘consciousness’, but various forms of consciousness. For instance, it is the differences in the various varieties or kinds of consciousness, such as creature

consciousness, state consciousness, access consciousness and phenomenal consciousness, transitive consciousness, minimal consciousness, perceptual consciousness, etc, that are distinguished, and it does not follow that because each of the distinct kind of consciousness bear the word ‘consciousness’ that all the occurrences of the word in the distinctions mean the same thing.

From the above, two possible positions are derivable. The first position is that ‘consciousness’ has no definition; it could be defined according to the context of its use. Every use of the word ‘consciousness’ would be correct. But this raises the question about the ontological status of what is being defined: does consciousness exist as an objective phenomenon or consciousness is a subjective phenomenon? Two responses have been offered. On the one hand, the view that consciousness is an objective phenomenon supports the position that there is the core meaning or the real definition of ‘consciousness’. This is the position prominently defended by most physicalists who argue that consciousness is just one kind of thing accessed, assessed and described differently. It is also in conformity with the view that consciousness is a spectrum, with different levels, and at each level, different senses or uses of the term ‘consciousness’ are formed. So, as K. Wilber notes,

each investigator would be correct when speaking about his or her own level and thus all other investigators – plugged in at different levels – would appear to be completely wrong. The controversy would not be cleared up by having all investigators agree with each other, but rather by realizing that all were talking about one spectrum seen from different levels... And of course, they would both be right, because each was working with a different band of the spectrum, and when they realized that, the argument would cease, and the phenomenon... would be understood through a synthesis of all the information gained on each level.²⁷

On the other hand, the view that consciousness is not an objective phenomenon is reflected in the dualist definition of ‘consciousness’ as a distinct property; and that consciousness is known differently from the way other property in the world is known. These two responses summarized the two positions in Philosophy of Mind in response to, first, the ontological question: ‘does consciousness exist as a distinct substance or properties of the world or consciousness is nothing more than a substance or a property of the physical world?’ and, second, the epistemological

questions: ‘are the properties of consciousness knowable?’ ‘By which method or means are the properties of consciousness studied or known?’ In acknowledging this problem, Max Velmans posits that

it should come as no surprise that such diverse assumptions about the nature of consciousness and how we can study it have created divisions between research communities that can be difficult to cross. There can, for example, be no point of convergence and certainly no consensus between researchers who take the existence of conscious phenomenology to be both self-evident and ontologically primary, with those who give no credence to that phenomenology at all. Given this diversity, some consciousness researchers have doubted that a systematic study of “consciousness” as such, is even possible.²⁸

The quest to determine which of these two positions is correct is also a problem of consciousness.

The second position is that the quest for the core meaning or real definition of ‘consciousness’ as the response to ‘what is ‘consciousness?’ may be unwarranted. This is because, on the one hand, it is difficult to justify the assumption that there is the core meaning or real definition of ‘consciousness’ to be sought for. This explains the reason that the quest for definition or meaning of ‘consciousness’ continues despite sustained and burgeoning efforts to arrive at one. Also, many of the definitions and meanings of ‘consciousness’ are derived from the several theories developed in response to various problems of consciousness. Since these theories are quite different, it is expected that there would be varieties of definitions and meanings attributed to ‘consciousness’.²⁹ Therefore, the elusiveness of the core meaning or real definition is either because there is no such thing as consciousness or it exists but there can be no agreement on what it is. On the other hand, it could be argued that the undefinability of ‘consciousness’ does not create any barrier for the continued and sustained research or discourses on consciousness. This is premised on the view that “definitions need not be final for research to begin; It is enough that definitions be sufficiently similar for different investigators to be able to agree that they are investigating the same thing”³⁰. If this argument can be sustained, then it could be argued that agreement or otherwise on the real definition or core meaning of ‘consciousness’ is not as important as the phenomena which the different uses of the word

designate. Are investigators of consciousness convinced that they are investigating the same thing? I share Sloman's doubt on this. He argues that "people who discuss consciousness delude themselves in thinking that they know what they are talking about...it is not just one thing but many things muddled together—rather like our multifarious uses of 'energy' (intellectual energy, music with energy, high energy explosion, etc.)."³¹ Anders Sogaard and Stine Osterskov Sogaard reiterated the point differently. To them, consciousness studies include a variety of different topics that may not be easy to reconcile, so, seeking a definitive definition that will encompass all the topics may be difficult to earn. Also, the Sogaards argue that the claim that there is no definition of consciousness is based on the erroneous assumption that there is only one kind of consciousness, which 'consciousness' designates. This assumption is erroneous because 'people use the word 'consciousness' to refer to different concept all the time'; hence, 'there is no reason to agree on just one definition' of 'consciousness'.³² The nature of consciousness being investigated is quite varied along distinct perspectives, orientations, theories, positions, schools of thoughts, disciplines, etc.

What derives from the two positions is that what is necessary in addressing the question: 'what is 'consciousness'?' is that there is an agreement on the object of discourse. In this respect, the question 'what is 'consciousness'?' would not be understood as asking for a strict or a definitive definition of 'consciousness', but for an account of the phenomena that the term is used to designate. It is on this basis that research and inquiries about consciousness can go on from diverse levels, contexts and perspectives without further problem. It may then be argued that the ambiguity of 'consciousness' is not about its meaning or the sense attributed to it, because there is no agreed phenomenon which the term designates given the level, context or perspective it is being used, but about its referent. This, however, would not be a problem peculiar to the word 'consciousness'. Referential ambiguity is a problem clearly articulated by Gottlob Frege.

Frege, in "On Sense and Reference",³³ asserts that a sign, (a word) has both sense and reference. The sense of a word contains the mode of presentation of that which is designated by the word. A referent is that which is designated.³⁴ For Frege, a word has a sense which is a conceptual content of the word. There is a definite reference or object that corresponds to the sense. Whereas the sense of a word picks out a particular thing in the world, this same thing can

also be picked out by several other words. Corresponding to each of these words are distinct senses. Since a thousand different words that have distinct senses can refer to a particular object, it means that there is no direct relation between words and the referents they pick out in the world. This implies that the relation between words and their referents is mediated by the senses of the words. Hence, for Frege, sense provides some kind of connecting link between a word and its referent. In fact, it must be noted that for Frege, there are situations in which a word has a sense and there is no corresponding referent.³⁵ This shows that for Frege, first, the relation between a word or a name and its referent is not a necessary relation. Second, words are not essential properties of an object. Again, since several words with distinct senses can refer to a particular object or to no object at all, then it means that no object has its word rigidly fixed nor is the reference of a word rigidly fixed. What derives from this is that ‘consciousness’ needs not have a definitive sense and referent, and the fact that there is no such sense is demonstrated by the distinct in exhaustive meanings (senses) attributed to the word; also, the fact that there is no rigid referent of ‘consciousness’ is demonstrated by different kinds of phenomena the word is used to referred to.³⁶ There is the possibility of conflating the meaning of ‘consciousness’ with the phenomena it is used to refer to. This error is evident when Antony mistakenly points at different phenomena, which writers like Ned Block³⁷, David Rosenthal³⁸, David Armstrong³⁹, and others, use the term to designate as what the writers use the word to mean.⁴⁰ As seen in Frege, the sense (meaning) of a word is one thing, the reference (the object of reference) of the word is another.

Conclusion

What would contribute to a clear definition of the problem of consciousness in philosophy is not to interpret the question ‘what is ‘consciousness?’’ as a quest to engage in semantics of ‘consciousness’ but to identify the phenomena that the word is used to designate. In other words, I join Antony in dissenting Quine’s call for semantic ascent⁴¹, i.e., focusing on expressions used to refer to philosophically perplexing phenomena instead of the phenomena themselves. Although, as an objection to this conclusion, the classical position defended by James William could be raised. The position is that ‘consciousness’ is the name of a nonentity, refers to or stands for nothing concrete, but a function and should be discarded. William’s conviction is that ‘Consciousness’ “is the name of a nonentity, and has no right to a place among

first principles. Those who still cling to it are clinging to a mere echo, the faint rumor left behind by the disappearing ‘soul’ upon the air of philosophy.”⁴²

However, against this position is the common assumption in the consciousness study that the term ‘consciousness’ has a referent, either concrete or function; but the problem is that there is no agreed or one and only referent of the term. It is on the ground of this disagreement that the divergent positions raise on the ontological and epistemological questions about ‘consciousness’, such as ‘What is consciousness?’ ‘Does consciousness exist?’ ‘What are the essential properties of consciousness?’ ‘Is consciousness knowable and by what means?’ become philosophically interesting.

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¹Guzeldere G. (1997) “Introduction: The Many Faces of Consciousness: A Field Guide.” In Ned Block, Owen Flanagan and Guven Guzeldere. (eds.) *The Nature of Consciousness* Cambridge, Mass.: MIT Press, , p. 1

²Chalmers David, *The Conscious Mind: In search of a Fundamental Theory*. Oxford: Oxford University Press, 1996, p. 3

³Max Velmans, “How to Separate Conceptual Issues from Empirical One in the Study of Consciousness.” *Progress in Brain Research*, (Amsterdam: Elsevier, Vol. 168, 2008), pp.1-2

⁴David Chalmers, *The Conscious Mind*. Oxford: Oxford University Press, 1996. Chalmers popularized the distinction between the easy and hard problems of consciousness.

⁵John Searle. “The Problem of Consciousness”. In Antti Revonsuo and Matti Kamppinen (eds.) *Consciousness in Philosophy and Cognitive Neuroscience*, (New Jersey: Lawrence Erlbaum Associates Inc. 1994), p.93. More important, the problem of defining ‘consciousness’ has been, and is still, a subject of philosophic controversy. See, for example, Hartley Buur Alexander, “The Concept of Consciousness”, *The Journal of Philosophy, Psychology and Scientific Methods*, Vol. 1, No. 5 (March 3, 1904), pp. 119-124; B.H Bode, “Realistic Conceptions of Consciousness”, *The Philosophical Review*, Vol. 20, No. 3, (May 1911), pp. 265-279, and for a more recent discussion on defining ‘consciousness’, see, *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009.

⁶See Max Velmans, “How to Separate Conceptual Issues from Empirical One in the Study of Consciousness.” *Progress in Brain Research*, (Amsterdam: Elsevier, Vol. 168, 2008), p. 4, and Alfredo Pereira and Hans Ricke, “What is Consciousness? Towards a Preliminary Definition”

Journal of Consciousness Studies, Vol. 16, No. 5, 2009, pp. 28-45 for arguments that definitions are inherently contextual and some examples of definitions of ‘consciousness across disciplines, epochs and regions of the world. No lists of definitions can be exhaustive; therefore, I shall not attempt to provide catalogues of definitions of ‘consciousness’.

⁷ Max Velmans, “How to Define Consciousness – and How not to Define Consciousness”, *Journal of Consciousness Studies*. Vol. 16, No. 5, 2009, p.139, italics mine.

⁸ Rimal, “On the Quest of Defining Consciousness”, *Mind and Matter*, Vol.8, No.1, 2010, p. 93

⁹ R.J. Gennaro. “Consciousness and Concepts”. *Journal of Consciousness Studies* Vol. 14, No 9-10, 2007, p. 2. The view that ‘consciousness’ is ambiguous is eminently represented in the literature. See David Chalmers, “Facing Up to the Problem of Consciousness”, *Journal of Consciousness Studies* Vol.2, No.3, p. 201 Hartley Buur Alexander, “The Concept of Consciousness”, *The Journal of Philosophy, Psychology and Scientific Methods*. Vol. 1. No. 5, March 1904, p. 118; On the other hand, a contrary view that ‘consciousness’ is not ambiguous has also been expressed. See A.V. Antony, “Is ‘Consciousness’ Ambiguous?”. *Journal of Consciousness Studies*, Vol. 8, No. 2, 2001, pp.19-44.

¹⁰ Max Velmans, “How to Define Consciousness – and How not to Define Consciousness”, *Journal of Consciousness Studies*. Vol. 16, No. 5, 2009, p.139 and; Guven Guzeldere. “The Many Faces of Consciousness: A Field Guide.” In Ned Block, Owen Flanagan and Guven Guzeldere. (eds.) *The Nature of Consciousness* (Cambridge, Mass.: MIT Press, 1997), p. 2. Crick and C. Koch, “Consciousness and Neuroscience”, *Cerebral Cortex*, Vol. 8, No. 2, 1998, pp.97-107

¹¹ Ram Vimal, “Meanings Attributed to the term Consciousness: An Overview”, *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009, pp.9-27. In fact, a whole edition, volume 16, of the *Journal of Consciousness Studies*, addresses the problem of definition of consciousness. The consensus among contributors to the edition is that there is no *the* definition of consciousness which is generally acceptable to everyone. Chris Nunn, the editor of the edition, suggests a default meaning of ‘consciousness’, which would serve a pragmatic purpose of at least making a distinction between conscious and unconscious. I, however, doubt any pragmatic success will be recorded if two people that use ‘consciousness’ have different conceptions of the word.

¹² This classification reflects, according to Vimal, the six classes which Chalmers categorized the most important views on the metaphysics of consciousness. Vimal divided the six classes into two groups using the criteria of function and experience. Details of the implications of Chalmers classification in this dissertation shall be shown soon.

¹³ These, according to Vimal, summarized the definitions offered by himself and others such as B.J. Baars, G.M. Edelman, William James, and John R. Searle.

¹⁴ David Chalmers, “Consciousness and its Place in Nature”. In S. Stich and F. Warfield (eds.) *Blackwell Guide to Philosophy of Mind*. (Oxford: Blackwell Publishers, 2003).

¹⁵ Thomas Nagel, “What it is Like to be a Bat?” In *Mortal Questions*.(Cambridge: Cambridge University Press, 1974), pp. 165-180

¹⁶ Ned Block, “Two Neural Correlates of Consciousness”, *Trends in Cognitive Sciences*, 9, (2), 2005, pp.47-52

¹⁷ Bruzzo, A. A., and Vimal, R. L. P. “Self: An adaptive pressure arising from self-organization, chaotic dynamics, and neural Darwinism.” *Journal of Integrative Neuroscience*, Vol. 6, No. 4, 2007, pp. 541-566; Globus, G. G. “Self, Cognition, Qualia and World in Quantum Brain Dynamics.” *Journal of Consciousness Studies*, Vol. 5, No. 1, 1998, pp. 34-52; and MacGregor,

R. J., and Vimal, R. L. P. "Consciousness and the Structure of Matter." *Journal of Integrative Neuroscience*, Vol.7, No. 1, pp. 75-116.

¹⁸ K.R. Rao, "Two Faces of Consciousness: A Look at Eastern and Western Perspectives", *Journal of Consciousness Studies*, 5 (3), 1998, pp.309-327

¹⁹ Richard Robinson, *Definition*, Oxford: The Clarendon Press, 1972, p. 12

²⁰ Richard Robinson, *Definition*, Oxford: The Clarendon Press, 1972, p. 6

²¹ This is the theme of the journal *Mind and Matter*, Volume 6, Issue 2, 2008, pp. 143-259. The point clearly deducible from the different essays in the edition of the journal is that there is no core definition or meaning of 'consciousness', it is a word that has meanings across cultures. The same point was obvious in Max Velmans's attempt at cataloguing the different meanings of 'consciousness' across epochs and cultures. See Max Velmans, "How to Define Consciousness – and How not to Define Consciousness", *Journal of Consciousness Studies*. Vol. 16, No. 5, 2009, p.139

²² See Vimal RLP. "On the Quest of Defining Consciousness." *Mind and Matter*, Vol. 8, No. 1, 2010, p. 93-122. Vimal, in this essay, notes "that the term "optimal" implies that a set of alternatives have been considered and one of them is chosen as the best according to a given set of parameters", p. 99

²³ Ram Vimal, "On the Quest of Defining Consciousness", *Mind and Matter*, Vol. 8, No. 1, 2010, pp. 93-122.

²⁴ Ram Vimal, "On the Quest of Defining Consciousness", *Mind and Matter*, Vol. 8, No. 1, 2010, p. 103.

²⁵ Michael V. Antony, "Is 'Consciousness' Ambiguous?", *Journal of Consciousness Studies*, Volume 8, Number 2, 2001, pp.19-44

²⁶ Michael V. Antony, "Is 'Consciousness' Ambiguous?", *Journal of Consciousness Studies*, Volume 8, Number 2, 2001, p.22

²⁷ K. Wilber, *The Spectrum of Consciousness*, Wheaton, Ill: Theosophical Publishing House, 1977, p.17

²⁸ Max Velmans, "How to Define Consciousness – How not to Define Consciousness", *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009, p. 141

²⁹ See Max Velmans, "How to Define Consciousness – How not to Define Consciousness", *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009, pp. 139-156, for a catalogue of the global theories about consciousness, and how this inflate or aggravate the problem of defining 'consciousness'.

³⁰ Patrice Terrier, "What is Consciousness?", *Psyche*, Vol. 5, No. 19, 1999, p.2 This view is also re-echoed in Max Velmans, "How to Define Consciousness – How not to Define Consciousness", *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009, p. 143

³¹ A. Sloman, "Developing Concepts of Consciousness", *Behavioral and Brain Sciences*. Vol. 14, No.4, 1991, pp. 694-695.

³² Anders Sogaard and Stine Osterskov Sogaard, "On Definitions of Consciousness", *Journal of Consciousness Studies*, Vol. 16, No. 5, pp. 46-53

³³ Frege, Gottlob, "On Sense and Reference" in Peter Geach and Max Black, eds. *Translations from the Philosophical Writings of Gottlob Frege*, (Oxford: Basil Blackwell, 1970), pp. 56-78

³⁴ Frege, "On Sense and Reference", p.57

³⁵ Frege, Gottlob, "On Sense and Reference" in Peter Geach and Max Black, eds. *Translations from the Philosophical Writings of Gottlob Frege*, p.58

³⁶ The fact that there is no single sense of ‘consciousness’ is obvious from the heterogeneity of senses attributed to the word. See Ram Vimal, “Meanings Attributed to the term Consciousness: An Overview”, *Journal of Consciousness Studies*, Vol. 16, No. 5, 2009, pp.9-27. David Armstrong’s assertion that “it is not even clear that the word “consciousness” stands for just one sort of entity, quality, process, or whatever”, indicates that there is no referent of ‘consciousness’. See David Armstrong, “What is Consciousness”. In Ned Block, Owen Flanagan and Guven Guzeldere, eds., *The Nature of Consciousness* Cambridge, Mass.: MIT Press, 1997, p. 722

³⁷ Ned Block’s use of ‘consciousness’ to refer to phenomenal consciousness, access consciousness, monitoring consciousness, reflective consciousness, self consciousness is found in several of his writings such as Ned Block, “Evidence Against Epiphenomenalism”. *Behavioural and Brain Sciences*, Vol. 14, 1991, pp.670-672; Ned Block, “Review of Dennett: Consciousness Explained”. *Journal of Philosophy*, Vol. 4, 1993, pp.181-93; Ned Block, “Consciousness”. In S. Guttenplan (Ed.), *A Companion to Philosophy of Mind*, Oxford: Blackwell Publishers, 1994,

³⁸ David Rosenthal distinguished among different kind of consciousness that ‘consciousness’ is used to designate. Some of these are state consciousness, creature consciousness, transitive consciousness, introspective consciousness, etc. See David Rosenthal, “Concepts and Definitions of Consciousness”. In William P. Banks (ed.) *Encyclopedia of Consciousness*. Amsterdam: Elsevier Science Limited, 2009, pp.159-169; David Rosenthal, “A Theory of Consciousness”. In N. Block, O. Flanagan, and G. Guzeldere (Eds.), *The Nature of Consciousness*. Cambridge, M.A: MIT Press, 1997, pp.729-753

³⁹ D. Armstrong, “What is Consciousness?” In N. Block, O. Flanagan, and G. Guzeldere (Eds.), *The Nature of Consciousness*. Cambridge, M.A: MIT Press, 1997, pp.721-728

⁴⁰ Michael V. Antony, “Is ‘Consciousness’ Ambiguous?”, *Journal of Consciousness Studies*, Volume 8, Number 2, 2001, p.19

⁴¹ See W.V.O. Quine, *Word and Object*. (Cambridge, MA: MIT Press, 1960), p. 56

⁴² James William, “Does ‘Consciousness’ Exist?” *Journal of Philosophy, Psychology, and Scientific Methods*, Vol. 1, p.447.