

Chimakonam's Sense-phenomenalism and the Bogey of Consciousness

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Abstract

In the 2019 work “A Sense-Phenomenal Look at the Problem of Personal Identity,” Jonathan O. Chimakonam articulates an intriguing and novel body-only perspective of personal identity that has a direct implication for our understanding of consciousness. In this article, I focus on the aspect of the work that adopts a seemingly eliminativist stance on the hard problem of consciousness. Chimakonam's version of physicalism rejects the reality of consciousness or experience while accepting that humans have sensations. Having transferred the location of sensation from the mind (the within), and even the brain, to the sense organs (the outside) without eliminating the category of mind, Chimakonam unwittingly raises the question of whether his philosophy of mind represents an eliminativist stance or a reductive physicalist stance. In this article, I argue that while a reductive physicalist reading of Chimakonam is a plausible interpretation of his stance, the non-rejection of the category of mind and the seeming distinction between mind and brain supports the claim that sense-phenomenalism does not radically overcome the hard problem of consciousness.

Keywords: Sense-phenomenalism, Consciousness, Mind, Physicalism, Jonathan O. Chimakonam

Introduction

In a 2019 book chapter titled “A Sense-Phenomenal Look at the Problem of Personal Identity,” Jonathan O. Chimakonam explores issues in philosophy of mind from an African perspective, with particular focus on the problem of personal identity. He marginally, but significantly discusses the problem of consciousness in the framework of sense-phenomenalism, a physicalist perspective inspired by insights that he gleans from African notions of the person. Chimakonam's body-based notion of sense-phenomenalism submits the thesis that what we call experience or consciousness does not, in fact, exist; what we mistake for consciousness is the physical sensation that occurs at the site of our sense organs when these organs receive brain-processed data (which he labels *sata*). He dismisses the subjective aspect of sensation while focusing on the bodily mechanism of response to stimuli (CHIMAKONAM 2019). I argue in this article that if we must adequately understand physical sensations we are committed to admitting that sensations have a subjective aspect that introduces the dimension of mentality. To the objection that Chimakonam has already eliminated

consciousness and sensation is entirely the function of sense organs, I note that Chimakonam, in fact, transfers the location of the seat of sensation from the mysterious within of the mind to a mysterious within of the sense organs. I observe that it is not clear how the biological function of the receptivity of sense organs to brain-processed information, or *sata*, translates to human recognition of physical sensation if the subjective dimension of sensation is denied. The article is divided into 3 concise sections. Section 1 briefly introduces the problem of consciousness, which Chimakonam sets out to eliminate. Section 2 presents Chimakonam's notion of sense-phenomenalism. Section 3 argues that the non-elimination of the category of mind and the unclarity about whether the mind is reducible to the brain render either an eliminativist or reductive physicalist reading of sense-phenomenalism uncertain even as this uncertainty lends support to the claim that sense-phenomenalism does not succeed in fully discarding the category of consciousness. An enormous body of writings on the problem of consciousness has accumulated in Western philosophy of mind. This article does not aim to present various Western responses to the problem and the further problematisation of the responses. Instead, the article focuses narrowly on evaluating Chimakonam's response to the problem of consciousness. Where Western responses to the problem are referenced, they function basically as context providers.

The (Hard) Problem of Consciousness

The term consciousness indicates the state of awakesness, being aware of stimuli, and having certain mental states involving feelings, beliefs, desires, and so on, with the capacity for sentience and information processing linking all three indicators of consciousness (see, for example, ROSENTHAL 2009, 157). Ned Block (1995) notes that a state is access-conscious if it has an epistemic instrumental value in helping us organise our reality, while a state is about phenomenal consciousness in relation to what it is like to have the (mental) state. Chimakonam's basic focus is phenomenal consciousness. Thomas Nagel (1974) famously notes that consciousness involves a unique standpoint that only the experiencer can adequately project. He argues that even if it becomes possible for one to fully understand the biological mechanism of a bat's body and brain, one will still not know what it is like to be a bat. Thus, consciousness involves a subjective dimension that does not seem adequately explicable in terms of identity with brain states.

The problem of consciousness arises on account of the apparent introspective dimension of the phenomenon. Uriah Kriegel (2009) brings the subjective and qualitative aspects of consciousness under the introspective nature of the phenomenon. The subjective aspect of consciousness involves intentionality or object-directedness, while the qualitative aspect involves the raw feel of what is presented to consciousness (for example, the sweetness of a sweet thing). The adjective 'subjective' is often used to capture the problem of consciousness. The subjective nature of consciousness accounts for why scientific reduction of consciousness to brain states proves difficult. David J. Chalmers popularised the term 'hard problem of consciousness' with reference to the scientific elusiveness of consciousness. For Chalmers (1995), the easy problem of consciousness is one that

science can fully account for in terms of neural functions and mechanisms. Thus, one can appeal to the scientific explanatory framework to understand such phenomena as attention, wakefulness, and memory. Beyond the physics of consciousness, however, the subjective dimension seems to remain □ our introspective access to the sensations produced by stimuli. The point is that the term consciousness cannot be functionally and descriptively analysed and reduced to a physical base like the term gene, which can be functionally analysed and reduced to the deoxyribonucleic acid (DNA).

Distinguishing between the easy and hard problems of consciousness, Chalmers (1995, 202) writes that:

[E]ven when we have explained the performance of all the cognitive and behavioral functions in the vicinity of experience—perceptual discrimination, categorization, internal access, verbal report—there may still remain a further unanswered question: *Why is the performance of these functions accompanied by experience?*

Like Daniel C. Dennett (1978), P.M. Churchland (1981), and Georges Rey (1997), Chimakonam believes that Chalmers' question is superfluous. Consciousness does not fit into neuroscientific explanatory framework and refers to nothing since it does not exist.. Chimakonam is an eliminativist with regard to consciousness. He claims that what is commonly called mind is, in fact, the brain. Yet, it is not easy to characterise his sense-phenomenalism as either an eliminativist or a reductive physicalist perspective. African philosophers of mind have proposed various shades of physicalist, dualistic, and panpsychist theories in response to the problem of consciousness. Physicalists like Aribiah D. Attoe (2019) and Samuel T. Segun (2019) either eliminate the category of consciousness altogether and posit brain states as the only reality or adopt a reductive physicalist stance that regards consciousness as a necessary component of the organisation of reality although ultimately dependent on neural processes. Attoe, an eliminativist, asserts that the category 'mind' is simply a verbal term that refers to brain activities and processes. For Segun, a reductive physicalist, consciousness is a necessary dimension of neural processes, such that the latter anticipate consciousness. Without the necessary component, reality is incomplete.

Kwasi Wiredu (1983) and Safro Kwame (2004) adopt a physicalist model that regards the mind as merely a logical construct out of thoughts that have occurred or may occur. For Wiredu and Kwame, thoughts have a basis in the brain even as the mind is not a thing. Kwame Gyekye (1995) proposed a seemingly dualistic theory of mind that entrenches the mind-matter dichotomy in African philosophy of mind. For him, mind (which he conflates with consciousness), is ontologically distinct from matter and interacts with the latter. Agada (2022) proposes that we are unable to eliminate the category of consciousness from our vocabulary not only because consciousness is real but, more importantly, because it is fundamental and ubiquitous in the universe. The idea of the fundamentality and ubiquity of consciousness introduces a panpsychist perspective given that panpsychism posits the irreducibility of consciousness to matter. A deeper

discussion of the frameworks of proto-phenomenalism, equi-phenomenalism, quasi-physicalism, and proto-panpsychism under which the African philosophers mentioned above explore the problem of consciousness is beyond the scope of this article. Having provided some context for the idea of sense-phenomenalism, I provide a concise and critical exposition of the idea in the next section.

Chimakonam's Sense-phenomenalism

Sense-phenomenalism is inspired by Chimakonam's understanding of African notions of personhood and personal identity. He believes that personal identity is a public or social construct grounded in an individual's bodily features. Since a person's identity develops in the context of the community's social-ethical evaluation of individuality, which is in its turn determined by publicly observable physical features rather than consciousness properties, Chimakonam (2019, 20) advances sense-phenomenalism as a body-only theory that eliminates experience, or phenomenal consciousness. For him, the so-called hard problem of consciousness is a pseudo-problem.

As noted in the previous section, Chalmers had identified what he calls the hard problem of consciousness as one of the knotty questions of Western philosophy of mind. Chalmers (1995, 1996) distinguishes between the easy and hard problems of consciousness. The easy problem references issues like understanding the processes involved in response to environmental stimuli and distinguishing states of wakefulness and sleep, while the hard problem references the subjective aspect of our mental life (experience, qualia, raw feels). According to Chalmers (1995, 200–202), appeal to functional brain and neural processes alone cannot account for the subjective aspect of sensation, which seems to indicate a different information-organising mechanism unique to the experiencer and adequately describable only in psychological language. Chimakonam denies the reality of phenomenal experience and accepts the validity of the easy problem. However, in locating physical sensation in some mysterious place at the site of the sense organs, Chimakonam's sense-phenomenalism appears to legitimise the hard problem of consciousness and confirm how difficult it is to dispense with experientiality. By experientiality I mean the dimension of subjectivity as an integral part of our conscious existence. Experientiality thus denotes experience, which I will use interchangeably with consciousness and with reference to mind as the seat of consciousness.

Chimakonam distinguishes between data (sensory information) and *sata*, (brain-processed sense organ-receptible information) while trying to show that what we mistake as experience is *sata*, which can be wholly accounted for by referencing neural and sense-organ mechanisms. As a physicalist model, sense-phenomenalism differs from popular physicalist models in Western philosophy of mind to the extent that Chimakonam looks beyond type and token identity theories and locates sensation at the site of sense organs. One is immediately faced with the idea that there are no mental events but neuro-physiological events even as, paradoxically, the category of mind is not denied. On second thought, the non-denial of mind will appear to grant that mental events may exist after all.

Sata refer to “sense-organ-receptible neural codes or information” (2019, 16). What this implies is that the sense organs perform two functions, namely, perception of data and then the reception of brain-processed data, which become *sata*. The sensory receptibility of processed data, or *sata*, is what Chalmers and others mistake as experience, according to Chimakonam. Taste is the *satum* accompanying the tongue’s reception of data processed by the brain, which were first perceived as sensory stimuli by the same sense organ. Since Chimakonam does not explicitly reject the idea of mind—although this rejection is perhaps implied in his denial of consciousness—his reference to *sata* as ideas reveals his struggle to wish away the fact of subjective experience, which appears so real to us when we report it. The struggle is even more glaring when Chimakonam writes as if he accepts the reality of experience after denying it. He notes:

Granted that most *sata* can be traced to one experience or the other, they are not the experience themselves. Data are the objects of our experience, *sata* are not; they are ideas...the relationship between *sata* and data is like that between shadow and the human being. *Sata* are created from data in the engine of the mind. (CHIMAKONAM 2019, 16)

Now, Chimakonam appears to strongly endorse the claim that there is no mind in the Cartesian sense. Obviously, he thinks that the senses perform the twin functions of receiving data and interpreting *sata* while the brain performs the sole function of decoding data into *sata*. *Sata* are mere neural codes, and the brain is like a computer that does not understand the data that it processes. It is possible to interpret Chimakonam as equating brain with mind. That is, when he talks about brain, he is talking about mind. However, the mind-body identity is not clearly stated. For example, the proposal that the raw feel of sensations “does not occur inside, somewhere in the mind” (CHIMAKONAM 2019, 16)” but at the site of the sense organs appears to lend weight to my interpretation. There appears to be a struggle to entirely dispense with the concept of mind as a thing distinct from the brain. If this is true, there is a certain contradiction here. Chimakonam accepts that there is a subjective aspect (*sata* or shadow or ideas) of direct response to stimuli and, paradoxically, denies that this subjective aspect exists. After noting that *sata* gain a subjective independence from the neural processes that underlie them and become a phenomenon of the mind, Chimakonam (2019, 16) adds: “Since the human brain was not designed to experience sensation, the actual experiences of the output occur externally at the senses...*sata* are like the shadows of things...they are not the experiences of things.” Instructively, he denies that both the brain and the mind are centres of sensation. In the next section, I will argue that Chimakonam’s elimination of consciousness and his seeming retention of the category of mind makes it difficult to place his theory of sense-phenomenalism as an eliminativist or reductive stance even as the hard problem of consciousness is not completely overcome.

The Bogey of Consciousness

It seems to me that Chimakonam struggles to eliminate the category of experience from his vocabulary precisely because he implicitly accepts the claim that there is a subjective dimension of sensation while explicitly committing to the view that this subjective dimension is an illusion. Chimakonam notes that *sata* are produced in the mind at one moment and observes that *sata* are different from experience/sensation at the next moment. For him *sata* are just codes or information. But the degree of their distinctness is not clear since sensation happens when the sense organs receive and interact with *sata*. There is a certain suspicion that *sata* are the mental events that correlate to neuro-physiological processes and states. If this is true, sense-phenomenalism will appear to be a reductive physicalist stance. If *sata* are generated in the mind, not only do minds exist but they are also the seat of subjective experience. Subjective experience here correlates with the *sata* effect. Accordingly, the reality of consciousness is affirmed, in view of its close connection with mind. If, for the sake of argument, one says that *sata* are generated in the brain conceived as a non-thinking, non-understanding machine, the sense organs still have to receive *sata*. The sensation that occurs at the site of the sense organs must be accompanied by a subjective dimension for the human being to have an awareness of what is happening in the sense organs. Thus, mind which was previously dispensed with now returns and becomes an *inside* at the site of sense organs.

If *sata* are absorbed at the site of the sense organs to generate sensation, subjective experience is not denied, as Chimakonam assumes, because the mystery of the location of the mind—and, therefore, experience—is transferred from the within to the without. While neural activities that immediately explain direct response to environmental stimuli can be measured using appropriate electrodes and adequately described in physical language, the exact place where the subjective experience of a taste or colour is located cannot be found at the site of the sense organs. The attempt to escape Chalmer's hard problem of consciousness creates a situation where the location of the mind is shifted to the sense organs without one identifying any mechanism that can enable us to pinpoint the exact location of phenomenal experience. Experience, therefore, remains a valid category, whether one says that the subjective aspect of sensation occurs in the mind or one admits that it occurs at the site of the senses. It seems to me that the only way sense-phenomenalism can be a radical body-only theory is if the notion of *sata* (and, therefore, mind) is entirely discarded. As long as this notion is retained, the suspicion lingers to the effect that the category of consciousness is smuggled into sense-phenomenalism through the backdoor after being kicked out through the front door. Instructively, *sata* have a foundation in reality, in neural processes, given that they are brain-processed data that reach the brain through the sense organs. Their mind connection makes them mental events.

In eliminating the category of consciousness, Chimakonam presents sense-phenomenalism as an eliminativist stance. Having denied consciousness, Chimakonam would have equally denied the reality of mind. If sense-phenomenalism retains the category of mind, it will appear that there is an implicit

acceptance of the reality of mental events. If sense-phenomenalism, being a body-only theory, is interpreted as a reductive physicalist stance, do mental states correspond to brain states in a type identity or token identity framework that ultimately reduces the mental to the bodily base? If the response is positive, then sense-phenomenalism is a unique reductive physicalist theory that elevates the status of the sense organs in the perceptual process. Traditional eliminativist stances either deny the reality of mental states (regarding them instead as physical brain states) or accept that mental states exist but are, in fact, brain states (see CRANE 2001; AGADA 2023; cf. EBO 2019). In other words, there is a commitment to either the denial of mental states and the acceptance of brain states or the belief that mental states are brain states and nothing more. Reductive physicalism will claim that while mental states are real, they are, nevertheless, dependent on brain states.

Chimakonam (2019, 18) presents a unique perspective and challenge when he asserts that: “If perception does not occur in the brain or mind, then it makes no sense to talk about the so-called conscious experience.” The uniqueness of sense-phenomenalism lies in the claim that *satum* is not a final product in the mind and the brain but is absorbed by the sense organs for sensation or perception to occur. However, it seems to me that Chimakonam does not succeed in making the sense organs the seat of sensation, as earlier noted. The sense organs indeed receive *sata*, but *sata* cannot agglomerate as sensitive neural codes if the organism as a whole does not recognise that it is *experiencing* something presented to it. This *experiencing* has not only a physical foundation but also a subjective dimension. Chimakonam’s theory of mind reduces humans to machines that compute data *and sata*. Yet, it is clear that humans are not mere machines because they understand themselves, their environment, and how they interact with their environment. This fact defeats his mechanical presentation of the human being.

Again, since Chimakonam does not clearly eliminate the mind, it may be that this subjective dimension is a global phenomenon in the sense of not having its location in the sense organs but in the elusive mind. Accordingly, the mind is deemed the seat of consciousness, a phenomenon ultimately dependent on, or reducible to, neural processes. Again, if this interpretation of sense-phenomenalism is correct, then Chimakonam is a reductive physicalist. Another implication of this interpretation is that sense-phenomenalism does not successfully defeat the bogey of consciousness.

In response to the charge that he retains the category of experience without successfully accounting for its reality, Chimakonam may cite the following proposition and deny that he means phenomenal experience when he uses the term experience in connection with response to stimulus:

Experience occurs when the sense organs make contacts with the objective world. In the mind, there are no sense organs and no objective realities; so ‘experience’ as a phenomenon of the senses cannot be produced there. Qualia or conscious experience simply cannot exist; *satum* is what does, and it is what has been misjudged as mental experience all along. (2019, 16–17)

Chimakonam may insist that he is distinguishing between immediate sensory experience (response to environmental stimulus) and phenomenal experience (consciousness). However, this manoeuvre does not resolve the hard problem of consciousness by eliminating it. Chimakonam seems to circuitously restate the problem, as I earlier suggested. What Chimakonam will regard as sensory experience has a subjective dimension characterised by privacy, such that the experience is accessible only to the experiencer and also reportable only by them in a psychological language that others (the public) can understand although they cannot share the experience. The communicability of conscious experience does not mean it ceases to be keenly a private phenomenon. Two or more persons may report the experience of the taste of the Nigerian delicacy *egusi* but their individual stories are profoundly their own, with each person reporting a phenomenon that everyone thinks revolves around sweetness. Since *sata* are ideas or shadows, they cannot be found at the site of sense organs but rather in a mind. If the category of mind persists in language referencing response to environmental stimuli, then the category of consciousness cannot be eliminated from this language. For, mind and consciousness imply each other.

I concede that Chimakonam's main task in "A Sense-Phenomenal Look at the Problem of Personal Identity," is to show how a body-only African perspective sheds light on the problem of personal identity. Nevertheless, his theory of sense-phenomenalism strongly and incisively impacts the mind-body problem. In my opinion, the work deserves more attention from African philosophers of mind even as Chimakonam may want to shed more light on the place of mind in the theory of sense-phenomenalism.

Conclusion

In this article, I exhibited the conceptual structure of Chimakonam's intriguing notion of sense-phenomenalism and asserted that it marks an important contribution to the mind-body problem, with its unique claim that sensation occurs wholly in the sense organs even as the category of consciousness can be comfortably discarded. I raised the question whether Chimakonam's stance can be interpreted as an eliminativist or reductive physicalist stance and pointed out that eliminating consciousness and retaining the category of mind makes a clear answer difficult to obtain. I argued that this peculiar state of affairs also mean that sense-phenomenalism does not succeed in completely overcoming the hard problem of consciousness.

Declarations

*The author declares no conflict of interest or ethical issues for this work

Relevant Literature

1. AGADA, Ada. [Consolationism and Comparative African Philosophy: Beyond Universalism and Particularism], 2022. Routledge: London and New York. <https://doi.org/10.4324/9781003172123>. Paperback.

2. _____. “Between Sense-phenomenalism, Equi-phenomenalism, Quasi-physicalism, and Proto-panpsychism.” [Conversations on African Philosophy of Mind, Consciousness, and Artificial Intelligence, A.D. ATTOE, S.T. SEGUN, Victor NWEKE, U.J. EZUGWU, and J.O. CHIMAKONAM Eds], pp37–48, 2023. Springer: Cham, Switzerland. Ebook.
3. ATTOE, Aribiah D. “Proto-phenomenalism as an Explanatory Model to the Mind-Body Problem: A Neurophilosophical Inquiry.” [New Conversations on the Problems of Identity, Consciousness, and Mind, J.O. CHIMAKONAM, Uti Ojah EGBAI, Samuel T. SEGUN, and Aribiah D. ATTOE Eds], pp67–94, 2019. Springer: Cham, Switzerland. Ebook.
4. BLOCK, Ned. “On a Confusion about a Function of Consciousness,” [The Behavioural and Brain Sciences], pp227–247, 1995. Vol 18. Paperback.
5. CHALMERS, David J. “Facing up to the Problem of Consciousness,” [Journal of Consciousness Studies], pp200–219, 1995. Vol 2. No 3. Web.
6. CHIMAKONAM, Jonathan O. “A Sense-Phenomenal Look at the Problem of Personal Identity,” [New Conversations on the Problems of Identity, Consciousness, and Mind, J.O. CHIMAKONAM, Uti Ojah EGBAI, Samuel T. SEGUN, and Aribiah D. ATTOE Eds], pp11–32, 2019. Springer: Cham, Switzerland. Ebook.
7. CHURCHLAND, P. M. “Reduction, Qualia, and the Direct Introspection of Brain States,” [Journal of Philosophy], pp8–28, 1985. Vol 82. Web.
8. CRANE, Tim. [Elements of mind], 2001. Oxford University Press: Oxford. Paperback.
9. DENNETT, Daniel C. “Why You Can’t Make a Computer that Feels Pain,” [Synthese], pp415–456, 1978. Vol 38. Web.
10. EBO, Socrates. “The ‘Matser’ Made World: A New Conceptualization of Matter and Spirit.” [SKHID], pp29–36, 2019, Vol 1. [https://doi.org/10.21847/1728-9343.2019.1\(159\).157444](https://doi.org/10.21847/1728-9343.2019.1(159).157444) Web.
11. GYEKYE, Kwame. [An Essay on African Philosophical Thought: The Akan Conceptual Scheme, Rev. ed.], 1995. Temple University Press: Philadelphia. Pa
12. _____. “Person and Community in African Thought,” [Person and community: Ghanaian philosophical studies I, Kwasi WIREDU and Kwame GYEKYE Eds], pp101–122, 2010. The Council for Research in Values and Philosophy: Washington, DC. Ebook.

13. IKUENOBÉ, Polycarp. “Matolino’s Misunderstanding of Menkiti’s African Moral View of the Person and Community,” [South African Journal of Philosophy], pp553–567, 2017. Vol 36. No 4. Web.

14. KRIEGER, Uriah. [Subjective Consciousness: A Self-Representational Theory], 2009. Oxford University Press: Oxford. Paperback.

15. KWAME, Safo. “Quasi-materialism: A contemporary African philosophy of mind.” [A Companion to African Philosophy], pp343–351, 2004. Blackwell: Oxford. Ebook.

16. MATOLINO, Bernard. [Personhood in African Philosophy], 2014. Cluster Publications: Pietermaritzburg. Paperback.

17. MENKITI, Ifeanyi. “Person and Community in African Traditional Thought,” [African Philosophy: An Introduction, 3rd ed. R.A. WRIGHT Ed], 171–181, 1984. University Press of America: Lanham, MD. Web.

18. MOLEFE, Motsamai. “African Metaphysics and Religious Ethics,” [Filosofia Theoretica: Journal of African Philosophy, Culture, and Religions], pp19–37, 2018. Vol 7. No 3. Web.

19. NAGEL, Thomas. “What is it Like to be a Bat?” [Philosophical Review], pp435–456, 1974. Vol 83. Web.

20. REY, Georges. “A Question About Consciousness,” [The Nature of Consciousness, N. BLOCK, O. FLANAGAN, and G. GÜZELDERE Eds], pp461–482, 1997. MIT Press: Cambridge, MA. Paperback.

21. ROSENTHAL, David M. “Concepts and Definitions of Consciousness,” [Encyclopedia of Consciousness, William P. BANKS Ed], pp157–169, 2009. Academic Press: Amsterdam. Web.

22. SEGUN, Samuel T. ““Neurophilosophy and the Problem of Consciousness: An Equiphenomenal Perspective.” [New Conversations on the Problems of Identity, Consciousness, and Mind, J.O. CHIMAKONAM, Uti Ojah EGBAI, Samuel T. SEGUN, and Aribiah D. ATTOE Eds], pp33–65, 2019. Springer: Cham, Switzerland. Ebook.

23. TAIWO, Olufemi. “Against African Communalism,” [Journal of French and Francophone Philosophy], pp81–100, 2016. Vol 24. No 1. Web.

24. WIREDU, Kwasi. “The Akan Concept of Mind.” [Ibadan Journal of Humanistic Studies], pp113–134, 1983. Vol 3. Paperback.