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Schizophrenia and Perceptual Knowledge in Light of A.J. Ayer's Predictive Principle

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Abstract: This paper attempts to draw a possibility of perceptual knowledge for schizophrenia patients through A.J. Ayer's predictive principle. Schizophrenia is a chronic mental disorder that causes a distorted reality that dismisses the possibility of gaining knowledge through perception. This kind of deficiency is also present in the epistemological issue of the problem of perception, where it hinders the possibility of gaining perceptual knowledge. Hallucinations (*false perception*) and illusions (*non-veridical experiences*) challenge the perceptual capacity that leads to erroneous world experiences. If perceptual knowledge requires a veridical perceptual experience of the external world, then it establishes a conflict with a person with schizophrenia and the epistemological problem of perception. As Ayer presented in his book entitled *The Foundations of Empirical Knowledge*, this implied the possibility of gaining perceptual knowledge in a certain condition despite a mental disorder. This paper is as follows: first, it will establish Ayer's predictive principle to present the conditions under his framework. Second, the perceptual anomalies of schizophrenia patients. Then I will motivate the question of whether schizophrenia patients could gain perceptual

https://suri.pap73.site/files/espuelas_suri_april2024.pdf

knowledge despite perceptual distortion. Lastly, I will demonstrate that through Ayer's framework, there could be a possibility for a person who has schizophrenia to gain perceptual knowledge by understanding the condition in which their hallucinatory experience occurs.

Keywords: Ayer, hallucinations, illusion, perceptual knowledge

INTRODUCTION

Whether one perceptual experience can be sufficient for knowledge has been a central issue of epistemology. The issue of the possibility of perceptual knowledge has been questioned and examined, as well as whether senses can reliably connect us with the actual reality or provide a reliable source of knowledge that could lead us to form a Justified True Belief (JTB). In this paper, I establish the problem of rejection of gaining knowledge through perception. We can identify the root of this problem from the skeptical inquiry of René Descartes, in his book, Meditations, which raised a concern that senses might deceive us and argued that it cannot serve as a reliable foundation for knowledge. While Wilfrid Sellars criticizes the myth of the given from a more contemporary perspective, he rejects the idea that raw sensory data can be immediately considered knowledge. As this paper proposes a response to the posed problem, Alfred Jules Ayer defended this possibility of perceptual knowledge, while still carefully endorsing the criteria for perceptual justification.

This philosophical debate led to a more actual problem, especially in the context of psychiatric condition, specifically, in the context of schizophrenia disorder. A person who suffers from schizophrenia experiences disturbances in perception and cognition.[1] A typical patient with schizophrenia often experiences hallucinations, delusions, and other cognitive dysfunctions that disrupt their ability to comprehend their perceptual reality. Given the problem of attaining perceptual knowledge, this paper tends to raise and resolve the question: Is perceptual knowledge possible in schizophrenia? This motivated the question because the narrative was oversimplified due to the unreliability of the source of genuine knowledge. Since not all perceptual experiences of a person with schizophrenia are always in hallucinatory or psychotic state, this leads to the claim of this paper that some patients can still have accurate and

[1] Kathleen Smith, "Schizophrenia: Hallucinations and Delusions," in *Psycom* (14 September 2022), <https://www.psycom.net/schizophrenia-hallucinations-delusions>.

veridical perception. The intersection between philosophical and psychiatric literature allows us to explore under what conditions perceptual knowledge can still be attained in schizophrenia patients.

This paper offers A.J. Ayer as a framework in which he provided an approach to this challenge. According to Ayer, perceptions are not simply an experience but our way to acquire hypotheses from the external world. These hypotheses from perception are epistemically justified if they entail accurate and confirmable future predictions. While the veridical experience is the problem at hand, specifically in cases of schizophrenia, given the symptoms of hallucination, it often fails the predictive test; however, other senses might give a veridical sensus-datum that makes accurate predictions. If this is the case, Ayer's predictive method allows patients to gain perceptual knowledge despite their mental dysfunction. If Ayer is correct, then this implies that a schizophrenia patient does not totally eliminate the possibility of perceptual knowledge; instead, this possibility depends on the context-dependent framework.

This paper is as follows: First, I will outline Ayer's predictive method and situate this as his response within the broader debates in epistemology. Second, I will present the perceptual anomalies in schizophrenia, focusing on the presence of hallucinations. Then I will apply Ayer's framework in order for a schizophrenia patient to distinguish the hallucinatory experience and veridical perception, so that the schizophrenia patient can obtain knowledge through perception. Lastly, I will address the potential limitations of whether this predictive confirmation is sufficient in broader and complex cases of schizophrenia. Following these presentations, I aim to show that despite the perceptual anomalies in patients with schizophrenia, perceptual knowledge is still possible only under the circumstances of Ayer's predictive principle.

AYER'S PREDICTIVE PRINCIPLE

In his book entitled *The Foundations of Empirical Knowledge*, Ayer addresses the criticism against the justification of perceptual beliefs on the basis of possible fallible sensory experiences. It was a supposed reply to those philosophers who argued that sensory perception is an infallible source of knowledge. Rene Descartes, for instance, in the Meditations, established a systematic way of doubting.[2] For Descartes, our sensory perception is deceitful; hence, we cannot rely on it. While Wilfrid Sellars criticizes the raw idea of sensory experience that is counted as knowledge.[3] However, Ayer proposes a defense against this rejection and proposes a concept of the predictive principle method. Although Ayer agrees that empirical data might be fallible, he proposed a method that could justify the veracity of perceptual experience. According to Ayer, a perceptual claim is our hypothesis about the external world, and this hypothesis is epistemically justified once an individual can successfully identify an accurate and confirmable prediction.[4] In this section, I will reiterate Ayer's predictive principle, which could be a framework for the justification of perceptual knowledge for an individual with schizophrenia.

As Ayer responds to the rejection of perceptual knowledge, it implies, on the tail-end of his book, the method by which an individual can verify the perceptual hypothesis. To demonstrate this clearly, suppose that one's belief is that there is a cup on the table; this can be justified through consistent, related observation.[5] For instance, if one touches the cup, they will feel its solid structure; if viewed from another angle, it is still visible, or

[2] René Descartes, *Meditations on First Philosophy* (Jonathan Bennet version, 2017), 2-4, <https://www.earlymoderntexts.com/assets/pdfs/descartes1641.pdf>.

[3] William P. Alston, "Sellars and the 'Myth of the Given'," in *Philosophy and Phenomenological Research*, 65:1 (2002), 69-86.

[4] A.J. Ayer, The *Foundations of Empirical Knowledge* (New York: The Macmillan Company, 1940), 274.

[5] *Ibid.*, 264-265.

it can be validated by observing others. According to Ayer, if these are the cases, one can hold perceptual knowledge.

Ayer's thoughts are guided by three main points: (i) the distinction between veridical perceptions and non-veridical perceptions, (ii) the predictability criterion, and (iii) the extent of the verification criterion. With this, I propose to draw lines on how Ayer resolves the problem of illusion and hallucinations, which defends the legitimacy of perception as a fundamental ground for acquiring knowledge.

Ayer understood that fully accepting an indirect realist view of the world would require distinguishing between the veridical and non-veridical sense-datum. Having this problem at hand, he seeks a criterion that would demarcate a correspondent perception from its opposite. Ayer's first step was to reinstate the idea that a deceptive sensus-datum did not cause the discordant perception.[6] For him, the first culprit to be investigated was the context by which the discordant observation occurred.[7] To illustrate this, suppose that a white sheet of paper would appear warm white in a room with warm light, per the condition that it was perceived as being under a warm light. In this scenario, the lighting affected by the observation is the reason for the inaccurate depiction of the material object.

Another example would be someone suffering from a cold trying to smell perfume. The context of acquiring sense data (having a cold) could affect the sense data itself; for instance, the perfume may be perceived as dull. Ayer suggests that identifying these faulty perceptual conditions and understanding the preferable condition in order to cross-reference such to the deceptive sense data.[8] Thus, Ayer's criterion for the reliability of sense data is through the initial understanding of other circumstances in which the sense data occurred. Through this, one can triangulate an idea of the object's real characteristics. This is similar to the example presented above; the discordant appearance of the white paper under a warm light could be

[6] *Ibid.*
[7] *Ibid.*, 265-266.
[8] *Ibid.*, 266.

surpassed through the very understanding of the context by which it was perceived as being under a warm light. Hence, it is also true that the identification that one has a cold would lead to an analysis of the actual smell of the perfume. Simply put, Ayer argues that extending one's perception to the context by which it was perceived could give a glimpse of the characteristics of the real object.

Despite the potential for the success of this criterion, Ayer identified that the next challenge was formulating a general rule encompassing all kinds of perceptual contexts. Thus, he proposed the prediction principle in response to such an issue. This principle suggests that one should favor a perceptual context that could possibly yield more predictions of further observations.[9] This means that a perceptual condition *x* is preferable if one can observe parallelism between the sense data that it produces and the sense data produced by both past and future perceptual conditions. For instance, under this principle, observing the color of white paper under a warm light would not be a preferable perceptual condition because it would yield erroneous sense data of the color of the paper in comparison to both past and future observations of white paper. Following a similar logic, not having a cold is a more reliable condition for acquiring sense data than having one, since, compared to one's memory and future experience of, for instance, smelling a perfume, having no cold is predictive in such cases.

Ayer implies that the preferable condition would be those that happen more often or have a greater sense of normalcy. The perceptual conditions with more predictability and frequent sense data would be considered the standard reference for observation. Hence, the prediction principle is a criterion involving temporal observations for verification since the perceptual condition being tested is being compared against both past and future experiences. Therefore, to hope for a more accurate yield, one could go beyond temporal observations and use other sensors, organic or synthetic. For instance, if a person with a cold wants to test whether his

[9] *Ibid.*, 267.

condition is reliable for perception, one could ask other people to smell the same perfume and see if one's perception of the smell is precise. One could further solidify his predictive reference and normalcy through these testimonial comparisons.

Despite all of these, Ayer acknowledges that this process would not promise absolute perceptual certainty even after the successful judgment of perceptual conditions through predictions. For him, the predictive principle does not in any way guarantee a complete avoidance of deception; instead, it only offers a path to diminish any doubts along the way continuously.[10] This is because the reference by which prediction would occur does not guarantee absolute certainty, as they could also be subjected to doubt. Hence, Ayer recommended rechanneling efforts instead of developing more ways to practice the prediction principle.[11]

This framework is also relevant in assessing the perceptual knowledge of individuals with mild schizophrenia (appropriate to the prodromal stage and the residual stage). These cases show that despite the occurring symptoms in schizophrenia patients, such as hallucinations, which often hinder the ability to execute a predictive confirmation. I argue that in this stage, a schizophrenia patient can utilize their perceptual experiences and remain veridical, which is still sufficient for Ayer's predictive test. As this section suggests, the possibility that, through Ayer's framework, perceptual knowledge is possible in a schizophrenia patient through a context-dependent and sufficient ability to attain certain conditions. Hence, this paper establishes a moderate claim that Ayer's framework is possible only in some instances. Given this discussion, I will expound in the next section on the clinical discussions of the actual perceptual experiences of schizophrenia patients, specifically during the prodromal and residual stages. In this manner, it will gain traction between the philosophical and the psychiatric literature that bridges the connection

[10] *Ibid*., 273-274.
[11] *Ibid*., 274.

towards the possibility of gaining perceptual knowledge despite the symptoms of mental disorders.

OVERVIEW OF SCHIZOPHRENIA

Schizophrenia is a severe mental illness that involves disturbances in perception, thinking, behavior, and emotions. A person who has this kind of mental illness experiences hallucinations—a false perception where a person with schizophrenia experiences a perception-like experience without the material object being stimulated by sensory organs. For instance, one can see a thing that does not correspond to a material object (*visual hallucination*) or hear some voices without the actual sound (*auditory hallucination*). In the case of schizophrenia, the mentally challenged person experiences and sensitizes the non-perceivable to a non-hallucinatory person.[12] Hallucinations are part of the clinical diagnosis of a person with schizophrenia;[13] it is the usual psychosis. Illusion is the non-veridical perception of a thing, though it does not interrogate the existence of an actual object but the veridicality of the object itself. Another positive symptom of this mental illness is a delusion—a false belief where a person who has schizophrenia has a conflict of beliefs with reality.[14] The case of delusion clinically involves persecution, erotomania, somatic, and grandiose delusions.[15] All these delusions are not necessarily present in psychosis. Delusions also come in different degrees depending on the severity of the cases. However, I tried to limit the scope of this paper, and

[12] Smith, "Schizophrenia: Hallucinations and Delusions."

[13] I am using the phrase "a person who suffers from schizophrenia" rather than schizophrenic to avoid labeling the entirety of a person based on mental challenges.

[14] Clinically, a positive symptom means an addition or change in a person's normal behavior or attitude.

[15] Delusions of *Persecution* are the formation of beliefs that people will harm them; *erotomania* is the formation of beliefs that someone admires them; *somatic* is the formation of beliefs that they have a physical illness; *grandiose* formation of beliefs that they have a special ability. See Smith, "Schizophrenia: Hallucinations and Delusions."

delusion has nothing to do with the implied problem of this paper, but only the perception of hallucinations and illusions.[16]

The clinical history of schizophrenia begins when Eugen Bleuler coined the term "Dementia praecox," or the "group of schizophrenias." At first, schizophrenia was conceived as the combination of dementia and split personality; however, through the advancement of clinical studies, they concluded that schizophrenia is different from dementia.[17] Bleuler studied the in-depth behavior of a person with schizophrenia; the first conception was that it was associated with dementia because there was a split personality or forgetfulness with the concept of personality. However, as Bleuler carefully studied, the '*split personality*' is not *per se* a splitting of personality but rather a splitting of psyche functions resulting in the loss of the unification of personality that must be present in a normal brain function.[18] In the case of schizophrenia, delusions, illusions, and hallucinations are the result of impaired thought. As Bluerer put it, the impairment of thoughts and ideas is the inconsistency resulting in detachment from reality. In addition, because of this impairment, one might think of opposite ideas or perceptions.[19]

Phenomenologists studied the perceptual abnormalities of a person with schizophrenia, and they concluded that this impairment in perception leads to an examination of the phenomena of mental illness. The state of being present or connected to the world is the fundamental process of perception and cognition, and the passive perceptual experience leads to

[16] I understand that delusion is part of perceptual belief and also part of the formation of perceptual knowledge. However, I am more convinced that delusion is a part of anomalies in neural activity rather than an epistemological formation of perception, which is implied as the scope of this paper.

[17] Gabriele Stotz-Ingenlath, "Epistemological aspects of Eugen Bleuler's conception of schizophrenia in 1911," in *Medicine, Health Care and Philosophy*, 3 (2000), 153.

[18] *Ibid.*, 157.

[19] *Ibid.*

an erroneous perception of the world.[20] Marleau-Ponty delves into the phenomenological approach of hallucinations. According to Marleau-Ponty, hallucinations have a role in philosophy; they are the borderline case of our perception of being in the world.[21] This concept of hallucinations for Marleau-Ponty delineates the world's perception and intelligibility.

On the other hand, Karl Jaspers viewed the abnormalities of perception in the state of this mental illness as the self-reference of the other world. The form of isolation for Jaspers is a special kind of accessing the different dimension of reality.[22] Phenomenologists contribute to the philosophical concept of schizophrenia or its symptoms. It lacks an understanding of the real psychiatric diagnosis of this kind of mental illness and takes it metaphorically. Let us now examine the perceptual abnormalities of a person with schizophrenia.

As mentioned, the impairment of perceiving reality is present in the case of schizophrenia, but it also has a physiological impairment. Neurologically speaking, the prefrontal lobe and the medial lobe brain regions are responsible for memory; however, the impairment causes certain changes to the brain. To further illustrate this neurological occurrence in the brain, an article entitled *Neurobiology of Schizophrenia: A Comprehensive Review* discusses the parts of the brain that are responsible for causing positive and negative symptoms. Dopamine dysfunction is the leading cause of psychosis in schizophrenia.[23] According to neuroscientists, schizophrenia occurs when dysfunction between the thalamus and the cerebral cortex or the prefrontal cortex. The thalamus has an amygdala and hippocampus; these parts are responsible for perception

[20] Peter J. Uhlhaas, and Aaron L. Mishara, "Perceptual Anomalies in Schizophrenia: Integrating Phenomenology and Cognitive Neuroscience," in *Schizophrenia Bulletin*, 33:1 (2007), 142.

[21] Sergio Benvenuto, "Merleau-Ponty and Hallucination," in *American Imago*, 72:2 (2015), 177-178.

[22] Uhlhaas, "Perceptual Anomalies in Schizophrenia," 144.

[23] Enkhmaa Luvsannyam, Molly S. Jain, Maria Kezia Lourdes Pormento, Hira Siddiqui, Angela Ria A. Balagtas, Bernard O. Emuze, and Teresa Poprawski, "Neurobiology of schizophrenia: a comprehensive review," in *Cureus*, 14:4 (2022), 2.

and emotion; then it must project excitatory[24] to the striatum, but before it transfers to the prefrontal lobe, it goes through different pathways, which are the *mesolimbic pathway,* which causes positive symptoms, and the *mesocortical pathway* causes the negative symptoms.[25] Following the technicalities of neuroscience, there is still dysfunction in regions of our brain. Multisensory integration is the unification of senses, a process where the sensory input is identified and follows a possible receptor to the neural activity into a 'percept.'[26] Since schizophrenia has a dysfunction in multisensory integration, it results in perceptual incoherence.

The impairment of sensory input from somatosensory feedback or the sensory motor affects the percept's incoherency.[27] Schizophrenia poses a challenge necessary to address psychologically; however, it also poses a challenge against the epistemological correspondence through the interrogation of their perceptual capacity: the perceptual incoherency, the dysfunction of neural activity, and the conceptualization of the world. As established above, the problem of schizophrenia is the distorted reality it shows upon discussing the physiological condition of a person with schizophrenia. Let us proceed to a more subjective perspective of this multi-sensory dysfunction and the state of psychosis as the real culprit of the disrupted perception.

The state of detachment from reality is called psychosis; as introduced above, psychosis involves positive and negative symptoms, but also the experience of an alteration of oneself being in the world.[28] Abigail

[24] Excitatory neurotransmitters: responsible for generating signals for receiving neurons.

[25] Luvsannyam et al., "Neurobiology of schizophrenia," 3.

[26] Lot Postmes, H. N. Sno, S. Goedhart, J. Van Der Stel, H. D. Heering, and L. De Haan, "Schizophrenia as a self-disorder due to perceptual incoherence," in *Schizophrenia Research*, 152:1 (2014), 43-44.

[27] *Ibid.*, 44.

[28] Susanne Harder and Paul Lysaker, "Narrative coherence and recovery of self-experience in integrative psychotherapy," in *Psychosis and Emotion,* ed. by Andrew Gumley, Alf Gillham, Kathy Taylor, and Matthias Schwannauer (New York: Routledge, 2013), 56.

Yates, a clinical psychologist, presented the cognition of a person with schizophrenia; she called this basic data assembly, where the schizophrenia patient failed to build up a cognitive relevance from stimuli.[29] A patient with schizophrenia experiences a psychotic state or *psychosis,* which is the state where they have episodes of positive and negative symptoms of mental illness. During the first episode of psychosis, a patient will feel a quick-shifting reality that makes a person think that it is 'not right', and it will escalate to suspicion of reality.[30] Here, I will present the actual narrative of cases with schizophrenia to establish subjective perceptual incoherency.

Rob Sips narrates his first-person view of psychosis and reflects on it. According to him, our perspective in the world is not the subject of the object of reality. Still, based on how we subjectively interpret and experience the world [31] During his psychosis, he offered a dialectical perspective of aha-experience and anti-aha-experience to process the loss of reality. The aha experience is an insight into a direct perception of things. The navigation of perception that fits the framework's worldview. On the other hand, the anti-aha-experience had almost the same experience as the direct perception, but lost the navigation of his previous experience. It does not fit the conviction of the worldview.[32] This dialectical method of Sips introduced the idea that in the state of psychosis, as the experience, there is a loss of translation of perception in reality. However, in the case of Sips, he can still recognize the state of psychosis.

In the case of Susan Weiner, although she is aware of her environment, she begins to question her perception that it is not real. According to Weiner, all the details of one's object come into her

[29] Richard WJ. Neufeld, "On the centrality and significance of stimulus-encoding deficit in schizophrenia," in *Schizophrenia Bulletin*, 33:4 (2007), 982.

[30] Sophie Allan, "The 'Healing Healer'? A Psychologist's Personal Narrative of Psychosis and Early Intervention," in *Schizophrenia Bulletin*, 44:6 (2018), 1173.

[31] Rob Sips, "Psychosis as a Dialectic of Aha- and Anti-Aha-Experiences," in *Schizophrenia Bulletin*, 45:5 (2019), 952.

[32] *Ibid*., 953.

interpretation of her mind. She saw the lines, the building structure decoding meaning to her perception.[33] We can consider that in the case of hallucinations, they still have a perception; they are still immersed in reality, but perceive a distorted reality. In other cases, during the early psychosis, hallucinations were seamlessly blended with reality.[34] It is quite unrecognizable, and a person with schizophrenia fails to identify what is real.

In the narrative of Roberta Payne, though she states that she is aware of what is happening to her, she cannot control her mind, and it feels like a passive experience. She states that whenever she is in a psychotic state, she feels like other people do not exist and feels like her brain is in isolation.[35] Most of the time, Payne will touch the things in front of her just to make sure that these are the real things or exist. A psychotic state is a psychological disruption from reality; in a psychotic episode, a person who suffers will experience a disruption of thoughts and perception, which leads to difficulty in weighing what is real and what is not.

The experience of Sips, Weiner, and Payne is one of the psychotic symptoms of a person with schizophrenia. Losing contact with reality leads to erroneous world experiences. Given the psychological and neural deficiency of a person with schizophrenia, it leads to questioning their perceptual capacity and considering that schizophrenic patients experience perceptual abnormalities such as hallucinations, illusions, and delusions as part of their psychotic episode, their perceptual experience cannot guarantee the coherence of it in reality. In the following subsection, I will discuss the conditions for perceptual knowledge then I will present how exactly a schizophrenia patient failed to satisfy this condition.

[33] Susan Weiner, "The details in schizophrenia," in *Schizophrenia Bulletin*, 44:4 (2018), 707.

[34] Milton T. Greek, "How a series of hallucinations tells a symbolic story," in *Schizophrenia Bulletin*, 36:6 (2010), 1063.

[35] Roberta Payne, "Night's End," in *Schizophrenia Bulletin*, 38:5 (2012), 899.

PERCEPTUAL KNOWLEDGE

Perception is the cognitive process of sense data where we conceptualize the sensory experience of a particular thing that necessitates its coherency in the external world.[36] To explain this, we have an object that appeals to our senses, for instance, a table. In this case, it will transfer some sense data that stimulates our sensory organ, which is in sight. Science introduces an explanation of how we conceive things. For instance, when one sees a table, a light particle bounces off the table and trajects to our senses.[37] Vision starts when a certain amount of light from the object is converted into electrical signals transmitted to the retina that the brain will process.[38] Although science can explain the technicalities of how our vision, senses, and perception work, this is the preliminary understanding of conceptualization and contextualization of the world.

Philosophically, empiricists are more interested in discussing sense data (*sensus-datum*). David Hume and John Locke, as the prominent intellectuals in empiricism, hold such beliefs that through empirical data, we can comprehend things in the world, and through this comprehension, we can gain knowledge. However, I am aware that the empiricists' claims battled different attacks, but that is not the concern of this paper. Hume and Locke conceptualize the external world through understanding the sense-data and perception. As Hume puts it, all perceptions involve impressions and ideas. Impressions are the sensations that make the first appearance to us; according to Hume, the sense-data are the properties that we are only aware of, while the ideas treat the objects as mind-dependent—a formed representation of an impression.[39] On the other hand, John Locke sees the external world as limited to what it appears to

[36] Michael GF. Martin, "Perception, concepts, and memory," in *The Philosophical Review*, 101:4 (1992), 745.

[37] Denis Baylor, "How photons start vision," in *Proceedings of the National Academy of Sciences*, 93:2 (1996), 560.

[38] *Ibid.*

[39] David Hume, *A Treatise of Human Nature* (Oxford: Clarendon Press, 1896), 8-9.

our sensory experiences. Locke argues that no innate principle exists, given that all world knowledge emerges from our sensory experiences.[40] Locke opens the notion of primary and secondary qualities. Primary as the mind-independent—a projection of an object in its actual form, and secondary as the mind-dependent, it is a projection of an object based on how our sensory organs respond.

The sense data is a raw element of sensory experience or the immediate perception of how we conceive things through the sense of sight, smell, touch, and hearing. H.H Price would say that it is the sensible things that are direct to our consciousness, while G.E. Moore believes that it is the direct apprehension of a material object.[41] George Berkeley says that things are meant to be perceived—a concept as mind-dependent. In short, sense data is the preliminary conceptualization of a thing and is the "what is given to our senses." Though sense data is still connected with perception, it encompasses the sense data.

Our knowledge of the world arises from perceptual experiences, where we can grasp the world through our senses and what we perceive. As I stated above, perception is the cognitive process of sensory experience. The condition that our senses acquire the data of material objects leads to the justification of perceptual experience. Perception is when an object https://www.earlymoderntexts.com/assets/pdfs/locke1690book1.pdftrajects certain data and stimulates our sensory organs; then, we acquire a sensory experience that formulates certain understanding and beliefs of the material object being perceived. Perception binds the sensory experience, and without perception, things that are being perceived are solely qualities. This process leads to perceptual knowledge. It formulates that if S perceives

[40] John Locke, *An Essay Concerning Human Understanding* (Jonathan Bennet version,2017), 3-5, <https://www.earlymoderntexts.com/assets/pdfs/locke1690book1.pdf>.

[41] Roderick Firth, "Sense-data and the percept theory," in *Mind*, 58: 232 (1949), 434-465.

that x is p, then S knows x is p because of perception acquisition.[42] I will not present the counterarguments with the formulation of perceptual knowledge, but this process makes perceptual knowledge possible. However, in a state where our mind has a peculiarity in how we conceive things, how will perception make sense in the external world if the things around us do not appear to us as they are? This described perceptual problem is the direct realist's challenges, namely illusion and hallucination. The veridicality of experience is substantial in acquiring an accurate representation of the world. Fiona Macpherson argues that hallucinations and illusions are still considered perceptual experiences towards perceptual knowledge.[43] However, the certainty of the acquired object is questionable.

In the case of illusion, the veridicality of a material object is challenged. This is because, in such a scenario, the sense of data acquired is discordant with the actual material object as it appears to our senses differently. A famous example of an illusion is the crooked pencil.[44] When a pencil is placed into a cup of water, there is an illusion that the pencil is crooked, which technical science named the phenomenon of refraction.[45] The light particles pass faster through the air and decelerate as they pass the water. This is the reason why the pencil appears crooked to our senses. An article entitled "*Consciousness and Neuroscience*" explains the physical context of this kind of scenario. It discusses that when light particles interact with an object, they bounce from the specific object and carry information (such as color), which is trajected to our sensory organ, which in this case is the eyes. The retina then stimulates cells connected to our

[42] Georges Dicker, "Is There a Problem about Perception and Knowledge?" in *American Philosophical Quarterly*, 15:3 (1978), 68.

[43] Fiona Macpherson, "The philosophy and psychology of hallucination: an introduction," in *Hallucination: Philosophy and Psychology* (Cambridge, Massachusetts: The MIT Press, 2013), 10.

[44] P. L. McKee, "AJ Ayer on the Argument from Illusion," in *Canadian Journal of Philosophy*, 3:2 (1973), 275-280.

[45] A.J. Ayer, *The Problem of Knowledge* (London: Macmillan, 1956), 99.

optic nerve, which will excite the neurons to the possible receiver (*photoreceptor*) that stimulates the different pathways to the visual cortex. When the visual cortex is stimulated, the visual experience will happen.[46] This kind of explanation, regarding the physical to the neural activity, could assist us in understanding the process of our body—the connection of the senses and our brain, to be exact. Now, here is the case: if the material object appears to us in a defective way from the actual material object, then there is an assumption that we cannot directly grasp the material object through our senses. This very argument was Ayer's rationale in his indirect realist project.

Ayer introduces indirect realism by stating that there is a mediator between the perceiver and the object being perceived—the sense data. Ayer established his argument as follows:

> (P1) All objects of experience have a material object.
> (P2) In the case of hallucination, the object of experience is not the object itself.
> (P3) There is no difference between a hallucinatory object of experience and a non-hallucinatory object of experience.
> ∴ Objects of experience are not the object itself.[47]

The presented case of Ayer sets a demarcation of perceivable objects and the sense data of an actual object. In the case of illusion, the veridicality of experience is present in the objects of experience. Hallucinations and illusions challenge the views of Naive realism or direct realism. The view of Naive realism is that we perceive as directly the exact object. Thus, we can make sense of the world based on how we perceive it and how it appeals to us because of the direct connection with an actual object. We can make

[46] Francis Crick and Christof Koch, "Consciousness and neuroscience," in *Cerebral cortex*, 8:2 (1998), 97-100.

[47] Cf. Cameron Yetman, "Colour and the Argument from Illusion," in *Stance: An International Undergraduate Philosophy Journal*, 12 (2019), 14. Also see Ayer, *The Foundations of Empirical Knowledge*, 13-14.

intelligible conceptualizations of the world because we can perceive the exact properties of material objects. However, the objection is, in the case of illusion, we perceive a thing differently, for instance, a crooked pencil. So, how can we make intelligible things out of our perception? To resolve the problem of direct realism, indirect realism proposes that we do not directly perceive the material object; we perceive only the sense data as an intermediate variable between the material object and our perception but never the actual object. The demarcation that Ayer made between the object of experience and the material object itself justifies the existence of both objects of experience and an actual object. Ayer's conclusion, hence, was an introduction of an internal perception while still not dismissing the existence of the external world in itself. And in this case, opens the possibility to formulate knowledge through perception because of this clear distinction.

In inferential theory, we draw knowledge from facts or evidence. Ayer argues that there are three necessary and sufficient for knowing: (1) *S* in *p* must be true; (2) *S* is sure in *p*; (3) *S* is right to be sure in *p*.[48] Suppose that I know that the sun rises in the east because I know that the sun will never rise in the west. Ayer's first condition implies a non-contradictory statement; for *S* to know *p,* then *p* must be true. The second condition necessitates the accuracy of the statement sunrise in the east because I am sure of Earth's rotation. The last condition implies that I am right to be sure that the sun rises in the east and not in the west because I am sure of the accurate compass direction. Ayer's condition of knowing leads to the form of verification. The problem of perception (hallucinations and illusions) attacks the (2) and (3) conditions.

This part has discussed the thoughts that construct the general understanding of perception and the empirical acquisition of knowledge. The empiricist movement generally accepts the veridical requirement of knowledge in the process of perceiving. It was also expressed that the sense

[48] Brian Haymes, *The Concept of the Knowledge of God* (London: Palgrave Macmillan, 1988), 16-20.

data mediates the material apprehension by which it extracts the process of perceptual knowledge.

FAILURE OF PERCEPTUAL KNOWLEDGE IN SCHIZOPHRENIA

Given the discussions above regarding the general notions and characteristics of schizophrenia and perceptual knowledge, we could now proceed with a more specific diagnosis of their conflict. Perception battled the argument of illusions and hallucinations; the peculiarity of perception leads to an erroneous world experience. Tim Crane problematized the issue of hallucination; according to him, perceptual experience is the openness to world access to mind-independent objects. However, hallucinations allow perceptual experience without the mind-independent objects being perceived.[49] As discussed above, the material object, sense data, and perception are the variables for attaining perceptual experience. As Hume argues, material objects are mind-dependent; what we perceive in this world is based on how our sensory experience of that object occurs. However, the realist would argue that objects are objects of themselves, or in other words, we can comprehend things directly as they are. Perceptual experience is a strong veridicality of experience in a particular thing. Illusions and hallucinations are the problems of perception that were imposed. As far as perceptual experience is concerned, the argument is—that if illusion and hallucinations exist, then the certainty of perceptual experience of a material object is impossible.

In the case of hallucination, the perceptual experience of object *p* is identical to the hallucinatory *p*; it allows the perceptual experience of object *p* without its existence. Suppose illusions and hallucinations allow our perception without the existence of a thing,[50] Also, in that case, our

[49] Tim Crane, "What is the problem of perception?," in *Synthesis Philosophica*, 20:2 (2005), 240-241.

[50] *Ibid*., 260.

perception must correspond to the actual object being perceived, how can we be certain with the knowledge brought by perception? In the case of illusion, although there is a present thing, our perception perceives it differently.

Similar to the problem of perception, schizophrenia challenges the certainty of gaining perceptual knowledge. Though they arrive in different degrees, hallucinations and illusions are also the challenges faced by a person with schizophrenia. However, there is a descriptive difference between perception philosophically and psychologically. Nevertheless, both happen physiologically: the neural activity that causes a clinical hallucination and illusion and the problem of perception such as illusion and hallucination *per se*.

Hence, in retrospect, the main problem that schizophrenia poses to the possibility of knowledge is its challenge to acquire certainty in distinguishing veridical sense data from the totality of its sense experience. This is because a person with schizophrenia could have difficulties in demarcating the hallucinatory experience from reality, which would cast doubts about the material existence of the rest of her perception. Thus, in context with the conditions of knowledge we provide in 1.2, the person who suffers from schizophrenia commonly faces challenges in Ayer's conditions of knowledge, in the sense that, because of the indistinguishable characteristics of the hallucinatory experience, a person with schizophrenia would naturally face difficulties in being "sure," and the "right to be sure" regarding the veridicality of her sense experiences.

Taking the discussion of perceptual knowledge and schizophrenia, this paper provides an attempt to answer the question raised by this paper.

APPLICATION OF AYER IN SCHIZOPHRENIA CASES

Throughout this paper, I discussed the essential aspects of understanding to give a comprehensive answer to the question I raised. Perceptual knowledge sets the criteria for attainable and infallible knowledge.

However, illusions and hallucinations challenge the possibility of gaining knowledge through perception; it is the same challenge faced by a person with schizophrenia. Following the premises discussed in this paper, we are not perceiving the material object itself. Still, only the sense experience of a certain material object and some objects appear to us dubiously. Now, despite the dismissive possibility of perceptual knowledge in schizophrenia, upon discussing Ayer, we can draw an answer to the possibility of gaining perceptual expertise in a person with schizophrenia. A perception-like experience is a psychotic (*psychosis*) state of a person with schizophrenia. However, I made it clear that the scope of the problem of this paper is only illusions and hallucinations. In the analysis of Ayer's method, I suggest the possibility of gaining knowledge about a person with schizophrenia.

First, through the analysis of context and condition, as stated in Ayer's main points, the real culprit is not the sense data itself but the condition by which the deceptive sense data occurs. In the case of a person with schizophrenia, the condition or context in which hallucination occurs is the state of psychosis. It is essential to realize that the hallucinatory experience of people with schizophrenia happens in a physiological context. As explained before, when a hallucination persists, there is a deviated dopamine pathway. Hence, just like in the case of having a cold, psychosis is also a perceptual condition. It is then true—at least in Ayer's analysis—that to distinguish hallucinatory experiences from veridical ones, it is suggested that the analysis should be done with a focus on the context of psychosis.

To execute this, a person who has schizophrenia must take advantage of the awareness that there is a world outside their mind. This means that the possibility of inspection of the psychotic state relies on the patient's capability to distinguish between a healthy state and a psychotic state. Some of the discussions above prove this possibility to be real. In the cases of Sips, Weiner, and Payne, there is still a possibility of checking if a person with schizophrenia is in a psychotic state. It is present in their

narrative that even though the hallucinations seamlessly blended with reality, they were still aware that something was not 'real' in the things they were perceiving. However, it is salient to note that verification is challenging to execute in the case of hallucinations. Regardless, given the narrative of a person who suffers, the possibility of inspecting the perceptual context of the hallucinatory experience became possible.

At this point, given that it was already discussed that the state of psychosis is the perceptual condition of a schizophrenic patient's hallucination and that it was in precision that the distinction between such and a healthy state is possible, it is then advantageous to solidify how the psychotic state is not the preferred context of perception. According to Ayer, the general principle by which a perceptual condition is judged for its veridical preferability is through its capability of prediction. Following this principle, in the case of psychosis as the condition of hallucinatory experience, the sense data acquired during the psychotic state must be compared to the sense data obtained during the healthy state, both from past and future observations. Upon comparing, one could see that there is incoherent sense data during the state of psychosis—the hallucinatory perceptions. Furthermore, in an engagement of comparison between the psychotic sense data of a patient with schizophrenia and the sense data from other perceivers, it is most probable to observe that there, too, exist incoherences. Hence, according to this logic, the state of psychosis is a non-preferred condition simply because, in such a state, the predictability is minimal. Following Ayer's suggestions, the schizophrenic patient, then, should dismiss all of their acquired sense data during the psychotic state.

Knowing all of these, the possibility of perceptual knowledge lies in understanding and analyzing the sense data acquired during psychosis. Despite the epistemological challenges of schizophrenia, a patient could still gain perceptual knowledge through identifying the optimal perceptual conditions that the patient could rely on.

What this accomplishes is the capability it grants to the person with schizophrenia to determine the veridical experience from the hallucinatory

one. Through this principle, one could know what condition of perception to trust and, thus, rely on, while conversely, the conditions of perception not to put faith into. For a schizophrenia patient, this would give the possibility of filtering out the hallucinatory experience and thus welcome the possibility of perceptual knowledge. At this point, we could now resolve that a person with schizophrenia could still be sure that what she perceives is true. She could also be granted the right to be sure by elaborating an epistemological principle. Therefore, considering this logic, the schizophrenia patient could satisfy the abovementioned conditions of knowledge.

While Ayer's predictive principle method could allow obtaining perceptual knowledge for schizophrenia patients, the limitations also come. My claim in this paper is modest and does not encompass all patients with schizophrenia, but only some who are still capable of distinguishing between the hallucinatory experience and veridical experience. Aside from the limitation of application for schizophrenia patients, the predictive method has limitations. I framed this as an internal objection against Ayer's framework to avoid the circularity of argument if I return to the discussion of the rejection of perceptual knowledge.

First, the verification method could form a circular argument. Suppose that a schizophrenia patient executes a successful prediction, yet these predictions are formed by someone whose perception is in question, and then the predictions might also be questionable. How can we determine the accuracy of the perceptual prediction of a schizophrenia patient?

Second, since there is no way to determine what phase the patient is experiencing, there are some illusions and hallucinations that could mistakenly be recognized as false experience. For instance, even though the patient seems in the prodromal stage of symptoms, in reality, the patient is already in a psychotic state where he cannot clearly demarcate between hallucinatory experiences, but could still predict principle, here the product of knowledge is in question. Lastly, Ayer's framework is generally prone to

criticism from non-observable variables. Ayer's idea is patterned to produce a clear demarcation between science and non-science that follows the Humean criterion and empirical data. So, the limitation of the verification method is based on the probability of what is observable. Hence, in cases of schizophrenia, it might appear as a limited, especially in cases where symptoms are complex. Nevertheless, given these internal limitations, we can utilize Ayer's predictive principle only for patients who can execute the method.

This paper sheds new light on studying schizophrenia. Several philosophers such as Gilles Deleuze, Pierre-Félix Guattari, Maurice Merleau-Ponty, and Franz Brentano, studied the phenomenological implications of this kind of mental disorder. This paper breaks the glass ceiling of psychological incapacity limited only to phenomenological parameters. The possibility of raising epistemological questions in schizophrenia can gain traction between the perception and the external world.

This kind of discussion will also widen the horizon of epistemology, which is not limited to abstract discussion but the material manifestations of knowledge, not just philosophically but also in understanding physiological phenomena. This paper establishes a utilization of logical positivism or modern empiricism, advancing empirical verification. Ayer made a considerable contribution to empirical knowledge and epistemology. Ayer influenced the Vienna Circle, from which the falsification theory of Karl Popper arises. The objective of this paper is to expose the epistemological problem of schizophrenia, which this paper has succeeded in.

CONCLUSION

The paper examines the possibility of perceptual knowledge in schizophrenia, under Ayer's predictive principle, it provides a framework that proves the fallibility of perception. Despite the presence of

hallucinations in schizophrenia, which hinders the possibility of gaining knowledge, Ayer's predictive method suggests that perceptual knowledge is still possible once a patient can generate accurate and confirmable predictions about the future. By following this method, the veridical perception of a person with schizophrenia remains epistemically acceptable, given that it does not totally diminish their sense of perception but introduces a way of a context-based experience. This paper also presents the limitations of Ayer's method, focusing on the limitations of veridical perception as instant knowledge, and also presents the limitations of the possibility of attaining perceptual knowledge in all cases of schizophrenia. I present in this paper a modest claim that it could possibly attain once the conditions are met. Nevertheless, introducing Ayer's predictive principle, it shows both challenges, namely, the knowledge through perception and perceptual knowledge in actual cases, specifically schizophrenia cases, as this paper calls for a more refined epistemological concept to cover even the perception of mentally ill people.

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