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St Thomas' tactile visionary experiences from a neurophenomenological perspective

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Abstract

A neurophenomenological perspective postulates the aspects of perception and cognition to understand visionary experiences. St Thomas' immediate reaction when he heard about other disciples' visions of Jesus was not to believe it until he put his finger on the wounds of Jesus when crucified, suffered bleeding and died. After a week, his experiences of seeing, hearing and touching Jesus in a locked room after his crucifixion, death and resurrection are investigated here as natural phenomena due to certain neural processes. The neuronal functions are embedded in the constant interaction of bodily movement, reaction and influences of the cultural environment, resulting in kinaesthetic, tactile and visual perceptions. The explanations in neurophenomenology add value to them as natural phenomena. I compare these with hallucinations in cognitivism and synaesthetic perceptions in physiology and psychology, where sensory information through multiple sensory pathways simultaneously brings experiences from more than one sense.

Keywords

neurophenomenology; embodiment; visual experiences; auditory experiences; tactile experiences

1. Introduction

St Thomas' visions of resurrected Jesus with other apostles happened a week after Jesus' appearance to the other disciples, which he did not believe, declaring: "Unless I see the nail marks in his hands and put my finger where the nails were, and put my hand into his side, I will not believe it" (Jn 20:25, NIV Bible 1982). When they were together again on the eighth day after this instance, in visions, Jesus standing next to them greeted, "Peace be with you!" (Jn 20:26). Then he asked Thomas to put his finger

into his hands and the side, saying to stop doubting and believe (Jn 20:27). This indicates that Jesus was aware of the intentions of St Thomas when he expressed his doubts about the resurrection appearance to others. He was present with them even though they did not see him. Reaching out to Jesus' side, he stopped doubting and believed that Jesus was alive. In their conversation, Thomas accepted him, calling Jesus his Lord and God. Then Jesus told him that those who believed without seeing him are more blessed than those who have seen and believed (Jn 20:28–29). It is noted that the synoptic gospels (Matthew, Mark and Luke) did not mention this experience of Thomas. Johannine tradition is distinct from others due to different theological purposes. Each narrator shaped their explanations mostly from oral traditions that existed during the first century in the communities concerned. The consciousness of the persons concerned in the narrations is influenced by their perceptions of actions and aspects of cognition. Finally, I present the transformation of St Thomas due to his visionary experiences from a neurophenomenological perspective as follows.

2. Definitions for visions

The visionary experiences of a person are defined as profound states of perception with cognition where the individual reports sensing, feeling or understanding things beyond ordinary reality without external stimuli. Varela et al ([1991] 2016, 228) affirm that cognition is an embodied action (enaction), as the emotional sense of self causes our awareness of seeing, hearing, tasting, smelling, touching and thought processes. Non-ordinary experiences occur through various means by a healthy individual when in extreme stress situations, bodily exhaustion or meditation. Visionary experiences make it complex to interpret the individual experiences. If they do not align with the cultural norms, they can be misinterpreted. In religious contexts, the authority of the visions can be used to control or manipulate others. It is also possible to integrate the insights from the visions in the individual's life to bring positive changes. Visionary spiritual experiences (VSE) are also part of visions as identified by Lukoff (2007, 638), that conceptual disorganisation and incoherence. Their experiences can have personally valid spiritual dimensions.

Martin (1956, 63) maintains that the physical body of Jesus became, in its resurrection, a body that was an instrument of his spirit, subject to no limitations of flesh. This mode of the resurrection against bodily limitations is a spiritually imperishable explanation. It displayed nonphysical attributes like appearing and disappearing at will. As Paul also saw in his visions, in a perfect union of spirit and body, Jesus was no longer in mortal flesh. Thus, there is both continuity and difference, like Jesus' resurrection body. But it does not explain how Jesus' body displayed both material and non-material characteristics.

During visions, a person may experience encounters with an internally generated symbolic field as a world out there. Reconstruction of structures that mediate perception and thought takes place instinctively in the conceptual levels of thought. A rearrangement of substructures affects the person even after the trance experience. The person remembers everything that happened as real experiences and re-enters the presence of the normal world. Even then, the reformed structures may exert pressure on the person to re-integrate the development of earlier structures. In the context consisting of physical, cultural and social aspects, visionary experiences confirm the reality existing in multiple levels of understanding for the person concerned. Clark (1997, 45) confirms that the nervous system interacts to yield desired outcomes with intrinsic bodily and environmental constraints. In a cultural context, body-world relations give rise to visionary experiences as revelatory knowledge. I define visionary experiences as real internal experiences when perception and cognition bring under particular environmental circumstances. In the bodily conditioning process, the sensory apparatus generates simulations. Whereas ordinary experience depends on perceiving environmental factors, visionary experiences occur without direct external stimulation from objects in the environment. Whereas ordinary experience depends on perceiving environmental factors, visionary experiences occur without direct external stimulation from objects in the environment.

The environmental conditions integrate the perceptions in everyday life within a worldview. Even though human bodies are similar in many respects, personal cognitive capacities differ, especially in the neuronal communication within the body. They also differ due to the environmental and cultural aspects in which they live and shape their behaviour in the

modern world, as it was about the people who lived in the ancient world. The phenomenological analyses of visions can help guide the scientific investigation due to the consciousness of the person, and the findings can in turn shape the future of the person concerned. This can happen even without stimuli from the environment, but due to the earlier picked-up information in the waking state, a person may experience visions. As visions are experiential phenomena, the limitations of this study depend on the factual disclosure or reporting of the persons concerned.

3. Perception in conventional cognitive science

Since the inception of cognitive science, there have been key ideas and metaphors promoting feature-full world representation inside through complex actions (Varela 1996, 345–346). These ideas arise because the world is materialistic and due to the physicality of tangible objects. In conventional cognitive science (cognitivism) cognition is the internal mental representations caused by interacting with an external world. A person's conscious perceptual relation with the environment in the world around cannot capture the objects and events in terms of the content of that perceptual experience. Internal mental representations cause interaction with an external world. A person's conscious perceptual relation with the environment in the world around cannot capture the objects and events in terms of the content of that perceptual experience. Since the inception of cognitive science, there have been explanations for ideas on neural activities for every human experience through complex actions. These ideas arise as the world is materialistic and due to the physicality of tangible objects. Seeing occurs when objects reflect light waves, which fall on the eyes of a person, where they are converted into electrochemical changes. In conventional cognitive science, as Varela et al ([1991] 2016, 8) note, mental cognition is the mind manipulating features of the world in a certain way. The sensory cells' excitation updates the perceiving image projected on the retina and cognitively interprets it as the experiences of sight in daily life.

3.1 Seeing as sight in cognitivism

Visual experience for sight through representation of objects, events and space are determined, as commented by Noë (2004, 96), by patterns

of retinal stimulation with retinotopic neural representations inside the visual thalamus and visual cortex. The existence of the subserving sight and the control of visually guided behaviour are the functionally separable visual systems in the brain. Input from light reflections reaching the retina produces stimulation, and the visual processes in different areas of the brain produce output for understanding through sight. The traditional approaches describe how the three-dimensional environmental layout produces a projection of that layout in two dimensions on the retina. Depending on a specific environment, the different ways in which mechanical, chemical and physical detectors in the human body participate in the diverse perception processes.

In the perceptual process, misperception also happens due to various factors. The neurophenomenology of time consciousness, as confirmed by Varela (1999, 295–296), is the mode of the now slipping into the just past, and so it appears as the presence of the past is distinct. The emotional tone is an integral part of the phenomenon. The notion that now is relative to the moment just passed is used for capturing cognitive information from the environment. A person's cognitive capacities are transformed due to the transactions with the structures in the environment. It is also confirmed by Manzotti (2017, 135) that all events seem to occur at a time earlier than an activity and this problem is due to the processes in our body in the past. The representation of these structures offers a straightforward explanation for misperception as misrepresentations. It is incompatible to compare the process of computational nature to the brain developing representations of the objects and events of a separate and distant world. The body's position is relative to the external objects, and the body is also an object and looking inside, one never experiences even the neurons or their activities. Original external objects do not create within the brain their replica in any form of matter or energy. As pointed out by Fuchs (2021, 157), the neuro-constructivist view of the real world is dramatically different from the one that we experience. Our perceptions are not the things themselves but only images or representations that they evoke immediately within the brain. This view provides that perception creates only an illusory world with neuronal simulation, particle movements, energy fields and other qualities of physical reality. In contrast to these, what happens is understood from the view of a neurophenomenological perspective.

3.2 Hallucinations in cognitivism

In order to redescribe visionary experiences with perception and cognition, the neurophenomenological perspective rejects the claim in conventional cognitive science that they are hallucinations. A person can perceive an object when there is not even an appropriate object externally that exists to be perceived. One of the definitions for hallucination in conventional cognitive science proposed by Anthony (2004, 110) states it occurs in the absence of corresponding external stimulation from the relevant sensory organ. It resembles a veridical perception over which the subject does not feel that has no control in the awake state. This experience is considered an aberration of sight without external sensory stimulus or impulses. Even though they can affect all the senses, visual hallucinations and auditory hallucinations are very common. If hallucinations are perceptions in the absence of sensations and delusions about influences from other people, they are not always associated. The term hallucination has a history that is used within the conventional view of sight and receives its meaning from that view. In conventional cognitive science, such experiences are often seen as pathological. Thus, hallucination has a negative meaning. But it is also true that many in that tradition have begun to see that not all hallucinations are pathological. However, with that framework, they still see hallucinations in contrast to seeing as representations in the head. In conventional cognitive science, hallucination is seen as a mistaken perception. Accordingly, sight is something in the head, and hallucination is also something in the head, as a mistaken version of sight. In the modern world, it can be distinguished between hallucinations, and other thought experiences that occur due to certain electro-chemical impulses firing neurons of the brain, producing images which do not correspond to any external matter.

3.3 Synaesthetic perceptions in physiology and psychology

In the case of subjective experiences like visionary experiences, it is worth noting the following experience of synaesthesia among certain individuals:

> Synaesthesia can be construed as a conscious experience in the absence of the normal preconscious sensory stimulation and therefore has the potential to inform theories about conscious perception. Psychophysical and functional imaging studies have

> attempted to establish which perceptual processes are involved in the synaesthetic experience (Ward 2013, 55).

As a perceptual phenomenon in which one sense elicits concurrent experiences of additional senses, like hearing voices in addition to seeing and feeling tactile physical sensations. This mixing of senses is an involuntary synaesthesia experience, unusual, automatic and not easy to distinguish from non-synaesthesia. Some people experience movement sensations in response to touch, auditory or visual sensations. A mix of sight, sound and touch is visual-auditory-tactile synaesthesia and is considered pathological in conventional cognitive science due to the mixing of their representations in the brain. These synaesthetic perceptions in physiology and psychology are applicable to neurophenomenology but without the ideas of representations in the brain. Awareness of perception and cognition is important in neurophenomenology when sensory information through multiple sensory pathways causes such experiences to occur in more than one sense, but not simultaneously. In pathological cases, neuronal activities occur randomly, with the mixing of different sensory modalities causing confusion in the patient. But, in the case of religious visionary experiences, the person is emotional when the experience in one modality leads continuously to other modalities in an order so that interpretation makes meaning and conscious understanding feel real. Different persons have different capacities to grasp ideas and behave accordingly due to the self-experiences in the environment in which they are brought up and continue to survive in that context due to neuronal activities along their pathways by the neurotransmitters. Perception for action affects a person's cognition and differs in the context of the person concerned at a moment of that experience.

4. Perception in neurophenomenological perspective

In a neurophenomenological perspective, perception of a person is the awareness of something that prompts action and is responded to with their cognition. Laughlin (2022, 20) confirms that it is only through perception that we maintain our understanding of the real world, as it is constantly tested by perceived feedback from our actions. Again, according to Laughlin (2011, 16), the value of neurophenomenology is important

in developing introspective, esoteric, qualitative and cultural data in building explanations of phenomena within a neuro-anthropological or neurophenomenological frame of reference. It shares and contributes to the conceptualisation of the consciousness of a person from perception and cognition in engagement with the environment. Another development is embodied cognitive neuroscience, in which embodiment and enactment promote completely different understandings of perception and cognition compared to conventional cognitive science. These completely different cognitive processes contribute to the criticism of the mainstream neuroscience of consciousness.

A neurophenomenological view on perception includes the role of cognitive processes. Varela et al ([1991] 2016, 235) write that perceptions, relationships and the activities of the mind expand into awareness with insight into the codependent lack of ultimate foundations for the mind or for the objects in the world. Perception integrates current and other possible perspectives on things and persons through their diversity implicitly. The neurophenomenological perspective rejects the notion of involuntary, stimulus-driven movements of the eye for seeing in conventional cognitive science. It favours a functional approach to the perception of relevant aspects of the environment in which eye movements support and facilitate action performance. A nested visual system is with the eyes, which are within the head, implying them within the body. When actively involved in exploring something over time, that becomes the object of awareness for the observing perceiver. A person's perception is a psychosomatic process for obtaining knowledge of the environment or world that is communicated to a receiver. These developments allow us to see perception as a way in which a person engages with the world through the perceptual system.

Encountering for the pickup of information from the world involves a perceptual system that functions together at all levels. For example, the organs of the visual system, beginning with the eyes' interior, muscles, and the mobile head on the body, all constitute information pickup through adjustments of their movements. In a perceptual system, attention is a skill that can be educated in exploring, orienting, or investigating. The act of linking occurs through perceiving every fresh glimpse of anything to the memories of that thing and registering them within the body for always availing. The neurophenomenological approach to visual perception begins

with the observer moving around an object of interest for its scrutiny and extracting the ambient awareness. It is an ongoing process which detects information, yielding a meaningful experience in the life of a person. As it yields meaningful knowledge, perception is cognitive for action through our history of structural coupling and is not pre-given. Through perception and action, mutual coupling occurs between the person and the environment. They help human beings look forward to new knowledge, either through seeing as sight or visionary experience, to defend their future in their world or environment. Fuchs (2021, 6) states that even our relationship to the environment will only succeed if our connectedness with our natural environment is at its centre. Human bodily activities take place in this habitable world, which requires connection to maintain its form through thoughtful actions. The perceptually guided action emerging from the cognitive structures enables the mutual coupling as they are intertwined. Cognition is always situated in the physical, cultural and social environments.

5. The embodied "self" creating real experiences

The embodied self of an individual can create real feelings in the body through its sensory pathways of neurotransmitters. In the enactive approach, these experiences are seen as something that takes place in the body. As Varela et al ([1991] 2016, 124) point out, the word self refers to mental-bodily coherence with integrity. A person is a single, integrated entity comprising both the physical and mental aspects. It emerges from the processes and relations to objects mediated by functions of the body like perception, attention and movement. For an individual, the embodied self-experience arises as the psychological properties that emerge from the physical processes.

The concept of self is formed due to the interconnectedness of the brain, body and environment in shaping its experiences. It is constructed through a dynamic interplay between biological, psychological, social and cultural factors. Gallagher (2000, 20) reports self is the totality of narratives, including within itself all the contradictions, equivocations, struggles and messages which are hidden to find expression in the life of a person. From another description, Damasio (1999, 154) calls the proto-self in an

individual that integrates neural patterns every moment that map to the stable aspects of the bodily structures. The outcome of this process is active during the engagement of a person with the world and is also known as the *experiential self,* which contains a record of its lived experiences and anticipated futures. The ensemble of brain devices contains, as Bucci (2002, 774) states, the proto-self, which continuously maintain relative stability for survival associated with its operations. A definition given by Bucci (2002, 775) of the name *core self* is the way a person is affected by the processing of an object, which results from the interactions with those parts concerned. Objects like memories and anticipations are also known to the *core self*, which generates its pulses of core consciousness. Perceiving or recalling a triggering object can be within the body boundaries or even external. For perception, an immediate factor is that which arises from the emergence of complex interactions within the body and its interactions with the world. Metzinger (2009, 208) puts the self as a process as long as life continues, for self-stabilisation and self-sustainment reflected in a conscious self. This makes the autobiography of a person conscious, with cultural beliefs and practices which influence social situatedness. Extended consciousness occurs during an experience reaching out to another person with the intention to do so. Damasio (1999, 222) states that the autobiographical self is generated when a particular object from the memory holds its place when required. Among resonating neuronal ensembles, the emergence of a global state occurs as the basic mechanism of recognition of sensory attributes, even when the tactile experiences alter the self and its embodiment internally.

From the embodied and enacted approach to sensory experiences, tactile feeling, perception and cognition are interlinked with the embodied self of the individual. The feeling of elevation of a person from the body and perceiving surroundings from a different perspective contributes to a tactile experience also, accompanied by intense sensations of something. These intense sensations bring complex and multifaceted experiences that can be described in various contexts. They are embodied experiences as products of certain neurological activities in particular contexts. The contents of these experiences are produced neurobiologically or psychologically, with alterations producing sensory experiences. In this context, psychology demonstrates how the self-generated symbols of the self are activated.

Miller (2012, 357) states activation of neurotransmitters is associated with responses within the body are influenced by chemicals like serotonin, dopamine and norepinephrine, which can contribute to the experience of visions, also affecting the neural pathways for sensory experiences. The sensory experiences during visions are offshoots of the altered state of embodied self in terms of neurophenomenology in the embodied system. In this approach, the central idea is the skilful interpretation of cognition in the experience and conveying the know-how in a situation suitable for action from the perceived experiences. Phenomenology and cognitive science are complementary as they mutually inform neurophenomenology, building the embodiment of the self as a human being is evident from ordinary personal experiences.

6. Applying neurophenomenology to tactile experiences of St Thomas

6.1 Tactile experiences of St Thomas' visions

During the visions of St Thomas, Jesus was standing beside him and reached out to him, showing his bodily movement reacting to the conversation in the environment of a locked room with the other disciples of Jesus. These kinaesthetic factors induce his experiences of intuition from his memories of living with Jesus and other disciples for about three years of participation in his teachings and messages before his crucifixion. His memories of Jesus in the abilities to empathise kinaesthetically might have induced his experience of Jesus' presence in his environment. 'The perceptual process best suited for nature awareness is a process whereby a person makes his or her mind very still so that it can pick up what is occurring in the environment and then act on it' (Lumpkin 2001, 47). He can remember what the other disciples in the locked room informed him about their experience of seeing the risen Jesus during the previous week and his intention of action of putting his finger on the marks of nail wounds on the side of Jesus. As cognition in the mind of a person is more than the brain and body due to synergy, it can extend beyond the self; it is possible to experience Jesus' presence as tactile visions. The sensory experiences, as the brain is a part of the body, 'can be seen to operate based on massive interconnections in a distributed form. The visual, auditory

and tactile experiences of St Thomas were the consequences of these in a neurophenomenological perspective. This is interpreted as a result of spiritual or divine interference, and his belief addressed Jesus as his Lord and God. In this experience, the bodily energies generated from his emotions and textures through touch were perceived as real experiences. The features of these tactile sensory experiences are identified in the following manner.

6.2 Lived experience of St Thomas seeing resurrected Jesus

The experiences of St Thomas as narrated in the Gospel of John are his lived experiences which "are lived and verbally articulated in the first-person, whether it be lived experiences of perception, action, memory, mental imagery, emotion, attention, empathy, self-consciousness, contemplative states, dreaming, and so forth" (Lutz & Thompson 2003, 32). Neurophenomenology stresses the importance of gathering first-person data. The narrator of the Gospel of John claims as follows about a first-person who testifies to what happened during the death of crucified Jesus and his wounds due to piercing his side. When the soldiers

> came to Jesus and found that he was already dead, they did not break his legs. Instead, one of the soldiers pierced Jesus' side with a spear, bringing a sudden flow of blood and water. The man who saw it has given testimony, and his testimony is true. He knows that he tells the truth, and he testifies so that you also may believe (Jn 19:33–35).

The disciples of Jesus, who were his followers and the person who testifies is believed to be the narrator himself. He also can be present in the locked room when St Thomas had the experience of seeing the wounds in visions, who believed the above and spread these messages to others. It is possible that people vary in their abilities as reporters and observers of their own experiences. The intention of St Thomas from the memories of his autobiographical self generates the tactile experience which constitutes the core self and affects his self-consciousness. These are linked to the bodily processes of St Thomas and regulate his visual and auditory experiences at that moment, affecting his emotion and intentional action of cognition, saying "My Lord and my God!" (Jn 20:28).

6.3 Feeling the texture in wounds of Jesus during visions of St Thomas

The feeling of St Thomas about the texture of the wounds of Jesus from the nailing during his crucifixion (Mt 27:35; Mk 15:24; Lk 23:33; Jn 19:23) and piercing his side with a spear by a soldier (Jn 19:34), as narrated in the Gospels, is important for his belief in the experience. In the cognitive-neurophysiological model, understanding the events of visions is due to human consciousness. Occurring the use of multiple perceptual processes during visions, as in the case of St Thomas' visions, is positive in the value of perceptual diversity in feeling the texture in the wounds of Jesus during his experiences of communication, conversation, seeing, hearing and touching. "States of increased arousal (or hyperarousal) are represented by sensitivity, creativity, anxiety, ecstasy, and mystical rapture" (Lumpkin 2001, 38). These induction processes in visions are recognised in cultures by individuals and add their values to the belief system of those concerned.

6.4 Sensing the divine presence of Jesus

St Thomas' sensing the divine presence of Jesus as his Lord and God through touch and movement or tactile sensations is identified from the narrations in the Gospels. Gallagher et al (2015, 160) observe that any movement of our body affects sight when moving from one side of our head to the other, or up and down and our spatial perspective on the world changes. Even if it happens only in a minimal fashion, the visual system allows for registering changes in the environment differently, producing identical effects in the visual experience. Perception is an active engagement of living beings with their environment, and through such interactions we see, hear, or experience the world through perception and cognition. It is also based on the ability of humans to grasp objects and events independently in a subjective perspective, not by creating images in the brain or any other representations. Visions are not supernatural in the sense that they are extraordinary. It is natural that humans feel the reality of events and objects in the world and can reflect on them later. They are also not pathological, as visions are natural processes. To understand sight and visions in a particular way through perception and cognition, a neurophenomenological approach gives a better explanation. Like all kinds of perception, seeing, because sight is seen as the product of cognition of

a person. The experience of seeing objects and events in the environment involves the capacity for self-observation due to cognitive awareness. Through perception and action, the organism and environment are structurally coupled. The behaviours of the perceptual systems organise the properties for perceiving to detect the information from the environment. While the organs of the visual system participate in the processes of attention, cognitive skills to focus and the content analysis of the visual experience of objects occur simultaneously. Though the visual cortex is necessary for seeing, it sees nothing at all because perceiving, seeing and feeling are activities of all living beings. The bodily visual experiences from the physical environment are perceived through the two eyes, resulting in binocular vision. This process enables us to see the depth of objects without the representations in the brain. As Gallagher (2023, 9) argues that the structure, motor abilities and composition of our physical body determine how we experience things, what we experience and how we understand the world. A person self-perceives the world and feelings by picking up information through the bodily structures while focusing on them due to internal mechanisms.

Visions form a sub-category of seeing in the absence of picking up information externally from objects but internally being aware of them as real knowledge due to the reshuffling activities of neuronal processes within the body. Perception is the passive reception of the pickup of information, causing sensations within the body without any representation inside the brain. The cognitivist view has been recently challenged by the views on inactivism with the embodied and enactive approaches to cognition. The actions of the neurons inside the body connect the lived experiences through neurotransmitters. The body schemas are not constituted to interpret one part as a representation of the other. If the human sensory experience is moulded by the representations, it also creates the problem of sensing the representations. Hence, as a human being actively living in an environment, the neurophenomenological perspective on visions has more preference than the ideas of representationalism in conventional cognitive science.

Visions are different from the understanding in cognitivism, as it rejects them as hallucinations. A person's conscious perceptual relation with the environment in the world around cannot capture the objects and events

as content of that perceptual experience. As a subjective experience is an object in the visions, but not a body implies that the body is also an object. Each time a person interacts with a situation in an environment, mental activities due to the neuronal network structures are performed for future reflections. All human experiences in the world, including subjective and objective, are actual objects for perception in the understanding of visions as revelations of new knowledge from a neurophenomenological perspective.

6.5 Receiving auditory, visual and tactile experiences

Receiving auditory, visual and tactile experiences accompanied by a sense of comfort and guidance with bodily feelings for St Thomas was due to the respective "neural circuitry forms models that have been passed down through DNA and are formed during neurogenesis under the direction of genetic inheritance" (Laughlin et al 1990, 43). The cognitive neural models for bodily feelings "are living cells" that organise themselves into circuits, not microchips. Neural models begin as nascent structures that function in a rudimentary way as models, and those models that are involved with knowing reality begin life as neurognosis – as species-specific, primitive knowledge about the world and self that are "already there" in a very human way (Laughlin 2011, 124). These develop depending on the cultural and physical environment in which the individuals in the community are living. In the case of St Thomas and other disciples of Jesus, "On the evening of that first day of the week, when the disciples were together, with the doors locked for fear of the Jews, Jesus came and stood among them" (Jn 20:19) and offered them peace. They were all bereaved after the crucifixion and death of Jesus. According to Callahan (2010, 176), 'The Jerusalem priests have plotted to kill Jesus because of his project to reunify all Israel, in Palestine and beyond'. The disciples assembled in the locked room were also afraid for their own lives immediately after the events of death happened to Jesus. But their visionary experiences of resurrected Jesus strengthened them, as the greeting of Jesus involved "Peace be with you!" (Jn 20:19, 26), which strengthened their belief and motivated them to spread the message afterwards.

7. Comparing neurophenomenology with cognitivism

Visions are different from the understanding in cognitivism, as it rejects them as hallucinations. A person's conscious perceptual relation with the environment in the world around cannot capture the objects and events as content of that perceptual experience. As a subjective experience is an object in the visions, but not a body implies that the body is also an object. Each time a person interacts with a situation in an environment, mental activities due to the neuronal network structures are performed for future reflections. I argue that all our experiences in the world, including subjective and objective, are actual objects for perception in the understanding of visions as revelations of new knowledge from a neurophenomenological perspective.

7.1 Experiencing mental connections with the departed

St Thomas experienced a connection with the divine Jesus and a sense of unity through physical touch or sensation. His intense and meaningful experiences did not lead him to doubt and are interpreted as real spiritual experiences. They modified his perception of Jesus as a disciple and led him to action, motivating him to move outside the Roman Empire towards the East and spread the messages of Jesus according to his cognition to those people where he travelled.

7.2 Transformation of St Thomas from a doubter to a believer in resurrection

The experiences of St Thomas resulted in his transformation from a doubter to a believer. Experiencing the wounds of Jesus, tracking his eyes according to his intention can be compared to the following aspects of cognition. Thinking ourselves in that position,

> we can feel in kinaesthetic terms the temporal and spatial trajectory of our action. In what sense do such processes involve a disengagement or decoupling, rather than a dynamical physical linkage – relying on the physical processes of my eyes tracking (the wounds), activating extraocular muscles and kinaesthetic sense, and my hand already in movement, generating its own proprioceptive kinaesthetic feedback? (Gallagher 2023, 39).

The feedback is the texture of the wounds of Jesus at his crucifixion, and the fingers in the hand of St Thomas on his body, along with the visual aspects extended to the body of Jesus and the feelings are returned. These bodily cognitive experiences of St Thomas transform him from a doubter to a believer in resurrection at that moment. The importance of body-environment coupling for cognition occurs in that affect- or emotion-related process. "Affect is deeply embodied. It is constrained by the functioning of the circulatory system" (Gallagher 2023, 13) of the body. Our affective states and perceptual experiences are flesh-and-blood creations in the 'living bodies equipped with beating hearts, rather than brains in vats', as Gallagher explains further. In the context of St Thomas' experience, taking "the brain-body-environment as the explanatory unit, and if we maintain that the biological and extended nature of the system makes a significant difference, then an account in terms of attunements and affordances seems more relevant" (Gallagher 2023, 44). His bodily nervous system was attuned to afford the intentionality of putting his fingers on the marks of wounds on Jesus' body at crucifixion. These are intrinsic to understanding perception for action from his memories of Jesus. The embodied engagement of St Thomas with Jesus led to his sense-making of the experience through the integration of visual, auditory and oral communications in the visions.

8. Conclusion

The cognition of St Thomas during his sensory experiences of Jesus was complex and continuous with visual, auditory and tactile experiences due to bodily, internal neural circuits occurring along the pathways of neurotransmitters. Prior knowledge leads to intention, and perception leads to action after the cognition of the events from affective dispositions in the space of affordance. In the cultural contexts of the community in which he lived, they were acceptable to them and motivated them to spread their belief about the resurrection of Jesus and a new religion was formed gradually.

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