

Action, Body, Technology: A study of cave, “The Man Who” and hands

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***Abstract:** The study of technology opens up a possibility of reformulation of the concepts and practices of the triad body, brain, and environment. Technology, as a surface, produces in reflection an encounter of the triadic relation of body-brain-environment with itself. Through a conjunct study of three disciplines - philosophy (through the Plato’s allegory of cave), theatre (through Peter Brook’s The Man Who) and science (through neurological case studies), I seek to propose that the triad is in both a material and virtual relation, where material and virtual are “allelic” pairs.*

***Keywords:** body, technology, environment, brain, the virtual.*

Introduction

Technology often engages in the production of a newer perception and experience. Actions and possibilities of actions through technological enhancement and prosthesis open up new modes of behavior. The act of attaching the body to technology gives an invitation to look at the *material* and the *virtual* by/in the body. Technology in my paper is a surface; a bounded one of reflections in a close relation, unconcealed and arranged for interaction. It is a surface where the triadic ecology of body-brain-environment encounters its own relationship. The triadic relation in other words is brought closer to itself. This migration closer to itself mediated by technology is a new way of structuring the relationship and its material ecology. Here, technology is not merely a medium to execute a task but is also a creator and animator which attends and is orientated towards varieties of triad formations that cannot be presumed beforehand.

The triadic relation of body-brain-environment implies that each is haunted by the other; sometimes evading, sometimes capturing. To elaborate, an individual does not merely live in its environment, controlling or mastering it, but also as an entity that gets excited and stimulated by it. The excitations and stimulations cannot be consciously intended or controlled or manipulated. The excitations and stimulations also reach the brain which acts as a mediator between organs and transfers it to the tissues and the other contact surfaces. By mediator, I imply that it acts both as an adjunct and as an intervener between two body parts. The body organs or parts receive excitation from both directly outside and through the mediation of the brain. Perception and experience hence, are not entirely determined by and in the neural networks of the brain but also by the sensory stimuli received from the environment. Visual or auditory hallucinations are an example of experiences produced directly by the brain. The brain generates images and sounds

that the eye sees, and the ear hears, while acting with/in the environment. These hallucinations, in turn, affect the way a body behaves in its environment. Direct stimulation of the body happens during a situation such as sudden event in the environment like a natural catastrophe, a war trauma like of torture, rape, and economic trauma such as sudden unemployment or homelessness. The suddenness is felt as trauma which cannot be immediately, directly and easily deciphered by the brain. On the other hand, the body acts out in the world, a doing which acts upon the body and the brain too. Environment, body, and brain thus respond to each other and work in relationship with each other.

As I use the term *body*, I have full cognizance of the body-mind bifurcation that exists in the discourse of philosophy and that is aroused by the usage of the concept. I do not discuss mind in my paper. My interest in the paper is to address the dichotomies of body-brain, body-environment and brain-environment and discuss the triad ecology of body-brain-environment that emerges, flourishes, interacts with and through the reflection of itself as created by technology. Technology, here, is an active surface that builds a possibility of capturing, recording, reflecting and revealing the brain of the triadic relationship and putting what it captures into the triadic ecology. Technology thus is not a passive reflector. Each technology is a surface that is unique and particular in terms of how its reflection organises the triad. It is unique, that is its mystery. By the sheer nature of its uniqueness, the effects, or results of reflections created and superimposed by technology, cannot be pre-determined.

To find another kind of knowing pertaining to the triadic relation, technology by bridging the split between the *material* and the *virtual* brings an attitude of freshness towards the relationship. From bringing an instantaneous familiarity in the triad of its relation through the reflection from technology's surface, the relationship passes onto a new life. Technology here is not an interface. Interface, according to the Oxford English Dictionary, means a point where two systems, subjects, organisations meet and interact. An interface connects two different systems; two different spaces. What will be an interface when a connection within one system and with itself is elaborated upon? The technology expands the relationship from within which opens a reality revealed only when the interaction of the body, brain and environment encounters a surface that blocks their movement and offers itself in the formation of the triadic relationship. The swamps of surface produce a jarring encounter of the triadic components otherwise concealed in inactivity with each other. To explore in more depth a deeper understanding of such a surface that explicates the virtual and the material nature of the triad of brain-body-environment, I would study Plato's cave parable followed by an analysis of Peter Brook's *The Man Who* and an examination of a few case studies from neurology.

1. In the Shadow of Plato's Cave

In the cave allegory,¹ the prisoner's world of knowledge and light lies outside the cave. The cave is a prison of appearances, understood to be a copy of those which exist outside. Instead of going by this understanding, I would like to speculatively analyse the aesthetics of the spectacle created in Plato's cave. The cave is a cave of appearances densely populated with prisoners and shadows and yet in another sense is devoid of the density and of the concreteness of Plato's ideas and knowledge. The emptiness of the cave's dark space is filled with the activity of this world. The prisoners are continuously in motion producing and watching the images projected onto the wall. In this regard, the spectacle of the cave is a sequence of images being projected onto

1 Plato, *The Republic*, Book VII, trans. Benjamin Jowett, available online at <http://classics.mit.edu/Plato/republic.8.vii.html>

a surface watched by an audience who is itself projected as a spectacle. The sensations that the spectator receives directly stimulates the brain. There are maps of the body in the brain, so stimulation in a certain region of the brain excites the corresponding body part. The excitation of the body part and the stimulation of the brain is mapped on the wall. The mapping on the wall further stimulates the neural connections of the spectator.

The wall picks up the movements and the “inner” experiences of the prisoner such as the decision to move. The manipulation of the environment through such movements of the body determines the prisoner’s perception of itself. The body, its actions, its “inner” experiences are (on) the wall/ stage. This wall of activity is grasping and immersive involving the prisoner completely. The observation of the spectacle is an integral feature of the cave parable and brings us in an analogy with science which is guided by human observation. Light exposes that which is in the cave. It brings the cave to light, rendering it visible and hence knowable. The appearance in the cave is hence not to be treated as a temporary referent to the reality but as that which creates a perception of the object/ideas. It creates a visual field for the idea of an object to appear. The field transforms sensory objects (of bodies) into virtual objects (of shadows and their movement), and by linking the two formulates them for a new and different avatar. The new avatar is the audience immersed in the spectacle, creating that which it watches and engages with. This new avatar is both sensorial (bodily experiencing and creating the spectacle) and virtual (itself the spectacle which is an allele to that who watches it).

Virtual in common parlance is understood as something that does not quite exist. The word gained this meaning with the development of computer technology in the 1960s. It was used for something that is “made to appear to exist physically” in reference to virtual memory and virtual machine. “Virtual memory is essentially a matter of extending and enhancing the physically real, by “fooling the machine” into believing its memory is greater than it is, something particularly useful in the early days of computers when physical memory was expensive and, by today’s standards (megabytes and gigabytes), very small (measured in kilobytes, or 0.001 of a megabyte).”² This understanding of the virtual was later expanded in the 1990s to virtual reality which is an environment that allowed experiences and interactions without it existing materially. The effects created thus, were real. It is in accordance with this meaning that I use the word virtual. Virtual is that which does not have a material existence yet produces an effect in the material. It may not exist in material nonetheless is mediated through material therefore is also in association with the material.

In Plato’s cave, the virtual exists as a default allele to the bodily or the material because of its intimate interaction with body, brain and environment (the cave). It is an allele in the sense of inheritance with the material like the gene variation. The *virtual* in the material is the transcendent living contingent. The virtual imitates the material, and the material imitates the virtual. They are indissociable. Together, they create a movement that is invisible and transforming, like the prisoner freed that leaves the cave and comes back. The prisoner in Plato’s cave is indissociable from her existence in the cave or rather from the cave (or the environment). The cave is also a space that cannot be escaped from or rather is not meant to be escaped from. It creates and produces sensations to which the prisoner, once free, keeps coming back to (and responds to). The visible elements of the cave i.e. the shadows and appearances are ghosted by the physical bodies of the prisoners, their behavior, their movements and their neural firings. The prisoner that goes out of the cave and enters Plato’s world of ideas does so by exceeding its

² Steven Pinker, editor’s introduction to *Digital and Other Virtualities: Renegotiating the Image*, ed. Antony Bryant, Griselda Pollock (London: I. B. Tauris, 2010), p. 11.

“prisoned” self. The prisoner had followed the light of this world to exit the cave, and she returns to the cave with a voice of itself. The prisoner returns to the cave to share that which the self has learnt outside. In the coming back of the prisoner, there is a confluence of knowledge (light) and the immersive, spectacular world of/in the dark cave.

The luminosity of the world outside is a witness to the immersive environment of the cave. A cave that is eternal that supports life as a mother does in her womb. The cave offers anonymity to its dwellers who are untouched by the world outside. The darkness of the cave is creative with its dwellers in continuous interaction with their virtual allele as a spectator. The walls are like mirrors but are not mirrors. Mirrors that project outward (into the cave) that which falls upon them. The light and the cave mediates the formation of shadows and images (of the prisoners) on the walls and their projection back into the sensory field of the prisoners. Without the cave (so as without the light and the prisoners), the glistening allele of the virtual often engaging in a production of a newer perception and experience the material could not have emerged. Hence, the same cave, which seemed to be the prison for individuals, is the space of freedom - where freedom is realised, experienced and shared. Freedom to go out, to explore, and to break the shackles of prison. Freedom to perform to oneself, to watch and enjoy a spectacle, to create a spectacle collectively. In the ‘not so visible’ cave, the only order is that of prisoner’s breathing. I let this breath guide us to a further exploration of the surface, which in the cave parable is the cave wall, and in Peter Brook’s play is the recording technology, to establish an understanding of the triadic relationship that is neither purely material nor purely virtual.

2. On the Stage of *The Man Who*

I now enter into the domain of theatre to further investigate into the intimate allelic nature of *material* and *virtual* and understand it through the interactions between virtual-material triadic ecology of brain-body-environment and technology. I would study Peter Brook’s *The Man Who* (*L’Homme qui*, 1993),³ written in collaboration by Peter Brook and Marie-Helene Estienne, and is based on Oliver Sacks’ book *The Man Who Mistook his Wife for a Hat*. It opens a new unknown landscape of human and brain in a lucid and sympathetic manner.⁴ It is a play with four actors (David Bennent, Yoshi Oida, Sotigui Kouyate, and Maurice Benichou, the latter replaced by Bruce Myers in the New York production), a musician (Mahmoud Tabrizi-Zadeh), a video camera, two television monitors, and minimal props (like chairs) on a raised square wooden platform stage. I have referred to both reviews and articles about this play and Brooks’ interviews as well as a production of the play by the Duke University Theatre Studies department directed by Kari Barclay.⁵

The play displays exchanges between a doctor and a patient where each actor becomes either character interchangeably. Simple exchanges of questioning by the doctor and the patient’s reply to them demonstrate a mode of perception and behavior that is very different. Some fail to recognise a side of their body as their own; some have devastatingly weak memory; some are

3 It is one of the first play of the trilogy of Peter Brook on cases of neurological disorders. The second was *I am a Phenomenon* (*Je suis un phénomène*) (1998) and the third was *Valley of Astonishment* (2014). All three productions are under two hours each.

4 Peter Brook found in neurology a basis for his theatre when Oliver Sacks took Brook around in neurological wards in New York. Peter Brook and the company did field research by visiting many mental hospitals of Paris and London, meeting various inmates and saw several videos. They found cases equivalent to the ones Sacks discusses in his book. For the first couple of months they studied cases and extracted the relevant material. The script was written after many years of research and experimentation and consultations with physicians and neurologists, including Oliver Sacks himself.

5 Peter Brook, *The Man Who*, directed Kari Barclay (1993; Durham: Duke University Theatre Studies department, 2014). Video. The production was designed by Austin Powers. The actors were Samuel Kebede, Faye Goodwin, Nick Prey, and Cynthia Wang.

prone to painful, violent tics; some cannot recognise things visually. Two patients are shown an image of rolling waves on the television monitor.⁶ When asked about it, one said that the image is that of horizontal lines and the other says that it is a spot of color. When the sound of the waves is added to the film both remarked that it looked like the sea. These patients suffered from visual agnosia where they had no identification and recognition of objects by sight.⁷

The use of a camera and its interaction with the patients becomes the turning point of the play. The camera records the exchanges between the doctor and the patient. The doctor shows the recordings to the patients. In this encounter with themselves in the recording, the patients are taken aback. The technology to record and replay becomes an important tool to present onstage the disorienting sensory encounters of the individuals. The dissociation of each gesture from its meaning comes out starkly. For one of the patients, the doctor records his recitation of a passage from Thomas Gray's *Elegy* and then made him listen to the recording. On hearing nothing but jargon, he starts to cry. For another, the doctor uses a mirror to show to the man to his astonishment that he has only shaved one side of his face. To another elderly patient, the doctor asks, "How old are you?" The patient replies, "I'm 23." The doctor gives him a mirror to look at himself. He asks horrified and astonished, "What's happened to me, doctor?" The play then ends "with vivid close-ups of the cerebral cortex projected on screens. Three doctors watch in silence. A patient sits apart, eyes closed, lost in his own inner space. Each in his own way contemplates the infinite mysteries of the brain, that "valley of astonishment," as Brook calls it, which they can never fully fathom."⁸

The play demonstrates the brains of people, who suffer from neurological disorders, through their association with their body and language. Through their actions and utterances, the play depicts the inner landscape of the patients to which their everyday behaviors belong. Through their encounter with mirror, sound recorder, and video recorder, the patients are horrifyingly brought closer in familiarity to their living life. The echoing of their behavior by the recording technology serves as the origins of their living behavior. The encounter of the patients with the recording technology is an encounter with their own brain. The image of their behavior and activities, that the recording technology reflects back, is discordant with the image of their acting-hood that they thought to have realised. The doctors use technology with the intention to introduce the patients to the reflection of their own actions and behaviors when recorded and replayed. The technology powerfully creates the brains of the patients through their actions and behaviors and proposes to the patients a connection to themselves through this encounter via technology. The process of differentiation that technology seemingly creates between the material or the bodily behavior and the virtual or the diagnosis of the brain is also the same process that redeems material and virtual from an oppositional dichotomy and establishes them as necessary correlatives or allelic pairs. The use of recording technology and the projection of that which is recorded makes the stage (like the walls of Plato's cave makes the cave) a platform that displays the intimate, living, intricate relationship between bodily and virtual. A relationship that is continuous, imitative and mutative, revealing a new kaleidoscopic pattern each time. The sparkling patterns are nothing but virtual webs on which materiality descends upon taking a form.

6 Peter Brook, "A journey into the brain," Peter Brook Official Website, May 6, 2014, accessed May 2018, <http://www.newspeterbrook.com/2014/05/06/un-voyage-dans-le-cerveau/>.

7 Gautam Dasgupta, "Peter Brook: The Man Who...", *Performing Arts Journal* 18, no. 1 (1996): 81-88, accessed April 20, 2018, <https://muse.jhu.edu/article/25573>.

8 Philippa Wehle, "The Man Who Mistook His Wife for a Hat," *American Theatre* 12, no. 4 (1995): 20.

The piecewise indifferent narrative of history-less behavior, brought to the stage by the actors, leaves the spectators taken aback by the pathos, pain, strangeness and courage of these individuals. The actors played the characters without evoking any particular social, cultural or economic background. The actors demonstrate modes of behavior that have a uniquely different relationship with the body and hence with the environment. “It was as if the actors were not acting, but simply existing onstage. As such, this kind of performance was a rare example of acting in the here and now. The quietness of the actors, the economy of their movements, the authenticity of gesture, and the serenity of the playing suggested a meditation on the fragility and vulnerability of all human beings—all damaged souls.”⁹ Yoshi Oida, one of the actors of *The Man Who*, writes in his book, *The Invisible Actor*,¹⁰ that the only way he was able to play a character with a neurological disorder was by a very careful and detailed development of each action. Earlier he could not even relate to the character and found it illogical to portray. But as he developed each action, as he focused at the smallest details, at the tempo, he felt the damaged individual emerge. He writes that he was terrified at realising the possibility that he could easily become the damaged without even knowing about it.

As evident from Oida’s account, it is through the body (of the actors), the brain (of a patient with neurological disorders) becomes formed as the actor, when it becomes active through the behavior (action) of the character. In other words, through the detailed display of body movement and behavior, a diagnosis of a brain or neural connections is put on display. Brain here is not merely an organ with electrochemical workings. It is a mode of behavior that the play presents through minimal theatricality by bringing to stage the materiality of a human being with neurological disorders, to reveal the hidden folds of the brain. By emptying the gestures of their theatricality, and by making them as simple and minimal as possible, the actors try to play a “pure brain”. Hence, the formation of the brain is contextual and emergent. In this emergence, theatre becomes an instrument to represent the damaged in/through the activity and the interactions of the body; and it is only through a disorder of some type that the deep valleys of the brain are revealed invoking incomprehension and astonishment.

If the technology is to expand/contract the limits of mobility or of perception of the body, it can also reflect the limits of the body back to the person who has been recorded. In the context of such a projection, there seems to lie no difference between the recording technology that showcases to the patients their behavior (and also indicating their brain mechanisms) and the walls of Plato’s cave that reflect back their actions and neural workings. By such a logic, the cave wall is as much a technology as a camera or a sound recorder. The solidity of the wall has a mechanism of opacity through which it reflects back, while a camera and a sound recorder have a mechanism of recording by which they reflect back that which it “watches.” The brain-body-environment triadic ecology is mapped onto these technologies. Technologies hence, are surfaces that can capture, record, reflect that which it touches or touches it. What the technology reflects is the virtual brain-body-environment ecology to the material brain-body-environment triadic ecology. This encounter of the material and the virtual is allelic in nature. To elucidate it, I have here separated the material from virtual, but in reality, the two are indissociable, so much so that it is difficult to tell what is purely material and what is purely virtual. As technology becomes the surface to reflect the triadic relationship through behavior and activities, it becomes pertinent to analyse action or activity in order to understand its role in the emergence of this ecology. Hence, to gain an understanding of the body-brain-environment relationship demands

9 Margaret Croyden, *Conversations with Peter Brook, 1970–2000* (New York: Theatre Communications Group, 2009), 273.

10 Yoshi Oida and Lorna Marshall, *The Invisible Actor* (New York: Routledge, 1997).

articulations of both behavior and activities, including reflections of behavior and activities via technology onto the triadic relationship.

3. At the Hands of Action

In Plato's cave, the origin of knowledge is in a deed; sudden act, a sudden turn that a prisoner makes. Although for Plato, what destroys ignorance or appearance is the true knowledge of ideas and not the turning of the head from appearances to ideas; the knowledge is produced by its own accord, and the turning of the head is an accidental factor. I instead propose that it is this accidental factor of action in the non-existence of true knowledge that stimulates a pursuit of true knowledge. An action thus becomes the beginning point. An action of a material body and on a material body. The prolonged duration of this action (or movement) or in its repetition (behavior) develops forth a virtual-body allele within the backdrop of a surface as seen earlier through the examples of Plato's cave and Brook's *The Man Who*. A material action is needed for creating a virtual bodily existence. It is in action that there is a collusion between existence and the environment. In that instance, a new form of existence is composed in the world. The form is material and finely distilled with virtual characteristics. The force of this existence is connected to the environment that overflows with the contingent, unforeseen, multisensory provocation. A form is born out of action and is sustained by the environment.

An accidental action or rather an impulse, makes a person do what it had never done, or it thought it could never do. In one of his case studies, Oliver Sacks discusses a case of sixty-year-old J. Madeleine¹¹ who had never used her hands in her life. She was congenitally blind with cerebral palsy and was taken care of by her family. She found her hands to be completely useless and felt as if she had no hands. Her hands could not recognise any object neither did they care to explore. In Sacks' words, there was no interrogation in her hands. They were inert and inactive. She had to be coaxed into action, but to no avail. Her first hand movement occurred whilst hungry; impatiently she suddenly reached out her arm, groping for a morsel, and fed herself. Sacks calls it the first impulse that induced movements in her hands and gave birth to perception in her hands. Her hands were perfectly fine with no sensory deficit. The question arises as to what was it that rendered them functionless to the point of their non-existence? This is because she was "taken care" of and that she never learned the use of her hands as infants do. Yet she could acquire active use of her hands in her sixtieth year despite never having used them before. She could now easily identify with her hand. Until then, no meaning, no thinking, no talking or no intelligence could change the (virtual) association¹² that she had with her (bodily) hands, as she previously identified herself as having no hands.

Virtual as non-material is not independent of material. The virtual of the body is malleable and mutable. It manifests in the mode of behavior. The virtual can get altered by the use of the material (body or specifically hands in the case discussed earlier) whereas the use, an action or a movement of the body, can create a new virtual (association), and hence a new body. The change in virtual determines the change in material, the hand not a hand becomes a hand. In Madeleine's case, despite the existence of hands, she had no hands in her conduct in/with the world hence

11 Oliver Sacks, *The Man who mistook his wife for a hat: And Other clinical tales* (New York: Simon & Schuster, 1998), 59-66.

12 Here I attempt to argue is that even though Madeleine has physical hands, her relation to her hands is not determined by the materiality of the hands but something like a virtual association that arises with the material or physical hand only in its use. Use, movement, action, behavior in that sense is a bridge between the virtual and the body or rather the material (for the body has been understood to be as a material entity only). What I hence argue is that it has an allelic pair in virtual, that is, the body is also a virtual entity. The virtual and the material linked through action. It is the virtual of the body through the material of the body that creates different modes of behavior.

denoting she acknowledged her body without hands or rather she was a body without hands. Her association changed due to the use of her hands. The use made her associate with her hands as being her own hands, with her body now endowed with completely functional hands. This indicates that an individual although mediated by the physical body is not limited within and by the material of the body but is determined by the virtual of the body. Madeleine could extend to include an object, a tool, a machine or in her case her own limb or contract to exclude the given body parts from the virtual of the body and hence the body. If, for example, a person were to use a machine to enhance its mobility such as an electric wheelchair, the wheelchair could be understood as analogous to a (prosthetic) limb. This technology that enhances mobility for a human is where the virtual association with the wheelchair as the limb or body is established. The technology here is a creative surface for the formation of virtual association and the form of a body to emerge. Behind the virtual (association) reoriented by an action lurks the creative power of the technological surface; the sheer force of formation. Technology gives rise to new form of assimilation of the virtual with the material and recognises their allelic pairing.

Doings pus in perpetual movement the triadic relationship of body-brain-environment. Another example that shows this rapidly changing relationship is the rubber hand illusion which was discovered by psychologists in Pennsylvania at the end of the last century. This illusion can be experienced by keeping an inflated rubber glove on a table in one’s field of vision and hiding the real hand away behind cardboard. The “fake” hand and the concealed “real” hand are both stroked and tapped using identical movements. The strokes and taps should be the same and synchronous on both hands which are placed in the same position. With the continuous looking and stroking of the “fake” hand for some time, the person begins to associate and recognise the “fake” hand as the “real” hand, whilst losing any sense of attachment or association with the actual “real” hand.¹³ As the hand is no more a part of the body, it no more can be used as before. Such illusions have been seen in cases of stroke patients when they do not associate with their paralysed limb as their own and sometimes instead develop an association with someone else’s limbs as belonging to themselves. Under this illusion, the brain is no longer geared to use the real limb with which it has lost connection and association.

Another group of scientists conducted an experiment with a fake hand but blindfolded participants to see if vision played an important role or not. The scientist moved the participant’s left index finger to touch the “fake” hand and simultaneously touched the participant’s “real” right hand in exactly the same fashion. According to their findings, within 9.7 seconds of the illusion, it was demonstrated that by touching the “fake” hand the participant felt it was touching their own hand.¹⁴ This experiment shows that the rubber-hand illusion is not produced by vision. It depends on the synchronous tactile and simple proprioceptive¹⁵ signals from two body parts.¹⁶ This is sufficient enough for the body to recognise the fake rubber hand as its own and derecognise its real hand. Multisensory signals play a crucial role in the reformulation of the body.

13 “Body illusions: Rubber hand illusion,” *New Scientist*, last modified March 18, 2009, <https://www.newscientist.com/article/dn16809-body-illusions-rubber-hand-illusion/>.

14 H. Henrik Ehrsson, Nicholas P. Holmes and Richard E. Passingham, “Touching a Rubber Hand: Feeling of Body Ownership Is Associated with Activity in Multisensory Brain Areas,” *The Journal of Neuroscience* 25, no. 45 (2005): 10566.

15 Proprioception comes from Latin word *proprius* which means “one’s own” perception. It is also referred to as the third sense (where the other two are- six exteroceptive (by which the outside world is perceived) senses are sight, taste, smell, touch, hearing and balance and interoceptive senses (by which the pain and the stretching of internal organs is perceived)) that tells of the relative position of body segments in relation to other. Proprioception can get impaired when one is tired or during epilepsy or injury in one of the joints.

16 *Ibid.*, p. 10569.

The rubber hand illusion depicts the significance of sensory perception that is the stimuli received from the milieu and its capacity to bodily transform a virtual relationship. Virtual ensures multiple differentiation due to its malleable and manipulative nature. The participant begins to identify with the fake hand as its own. The multi-sensory signals, received through the body from the environment, redirects the brain to associate and recognize a new body as its own. This experiment shows that the limits of the body in relation to the brain are not limited to the physical body given since birth. The body can be fake hands; it can be a prosthetic leg; it can be antennas attached to the head; it can be the body in a video game. Practice is the starting point that generates characteristics of both material and virtual, reorganised through sensory perception onto the backdrop of a surface,¹⁷ to create a form of the triadic relationship. The acting body immersed in a milieu of sensory stimulation mediating the movements and stimulations to the brain through technology is a body in conjunction with brain and environment.

Conclusion

The body-brain becomes the embodied means of practice in a complex relationship with the environment. Within this context, Brooks' play offers a significant platform to understand the triadic relationship and to further contemplate on the body-virtual allele of the prisoner in the cave, by bringing to picture an explosive interjection with technology. Exploring more deeply into the triad, technology is a necessity which brings a sheer effectiveness in explicating the triadic relationship that is united through the contraries of the material and the virtual. Theatre, by creating onstage very specific and particular theatrical images of individual behavior, brings to light the basic universal materiality of human behavior, becomes a laboratory space that through pure demonstrative gestures gives the audience a peek into the body and its intricate relationship with the brain facilitated by technology.

Theatre, in conjunction with the neurological research and psychiatric case studies on action, establishes the virtual to be a cause of multiplicity of existence and causes existence in the reflexivity of the body-brain-environment relationship through technology. The virtual causes the material to be immersed in the milieu that coils around and percolates through in a manner that both are non-differentiated. If the material is visible in form, virtual is a characteristic indicated through form. The material always carries the virtual within itself. What the virtual of the material indicates is the physiological forms of the material. The virtual is then the projection of many uses and functions; and hence many ways of life that can be explored, lived and codified. It is a speculation of the existence of a relationship of body-brain-environment which is dynamic and transformative.

The virtual-material allelic relation places the triad at the juncture of the clinic (biology), theatre (culture) and parable (philosophy). The triadic relationship is a virtual relationship whose continuous wiring is embedded in acting and plays out in reflection through technology. It seems thus that technology has an indispensable importance in shaping the virtual, expanding the material and defining the allelic nature of the material-virtual pair. Any action or any habitual movement can reassert or strengthen the relationship. Each action and each movement free from everydayness is also sufficient to break through the old virtual linkages to establish new ones. With action in forefront breaking and orienting virtual linkages, technology in the background destroys all that is human in order to witness a new formation of humanity in/through a triadic

¹⁷ This surface is like dirt particles on which water droplets condenses to form snow crystals. The dirt particle is without which no condensation surface will be available for the development of crystals.

ecology of body-brain-environment. This formation, as abstract as it may be, is through pure movement ready to realise form as best as it can. In the constraint of each form lies a possibility of courage to exercise freedom to form again. The devotion of the triad to what it encounters makes it what it is, thoroughly a servant of movement. The question then arises with which I conclude whether the triad relation exercises a sense of discrimination in its association to what crosses its path?

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