In this article, we have analyzed experiments conducted by neuroscientists and psychoanalysts to show that the perception is a mental process. In this article, we have solved several major problems of neuroscience.

Perception is generally defined as the knowledge gained by perceiving or becoming aware of something via the senses.

Obviously, perception is not just about seeing or hearing something; perception involves making sense of the information.

Medical science suggests that even feelings and emotions are nothing more than sensations or physical reactions caused by the release of certain hormones.

Medical science assumes that the brain not only receives the information from the sense organs but also processes it, and draws conclusions.

Since the entire process is supposed to be purely physical; therefore, it shall not be too difficult for medical science to explain the process of perception, but surprisingly, even at the purely physical level, the process is so complex that there is no clarity on the mechanism of perception.

In medical science, the mind does not exist as an independent entity; therefore, it cannot play any role in the process of perception. Medical science assumes that the mind is nothing more than the sum of all neural activities. According to medical science the brain is the essence of our being.
On the other hand, quantum mechanics suggests that an act of observation is not enough to produce what is being observed; a conscious act of observation is required to produce what is being observed.

General opinion in medical science as well as in physics is that even consciousness is a product of the quantum activities of the brain. However, some experiments suggest the existence of an entity beyond the brain.

In one of the experiments, a subject was asked to randomly press one of the two buttons. Neither of the button had any significance. The subject thinks about the available options and then presses one of the buttons.[1]

If the subject decides to press the left button then this decision manifests in neural activity in one part of the brain and if he decides to press the right button then the decision manifests in neural activity in a different part of the brain.

It was discovered in this particular experiment that the decision of the subject manifests in the neural activity at least 6 seconds before the subject himself is aware that he has already made a decision. Therefore, a neurologist observing the brain activity of the subject knew of the decision of the subject at least 6 seconds before the subject himself knows that he has made the decision.

It is surprising that the subject thought for 6 seconds before deciding on doing something inconsequential.

The decision in the above experiment was inconsequential because neither button would have resulted in any loss/gain or even meaningful activity to anyone, but certain decisions require intense thinking. The thoughts do not generate any neural activity even in such cases. Obviously, brain does not even think. The source of the thoughts has not yet been discovered by the medical science. If brain does not think then, it certainly cannot be the decision maker.

The important point to note here is that the manifestation of our decision in the form of neural activity is not enough for us to be aware of the decision. Something else must happen to make us aware of our own decision. Therefore, it is not proper to say that the brain is the entity that makes the decision.
Jim Rose and his partners in the Jim Rose circus perform some very painful routines in their shows. Jim Rose explains that they focus their attention on some imaginary situation while going through their routines; therefore, they do not feel the pain; for example, Jim Rose thinks he is standing in neck deep waters. Their technique does the job of an anesthetic.\[2\]

They are not unconscious; they are also mentally alert. They know that they would feel the pain if they fail to divert their attention.

In our paper on the measurement problem, we have shown that the brain may receive the information without the information being projected in the form of images, sound, taste, touch, and smell. The projection of information requires mental alertness.

The performers in the Jim Rose Circus do not feel pain because their mind is somewhere else. Mr. Jim Rose clarifies that they feel the pain like any other normal human being unless they consciously divert their attention to some other activity. Obviously, even pain is not projected if we divert our attention to something else. Not surprisingly, watching someone else in pain activates the same neuromachinery as does the actual experience of the pain. However, we do not experience the pain because the signals are not strong enough to be projected by the mind in the form of pain. Obviously, the neural activity can be generated even without the brain receiving any signals in any physical form.\[3\]

Experiments also show that the activities we perform as a matter of routine generate minimal neural activity. For example, driving on the known routes does not require any conscious effort; therefore, neuroscientists observe minimal neural activity even if subject is doing something that would generate plenty of activity in the brain.

Neuroscientists assume that the unconscious brain controls these activities. However, neuroscientists do not explain why and how the unconscious brain starts controlling the activities that are normally controlled by the conscious brain. Neuroscience suggests that the brain works in auto-pilot mode.

The analogy of the auto-pilot mode itself indicates the presence of some other entity. An aircraft in the auto-pilot mode does not require manual control because it is controlled by a software.
Medical science does not recognize the existence of any other entity that may control the operations of the body without the intervention of the brain. Therefore, it is forced to assume that the neural activity remains hidden because these activities happen in the unconscious brain.

If consciousness emerges from the quantum activity of the brain then we have to give up the idea of the existence of unconscious brain because if the brain is the source of consciousness then it cannot be conscious or unconscious.

Neuroscientists fail to explain how the signals are communicated to the parts of the body involved in such activities. In some of these activities things happen faster than the time required for origination of a thought, its routing through the brain, and then the execution by the concerned body parts.

Obviously, the mind acts as the auto-pilot.

An experiment conducted by Dr. Benjamin Libet raises a new set of questions. The experiment was conducted on a subject who was undergoing brain surgery.\[4\]

The brain of these subjects was exposed while they were still awake and talking to the doctor. Dr. Libet pricked the little finger of the subject. This event manifests instantly in the form of brain activity. However, when Dr. Libet stimulated the same area of the brain then, there was a delay before the subjects felt the sensation on their little finger.

The doctors expect a time delay in the pricking of the finger and patient feeling the pain and no time delay if the brain is stimulated directly, but these experiments show an absence of time delay in the first case and time delay in the second case. The doctors are not able to solve this mystery.

The subject does not feel the brain if it is pricked directly because the brain tissues do not have pain sensors. The pricking of the finger simply sends a signal to the finger and the pain is felt in the finger, not in the brain. Obviously, there has to be a time delay in the generation of information and its projection. Therefore, these results are not surprising.

This experiment also confirms that the brain is neither conscious nor unconscious. The brain itself does not feel anything nor does it have any emotions.

Now let us see what medical science has to say on the effect of events on the brain.
Dr. Susan Greenfield uses the analogy of raindrops falling in a pond and causing formation of waves in the water to explain why brain reacts differently to different signals.

Dr. Greenfield suggests that the bigger rain drops create bigger waves and smaller drops create smaller and weak drops. A few drops may be so small that they may not produce any significant disturbance. Similarly, weak brain activities go unnoticed, but she fails to explain why certain emotions or chemicals generate strong brain activity and some other emotions or chemicals generate very weak brain activity. [5]

The strength of the electrochemical signals generated in the brain do play a role in the projection of information, but we do not agree with the observation that the strength of the incoming signals is the sole factor that determines the strength of the neural activity.

If the strength of the neural activity depends only on the strength of the signals then, it will not be possible for us to focus our attention on any source of information other than the one that is generating strongest signals. However, we know that we can focus our attention on a source of information that is generating very weak signals and eliminate the information coming from other sources.

Let us examine the following experiment.

Dr. Daniel Simmons conducted the famous ‘The monkey illusion business’ experiment to show that our ability to pay attention is very limited. [6]

In this experiment, Dr. Daniel Simmons shows this video to two groups. The participants are asked to count the total number of passes made by the group dressed in white while ignoring the passes made by the group dressed in black. Several other activities are going on in the background; for example, a gorilla enters the scene, thumps his chest and walks out.

As Dr. Simmons has pointed out, only about half the participants noticed the gorilla. Therefore, Dr. Simmons concludes that our ability to pay attention is limited.

Dr. Simmons rightly points out that we may look at something without seeing it. We can eliminate a good deal of information by focusing our attention on a particular set of information.

It is suggested that this experiment is an example of “inattentional blindness,” the failure to see something obvious when focusing attention on something else.
Nature eliminates a good deal of information by limiting the range of sense organs, but it still provides us with plenty of information. However, a human being may not want to receive all the information that his sense organs may provide at any given point of time. For example, a doctor may not want all the information that his eyes can provide him while he is performing a surgery. Therefore, nature has granted us the ability to focus our attention on the information we want to receive and eliminate the unwanted information.

On the other hand, we may not notice some information because of the absentmindedness. Sometimes, we cannot see something even if it is placed right in front of our eyes until someone points it out to us. Our mind and body do not always stay together.

In the experiment conducted by Dr. Simmons, the subjects may fail to count the passes and may even fail to notice other events on the stage due to either absentmindedness or may fail to notice other events because their focus is on counting the passes.

The first case is an example of inattentional blindness. The second is an example of intentional blindness because we consciously decide to embrace partial blindness by focusing our attention on specific information.

We can project the information only in the state of mental alertness. The brain registers the information even if we look at the gorilla, but the information is not projected because the mind is focused on something else.

This experiment shows that the strength of the neural activity does not depend only on the strength of the external signals.

The ability to focus clearly shows that the brain is not the decision making authority. The brain must first receive the information before it can decide which information it must focus on. However, the process of eliminating the information occurs at the level of the sense organs.

If this is the case then, we must explain how the information is received by the entity that makes decisions for us because it is obvious that the sense organs cannot decide anything on their own.

In one of the experiments developed by Dr. Radin, a subject is shown different pictures at intervals of 5 seconds. The picture could be a calm picture or a very emotional picture.[7]
The subject was able to predict whether the projected picture would be a calm picture or an emotional picture.

Dr. Raddin only shows that the subject can have prior knowledge of an event that is yet to happen, but fails to explain how it is possible. The experiment clearly shows that we do not receive all the information from the sense organs. It would have been interesting if Dr. Raddin had scanned the brain of the patient to see when the patient becomes aware of the future event.

It would have also been possible for us to know the pathways involved in the communication of extrasensory information.

This experiment suggests that we may intuitively know what is going to happen next. Therefore, we can sense that the mind can receive the information without involving the sense organs.

Apparently, the mind processes the information, relates it to the memory, anticipates future events and prepares the body for an appropriate response. Most sports will be played at much slower pace if the brain were to perform all these functions.

The anticipation of future events is called intuition. We had mentioned that we can perform the routine activities without generating much neural response. This is possible because we perform these activities intuitively.

Experiments have shown that a person’s reaction to the mood stimulators given to him depends on whether he has been told beforehand that he has been given only a placebo despite the fact that he was actually given a mood stimulator.

This indicates that the response of the brain depends on the person’s belief. As we have mentioned earlier, the mind plays a crucial role in determining the outcome of biochemical reactions.

The mind only needs to be convinced that it has received the medicine to produce the necessary effects. On the other hand, the medicine fails to produce the expected results unless the mind is convinced that it has received the medicine. The placebo effect shows that the mind plays a role in determining the effect of medicines or any other object we consume. Obviously, the mind plays a role even in the biochemistry.
We see the light, but do not feel the light. However, we feel the heat. The heat may cause irreversible damage to the tissues; therefore, we can be sure that the heat is not projected inside the brain.

The finger obviously does not ‘feel’ anything. Obviously, heat is not perceived either inside the brain or in any other part of the body.

The mind feels the pain. Pain is only a projection.

The projection disappears the moment we shut the mind. Our state in the deep sleep confirms this observation.

The disease and the cure both are in the mind. The problem and the solution both are only in the mind. The projection disappears the moment we shut the mind.

As they say, it is all in the mind. However, for most of our activities the mind depends on the brain.

The mind depends on the physical structure to provide the information. Therefore, if a part of the body does not have pain receptors or is anesthetized or even if the pathway to the brain is temporarily or permanently damaged then, the mind cannot project the information.

In some cases, neuroscientists remove one of the hemispheres of the patients suffering from severe epilepsy. These patients gradually recover all their memory and are able to control all their body parts.[8]

Some neuroscientists suggest that it indicates that the brain is a hologram, but this feature may not have anything to do with the mechanism of recalling the information.

The fact that patients whose entire hemisphere has been removed can still recall the past event clearly indicates that the information is not even stored in the brain.

It is an established fact that more we come into contact with an entity and more things we can associate with an entity; the easier it is for us to recall the information about that entity.

This is surprising because there is no active communication between different lobes of the brain or between different neurons of the same lobe.
Logically, the angle at which the sense organs receive the signal must determine the location to which it is directed in the concerned lobe of the brain or else the brain will not be able to project the information relatively. Therefore, the information associated with any particular entity cannot be directed to the same set of neurons.

Information about the faces is stored in a separate part of the occipital face area in the occipital lobe, but the fusiform face area, the superior temporal sulcus, the amygdala, and the anterior/inferior cortex of the temporal lobe are also involved in separating the information about the face and other objects.

The sense organs cannot distinguish between the photons that come from the face and the photons that come from the rest of the world and direct the photons coming from the face to any particular region of the brain. Obviously, the neural activity related to any particular entity or event is distributed randomly across the brain. In the absence of any active communication between different neurons; the ability to recall the information stored in the brain cannot be the outcome of the activities of the neurons.

Doctors have made repeated attempts to see if we can wipe off the memory of a person and can alter the behavior of a person. Notorious psychoanalyst Ivan Pavlov conducted some very cruel experiments on children to alter their behavior after he discovered that he could alter the behavior of the dogs by giving them shock treatment. North Koreans succeeded in altering the behavior of American soldiers temporarily. Nowadays, drugs are being used to bring about the desired change in the behavior of the patients, but none of these methods have ensured foolproof and permanent changes in the behavior of the patients. It is not possible to even wipe off the memory of the human beings.\(^9\)

This is because the brain has very little to do with the memory.

It is a well-known fact that we tend to effortlessly remember the things that we are interested in, and forget the things we have ignored mentally. Lovers can effortlessly remember every word spoken by their beloved.

Obviously, repeated exposure or more information about any entity or event may or may not guarantee strong memory.
Recalling the information is not a mechanical process because it does not have to do only with the neural activities.

We must ask that if the brain does not recall the information then, why it is easier for us to recall the information we are repeatedly exposed to or connections within the brain play a crucial role in the process of recall the information.

The process of recalling is not about picking up the information from any particular point in the brain or anywhere else. It is about the ability to project the information because then only we can say that we actually remembered the information. Of course, the projection is not in physical form.

Repeated projection makes it easier for us to project the information effortlessly. Medical science assumes that the brain manages to establish new connections in case of the patients whose entire hemisphere is removed. However, if memory is stored in the brain then, there is no way patient should be able to recover that memory, but they do!

This is possible because memory is not stored in the brain. The mind forms new connections. Therefore, the patients whose brain is partially damaged shall also be able to function normally provided they have the confidence that it is possible for them to recover from the partial brain damage unless the damage is in the motor areas of the brain. We must remember that the mind uses the brain to connect to the rest of the body to perform almost all the physical activities. The neural activity can be minimized but cannot be eliminated totally.

We have seen that the process of thinking may manifest in the form of neural activity without the person being aware that he is actually thinking about something. This is because not all the activities are projected.

Now, let us go back to the observation of Dr. Susan Greenfield’s observation that the signals received by the brain create waves.

The strength of these waves not only depends on the strength of the external signals but also on a person’s interest in the activity and several other factors.

Dr. Susan Greenfield also explains that the neuroscience has no idea how anesthetics work.

In all probability, anesthetics harden the surface of the brain; therefore, the signals are not strong enough to be projected in the form of pain by the mind.
Most people find it difficult to remember everything they would like to remember but some people just cannot forget anything. In all probability, the surface of the brain of these people is hyperenergetic. They need almost negligible effort to recall any information they were exposed to in the past.

It is possible that our interest in any information increases the energy level of the signals at the level of sense organs.

Experiments can be conducted by the neuroscientists to confirm these observations.

Quantum mechanics suggests that an act of observation is not enough to produce what is being observed, ‘a conscious act of observation’ is required to create what is being observed but the fact is that the consciousness does not play any active role in the physical communication.

Consciousness should not be confused with mental alertness.

Neuroscientists expected that the neural activity will be minimal during the state of deep sleep, but to their utter surprise they discovered that the neural activity is maximum in the state of deep sleep. The brain remains active but the sense organs are dysfunctional in the state of deep sleep. Therefore, it is important to discover the source of the extraordinary neural activity.

In the deep sleep, the brain continues to function. We are fully conscious in the state of deep sleep and our brain also functions but there is total suppression of all the mental activities. Since the mind is inactive therefore, there is no projection of information in physical form.

We have already mentioned that the mental alertness is required for the projection of information in the form of images and sound. The purely physical sensations of touch and pressure are also communicated to the somatosensory cortex in the brain. A dysfunctional somatosensory system may cause temporary or permanent loss of ability to feel the touch. For example, peripheral neuropathy may manifest in the form of numbness. Therefore, we can say that the touch and even the pressure is also projections.

Nerve impulses, vibrations, waves, are all manifestations of information. The light, sound, touch, taste, and smell are projections of information.
Physics and medical science both assume that the brain receives the information from the external world through the sense organs and projects it back as the external world.

Obviously, there has to be some relation between the properties of the signals being received by the brain through the sense organs and the location and properties of the projected form.

The energy absorbed by the neurons determines the temporary changes in its structure. These changes determine the projected form of the objects.

Atoms get to the excited state when they absorb energy and return to their normal state after emitting the energy. Neurons also behave like excited atoms when the energy is passed on to them by the sense organs through the thalamus.

Sense organs pass only a small fraction of the energy to the concerned sensory areas in the form of nerve impulses. The residual energy is converted into the matter. For example, our eyes produce intraocular fluid and ears produce ear wax from the residual energy. Even the neurons in the sensory regions retain only a very small fraction of the energy. Each ventricle has its own choroid plexus that converts the remaining energy and whatever little waste is generated in the brain to produce about 600-700 ml cerebrospinal fluid daily.

The Matter so produced is used by the body to perform several important functions. For example, cerebrospinal fluid protects the brain from shocks and performs several other functions. Blockage of energy produces undesirable matter. For example, blockage of energy in the nose causes the production of excessive mucus in the nose. Bacteria are the effect, not the cause of the production of mucus. The mucus can produce over 10,000 different types of bacteria. Therefore, it is not possible to discover an effective antidote to the common cold.

Blockage of energy is the root cause of most ailments. Therefore, traditional systems of medicine focus on optimum absorption and circulation of the energy.

The brain reduces to just being a recording media in the absence of mental alertness, and the mind needs the brain to express itself.

Medical science assumes that the information is projected inside the brain. For example, it assumes that the light is projected inside the brain but the interior of the brain still remains dark! Even the objects like the buildings and even stars and galaxies are projected inside the brain. Obviously, information manifests in the form of light somewhere else.
Erwin Schrödinger raises an important question (albeit in a different context), “The large and important and very much discussed question is: How can the events in space and time which take place within the spatial boundary of a living organism be accounted for by physics and chemistry.”[10]

Based on the analysis of the process of perception, we can say that the brain does not project the information nor is the information projected inside the brain. For example, we have shown that the pain is not felt either in the brain or in the finger. The mind feels the pain.

We have shown that the physical process of perception and the projection of information are two different phenomena.

Now, let us discuss another important experiment.

Dr. Daniel Kehneman identifies two systems of decision making. Dr. Kehneman concludes that one method leads to quick decisions and the second method is slow because it involves lots of thinking.[11]

These are not two different methods of decision making. If decisions are based on the processing of available information then the amount of information and number of available options decide the amount of time required by an individual to make the decisions.

Dr. Daniel Kehneman does not realize that we make a quick decision if either the stakes are very low or if the decisions are routine decisions we make over and over in our routine life or if we simply do not care about the consequences of our decision.

Even this process is subjective because of the differences in the perceptions of the stakes, the experience of individuals, and their general attitude. Some people tend to take the things very lightly whereas some other may give importance to even very small things.

A good chess player spends very little time in playing first 10-15 moves because initial moves are theoretical moves therefore a good player is aware of the all possible lines. At some stage of the game, usually in the middle games, one of the players deviates from a theory. After this, players take time to think about their moves. He may make quick moves once he decides on the line of play.
The chances of making the mistakes are greater if we take things for granted or if we rely on set lines of thinking. However, we still prefer to go with the process because the stakes are not very high. Sometimes, the consequences can be disastrous, but we cannot waste time in thinking about every small detail before making every decision.

The experts are more prone to making mistakes because they wear the veil of knowledge. They are very uncomfortable if someone does not follow the routine or if they face a situation that does not fit into the known theory or known facts.

The veil of knowledge is the darkest veil because it does not let even a single photon of the wisdom to pass through it.

An entity beyond the brain is required to understand and explain the physics of perception. This entity may be conscious or sub-conscious mind. The projection of information requires mental alertness because the mind plays a crucial role in this process. The perception is a mental process.

We do not perceive any entity; we perceive the information generated by an entity. Therefore, any factor that affects the nature of information is bound to affect the projected form of the physical entities. This is the cause of the subjectivity in the process of perception.

Even such feelings as the pleasure and unpleasure that do not depend on any external inputs are purely mental states. Freud says, “.....we would readily express our gratitude to any philosophical or psychological theory which was able to inform us of the meaning of the feelings of pleasure and unpleasure which act so imperatively upon us.”[^12]

Freud goes on to say, ‘..Most of the unpleasure we experience is perceptual unpleasure.’

The fact is that all the feelings except love, peace, and bliss, are states of the mind; therefore, all feelings are just perceptual feelings.
Medical science assumes that the expression of even the feelings is a function of the hypothalamus. It suggests that the happiness is one set of chemicals and the sadness is another set of chemicals. However, the hypothalamus cannot decide whether we are happy or sad; it simply reacts to the state of the mind. The release of the chemicals by the hypothalamus is an effect, not the cause of happiness. The hypothalamus certainly cannot have reasons to feel happy or sad nor can it fall in love with someone. Its activities have to be controlled by another entity. Release of chemicals only manifests our state of mind in physical form. Some people cannot express their feelings but it does not mean that they do not feel anything.

If the mind controls the brain and has to rely on it to express itself then, we must answer following questions.

The famous Neurologist Charles Sherrington argues, *Physical science... faces us with the impasse that the mind cannot play the piano... mind per se cannot move a finger of a hand. Then the impasse meets us. The blank of “how” of mind’s leverage on matter. The inconsequence staggers us. Is it a misunderstanding?*”[^13]

Henery P Stapp quotes J. Kim, “*The problem of mental causation is: “How can the mind exert its causal powers in a world that is fundamentally physical?”*”[^14]

The analysis of the process of perception has shown that the mind is the master of the brain. Therefore, we need a two-way bridge between the mind and brain.

Medical science is not aware of any part of the brain that performs these functions although it has a reasonable idea of the functions of almost all the parts of the brain except pineal gland.

The pineal gland is also called the third eye and even the seat of the soul.

The concept of the third eye may have evolved from the parietal eye that some animals still possess.

Descartes devoted much time to the study of the pineal gland, but his arguments about its being the seat of the soul are unconvincing. Spinoza criticized Descartes for being inconsistent and unclear in his views.

We do not find any scientific reasons to conclude that the pineal gland is either the third eye or the seat of the soul. It is just a part of our physical structure.
Therefore, let us argue for and against pineal gland being the special gland.

For a long time, medical science assumed that the pineal gland was a redundant organ in the brain. According to the medical science, the only known major function of the Pineal gland is to release a hormone called melatonin, which controls circadian and seasonal cycles.

Medical science suggests that the exposure of the retina to the light generates a signal that is transmitted to the hypothalamus, which in turn directs it to a bundle of sympathetic nerves through the spinal cord. These nerves then carry the message to the pineal gland.

If this is true then, it will be interesting to examine the pattern of secretion of melatonin in the blind people. Not surprisingly, medical science is not sure what pineal gland has to do with the light and darkness. In fact, researchers discovered that the removal of pineal gland did not affect the activity level of rats that had normal access to light and darkness. [15]

The Pituitary gland, which is also called the master gland, is actually controlled by the hypothalamus.

In any case, the hypothalamus or thalamus does not perform all the functions discussed above; therefore, they cannot be the link to the mind.

It is evident from the analysis in this article that we need a part that plays a key role in the process of perception, in the expression of feelings and emotions and a part that controls the state of mental alertness required for projection of information.

The brain stem is also involved in the communication of information and it may even decide to respond to the signals through the brain stem itself. Therefore, even brain stem has to be part of the process of perception.

The pineal gland is the only part of the brain that is directly or indirectly connected to all the parts that perform these functions. The pineal gland and the brain stem both are involved in our response to the circadian cycle.

However, a person does not go into a coma like state even if the pineal gland is surgically removed. Therefore, there is no reason to believe that the pineal gland is the two-way bridge between the mind and brain.
All evidences suggest that the mind can exert its control not only on all the parts of the brain but also on the sense organs as well as brain stem. In fact, it can communicate directly with all the parts of the body. We have enough evidences to conclude that the pineal gland is not the seat of the soul.

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