

A Perspective on Our Mental Processes Versus Our Physical Brain

I believe there is a mind or soul and spirit/physical brain interaction system given to us by God that concerns our mental-related abilities.

There is really no specific Bible verse that explains our mental abilities in much depth, and two verses of the Bible Book of ¹Daniel Chapter 2: 28-29 state “Thy dream, and the visions of thy head upon thy bed, are these; As for thee, O king, thy thoughts came into thy mind upon thy bed.” (1) Also in Romans 12:22, a portion of this verse states “ but be transformed by the renewing of your mind.” The Bible Knowledge Commentary states “ The key to this change is the mind, the control center of our attitudes, thoughts, feelings and actions. As one’s mind keeps on being made new by Spiritual input, his lifestyle keeps on being transformed.”(2)

Dr. Wilder Penfield, a neurosurgeon, author of four books, and founder of the Montreal Neurological Institute, performed a brain surgical procedure on an epileptic patient and below are some thoughts that he arrived at. He was made a Companion of the Order of Canada and was inducted into the Canadian Medical Hall of Fame. In his book about the mind, Dr. Penfield developed a hypothesis about how the mind and organic brain may work in collusion with each other. He divides the mind-brain interaction system into three separate pages and functions. There is a mind itself, then the highest brain mechanism, and lastly the automaton, or the remainder of the brain mechanism. The mind can give direction only through the mind’s brain mechanism. Purpose comes to it from outside its own mechanism. The author says “This suggests the mind must have a supply of energy available to it for independent action. We may assume then, that if a mind can give directions minutes in advance, it must also give directions split seconds in advance. I (Dr. Penfield) assume that the mind directs, and the mind’s brain mechanism executes. It carries a message. As Hippocrates expressed it so long ago, “The brain is messenger to consciousness.” Or, as one might express it now, the brain’s highest mechanism is messenger between the mind and other mechanisms of the brain.” (For clarification as to the meaning of “automaton” that was mentioned in this paragraph, it is the autonomic nervous system and it follows a predetermined sequence of operations or responds to predetermined instructions.(3) (Please see page 3 paragraph 1 of this writing for the essential functions of the autonomic nervous system.)

Dr. Penfield believed that the mind, not the brain, watches and directs. Further, he believes that the mind may be a distinct and different essence. He also believes there is no evidence to suggest that the mind has a memory of its own, but utilizes the brain mechanism which can open the files at will. Dr. Penfield states, “one can understand the complexity and efficiency of the reflex coordinating an integrative action of the brain. In it, the automatic computer and the highest brain mechanism play interactive roles, selectively inhibitory and purposeful. Does this explain the action of the mind? Can reflex action in the end, account for it? After years of studying emerging mechanisms within the human brain, my answer is No!” (3)

Brain surgical procedures were used by Dr. Penfield in his study of the brain. His writings are the result of actual experiences, not purely philosophical exercises. Below are the details of a brain operation he performed on an epileptic patient:

“We have found that a gentle electrical current interferes with the function of the speech mechanism. One touches the cortex with a stimulating electrode and, since the brain is not sensitive, the patient does not realize that this has made him aphasic until he tries to speak, or to understand speech, and is unable to do so. One of my associates began to show the patient a series of pictures. He named each picture accurately at first. Then, before the picture of a butterfly was shown to him, I applied the electrode where I supposed the speech cortex to be. He remained silent for a time. Then he snapped his finger as though in exasperation. I withdrew the electrode and he spoke at once, “Now I can talk,” he said. “Butterfly.” “I could not get that word butterfly, so I tried to get the word moth.” It is clear while the speech mechanism was temporarily blocked, the patient could perceive the meaning of the picture of the butterfly. He made a conscious effort to get the corresponding word. Then, not understanding why he could not do so, he tuned back for a second time to the interpretive mechanism, which was well away from the interfering of the electric current, and found a second concept that he considered the closest thing to a butterfly.

He must have presented that to the speech mechanism, only to draw another blank. The patient's simple statement startled me. He was calling on two brain-mechanisms alternately and at will. He had focused his attention on the cards and set himself the purpose of recognizing and naming each picture as it came along. At first each picture was inspected in the stream of consciousness. It was identified, named, and recorded. He was using areas of cerebral cortex that, at birth, had been uncommitted as to function. Evidently, the highest brain-mechanism, impelled by "mind-decision", can carry out these transactions, calling upon previously established, conditioned reflexes one by one. When I paralyzed his speech mechanisms he was puzzled. Then he decided what to do. He reconsidered the concept "butterfly" and summoned the nearest thing to butterfly, that was stored away in his concept mechanism. When the concept "moth" was selected and presented in the stream of consciousness, the mind approved and the highest mechanism flashed this non-verbal concept of moth to the speech mechanism. But the word for moth did not present itself in the stream of consciousness as he expected. He remained silent, then expressed his exasperation by snapping the fingers and thumb of his right hand, that he could do without making use of the special speech mechanism. Finally, when I removed my interfering electrode from the cortex, he explained the whole experience with a feeling of relief, using words that were appropriate to his thought. He got the words from the speech mechanism when he presented concepts to it. For the word "he" in this introspection, one may substitute the word "mind". Its action is not automatic." (3)

"As I visualize it, a reasonable, explanatory hypothesis can be constructed as follows: Because I had asked the patient to do so, he turned his attention to the naming of cards (pictures), programming the brain to that end to the highest brain mechanism. I can say only that the decision came from his mind. Neuronal action began in the highest brain mechanism. Here is the meeting of the mind and the brain. The psychophysical frontier is here. The frontier is being crossed from mind to brain. The neuronal action is automatic as it is in any computer. In conformity with the mind's direction, the highest mechanism sends neuronal messages to the other mechanism of the brain. The messages go, I suppose, in the form of neuronal potentials arranged in a meaningful pattern, and they are sent, in each case, to the appropriate target gray matter. They cause the individual to turn his gaze and focus his eyes on the matter in question. They cause him to interpret what he sees, to select words that will express a meaning. This is hypothetical thinking, of course. It is clear that much is accomplished by automatic and reflex mechanisms. But what the mind does is different. It is not to be accounted for by any neuronal mechanism that I can discover." (3)

From another surgical expert experience, Dr. Penfield says, "The patient's mind, which is considering the situation in such an aloof and critical manner, can only be something quite apart from neuronal reflex action. The fact that there should be no confusion in the conscious state suggests that, although the content of consciousness depends in large measure on neuronal activity, awareness itself does not." The information following simplifies this neurosurgeon's intricate, detailed report on his brain surgical procedure. (3)

First, even the memory of a physical event must result from it being observed by a nonphysical intelligence or there would be no memory imprinted upon the physical brain. Memory involves thoughts, and thoughts are clearly not physical because they include nonphysical ideas such as truth, justice, perfection, etc. Amazingly, because of the mysterious connection of the mind to the brain, what the mind thinks is recorded upon the brain. The brain is no more the source of memories physically stored on it than a dvd, cd, or a computer is the source of the sights or sounds physically stored on them. (4)

Again, Dr. Wilder Penfield described the brain as "a computer programmed by something independent of itself, the mind." That a computer for the brain can have "memories" of ideas or events implanted upon its physical structure, does not mean the computer (or brain) originated such ideas or events. Just as an intelligence that exists outside and is independent of the computer must put into it whatever memory it has, so it is the mind (the independent intelligence) that imprints memories on the brain. (3)

The physical brain serves many essential functions, but in all of them is either directed by the mind or operates as an integrated part of the autonomic body or nervous system (ANS). This ANS is regulated by the hypothalamus. Autonomic functions include control of respirations, cardiac regulation, vasomotor activity, and certain reflex actions such as coughing, sneezing, swallowing, and vomiting. (5)

Two authors, one a neurosurgeon, in the early 2000's demonstrated that the human mind is an independent entity that can shape and control the functioning of the physical brain.(6)

Sir John Eccles, PhD-Neurophysiology, plus also being a Nobel Prize winner , and a Dr. Robinson, PhD-Psychology , discussed the research of three groups of scientists....Robert Porter and Cobie Brinkman, Nils Lassen and Per Roland, plus Hans Kornhuber and Luder Deeke—all of whom produced startling and undeniable evidence that a “mental intention” preceded an actual neuronal firing(in the brain)—thereby establishing that the mind is not the same thing as the brain, but a separate entity altogether!(7)

The experiments of Benjamin Libet, a mid-to late 20th century neuroscientist, studied the precise timing of electrical activity in the brain and conscious decisions to do simple tasks such as pushing a button. He found that we have “pre-conscious impulses,” characterized by spikes in brain waves that precede conscious decisions by about a half-second. He also found that these impulses are merely temptations! We retain the power to accept or reject them, and acceptance or rejection is “not” accompanied by brain waves. (8-1)

Rational appetite is inclination to act based on reason, not on perceptions or imagination. My decision about whether to eat a piece of cake because of its appearance and how I imagine it will taste is fundamentally different from whether I will break my diet in order to do so. One inclination—my sensitive appetite—is based on concrete perception. The other inclination—to follow my diet—is based on abstract reason. Only abstract reason/rational appetite is the will part of free will. Sensitive appetite is not part of the will—it is a passion based wholly on material factors—my brain chemistry, etc. Sensitive appetite is not free—this kind of appetite is indeed dictated by my molecules and neurotransmitters. I can condition and override it, but in itself it is wholly material and subject to the laws of nature. (8-1)

Roger Sperry's Nobel Prize-winning split-brain research convinced him that the mind and free will are real. And yes, some people think and speak with only half a brain. That adaptability is sometimes called neuroplasticity. (8-2)

There is an immaterial aspect—a spiritual aspect—to the human soul that can be demonstrated by science, and it leaves its signature, sadly, in this peculiar aspect of epilepsy. Dr. Michael Egnor stated that “ but patients (epileptic) never think abstractly as a part of the seizure. There has never been a report in the medical literature of an intellectual seizure”... Dr. Wilder Penfield concluded, quite reasonably, that this was because intellectual thought didn't come from the brain. Intellectual thought (Penfield called it the “Mind”) is an immaterial human power. Dr. Penfield began his career as a “Materialist.” He ended it as a convinced “Dualist.” (9)

Memories can be awakened by an electrical stimulus of such areas and does not say that the brain either originated or even knows the significance of these memories. In the case of an event that was observed, both the awareness of the event and comprehension of its relevance requires a nonphysical mind. A memory has no existence without a mind to recognize or give it meaning. (3)

The Bible Dictionary explains “Mind, ” in the Old Testament, as the intellect with all its capacities. ‘Soul’ is referred to as psyche. Mind and psyche are used interchangeably. (The individual self, or each person unique.) Proverbs 2:10 says, “When wisdom entereth into thine heart and knowledge is pleasant to thy soul.” Now, regarding “Spirit,” the essential attributes of a spirit are reason(mind), conscience and will. The spirit is a rational, moral and therefore a free agent.(10) But what we know is that at the center of a human being is a spirit, and the spirit continues to live even without the body. Will was an

objective reality action, not an analysis of inner thought. Our spirit was dead in our sins before we became a believer. When a person believes in Christ his or her spirit is made alive and in concert with our soul. We usually think of consciousness as our level of awareness, via our senses. There is something inside your head that makes you, you. In this sense of the word, consciousness is spirit. (11)

I believe there is a mind or soul connection, plus our spirit, with respect to a physical brain interaction system. This shows a distinction between the physical brain and a nonphysical mind or soul. Our mental faculties and our physical brain are a vital part of the creation of mankind. Where would we be without our mental abilities, especially concerning our salvation in Jesus Christ? Please consent to a personal salvation in Christ. This truly is a nonphysical mental process. This conscious decision is the most important mental process that can be made that will stand for here and eternity.

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