CHAPTER 1

A BRIEF HISTORY OF THE PROBLEM OF MENTAL CAUSATION
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The problem of mental causation considers the question, how mental states can have causal powers. The question of what mechanism or process does a mental event manage to initiate, or insert itself into, a causal chain of physical events. The three kinds of causal relations are: (1) Mental to Physical Causation (2) Physical to Mental Causation and (3) Mental to Mental Causation. The three types of mental causations are implied in the possibility of human knowledge. Modern philosophy of mind begins with Descartes. This doesn’t mean that philosophy of mind was born in the middle of the seventeenth century. The great thinkers like Plato, Aristotle, Aquinas and many other thinkers of the past had discussed the issues related to the mind. The Cartesian turn in philosophy sets up the problem of mental causation and then proceeds to give the world both a classic statement of the issues involved and a particular position which philosophers have continued to argue for and against. So the history of the problem of mental causation can be regarded as starting with Descartes’ Cartesian dualism.
1.1 Cartesian Dualism

The influential conception of philosophy of mind is being advanced by Rene Descartes. He holds that minds and bodies are ‘Substances’ of distinct kinds. This dualism of substances is subsequently labeled as Cartesian dualism. Descartes’ approach to the mind can be considered as a platform for almost all studies in philosophy of mind.

Some Philosophers have the view that human beings have a ‘privileged access’ to their own mind. Descartes believed that the thoughts about one’s own states of mind could not be false. By this, one can understand and analyze his own state of mind. The famous psychologist Sigmund Freud formulated that much in the mind is hidden and the cognitive scientists have contended that most mental states and operations are inaccessible to consciousness. Descartes understanding about the accessibility of one’s on mental goings on can be taken as, one’s access to one’s own states of mind is direct and unmediated, and the same by somebody else is invariably indirect. According to Kenneth Clatterbaugh,

Throughout his writings, Descartes displays an insatiable scientific curiosity about causes and their effects, he offers hundreds of examples. Sometimes his speculations about the causes are based on the study of its effect, in other places his
explanations of the effects are grounded in his study of their causes. Descartes is concerned with such diverse causal sequences as the way the body produces pain or “titillations” of the mind.

Descartes argues passionately, that body and mind are distinct substances. The essence of body is extension and the mind is thought. Descartes recognizes that there is something unique about human beings, that they are a subtle unity of the two and not merely an accidental union. The experience of our everyday life teaches us that human beings are a compound of these two substances. Both mental and material objects and states have attributes. Material objects are spatial, so they occupy a location in space and exhibit spatial dimensions. Mental objects like thoughts and sensations are apparently non-spatial. The second important difference between the mental and the material substances is qualitative. It is very difficult to talk about the qualities of one’s experience of a pain in his big toe, but that need not affect his awareness of them. The mental qualities are not qualities of material objects, mental qualities differ in kind from material qualities. The third distinction between the mental and the material is partly epistemological. The knowledge you have of one’s own states of mind is direct and unchallengeable in a way that one’s knowledge of material objects is not. Descartes believes that the
contents of one’s own minds are transparent to him and if one believes that he is in a particular state of mind, then he is in that state.

The states of mind are ‘private’. They are directly observable only by the person having them and outsiders can only infer them from their material effects. Neuroscientists might eventually be able to infer what one is thinking by observing patterns of neurological activities. The situation is very different for material objects and their states. If mental items are necessarily private, material things are necessarily public. When it comes to a material object, or the state of material object; two different persons can observe it in a similar way, there may not be any difference in their perception. The symmetry of access in the case of mental events is entirely absent. This suggests that minds and material bodies are very different kinds of objects. According to Descartes there is no overlap in the properties possessed by mental and material objects. A mental substance possesses properties not possible by any material substance, and a material substance possesses properties no mental substance could possess.

Descartes puts the attribute-mode distinction to elaborate his concepts in the field of Philosophy of Mind by supposing that each kind of substance possesses a distinctive attribute. A material substance is a substance possessing the attribute of
extension. A mental substance is a substance possessing a very different attribute, the attribute of ‘thought’. In the book ‘Philosophy of Mind’ discusses Descartes’ thought as,

Descartes gives the term “thought” a broader sense than we do today. Anything we in everyday life would count as a state of mind- a sensation, an image, an emotion, a belief, a desire- Descartes regards as a mode of thought, a way of thinking.²

Bodies are material substances possessing the attribute of extension. Minds, too, are substances, but not material substances. Minds possess the attribute of thought. Every substance possesses exactly one attribute. If a substance possesses the attribute of extension, it cannot possess the attribute of thought. And likewise a substance possesses the attribute of thought cannot possess the attribute of extension. Thought and extension mutually exclude one another. It follows that no extended substance thinks, and no thinking substance is extended. Minds are thinking substances and bodies are extended substances, so minds are distinct from bodies.

Descartes’ philosophy of mind was of a piece with the new science he was attempting to establish, in which the physical world should be understood in terms of a large mechanism
and causal relations within it as a function of material objects’ extension- as the push of one thing on another. As human and animal bodies are material objects, they too could be understood mechanistically. Descartes’ philosophy thus dispenses with Aristotelian notions such as a “vegetative” or “sensitive soul”, or a “principle of movement”, as a causa vitae and he occasionally indicates that such bodies could be thought of in terms analogous to watches or other automata; that is, machines that are able to move themselves by the mere arrangement of their internal organs, as watches move themselves simply by the arrangement of their counterweights and wheels. Nevertheless, there remained certain anomalies.³

Descartes does not deny that minds and bodies are, as they clearly seem to be, intimately related. When ones’ finger comes too near the flame of a candle, he feels pain. When some other’s finger goes near the flame, in contrast he feels no pain. When one decides to get up and walk across the room, it is his body that moves not the mind. So it is very clear that the movement of the body is largely under the direct control of the mind.
Descartes holds that the world consists of two kinds of substance; they are material substances and mental substances. Material substances are extended and unthinking, mental substances think, but are unextended. According to Descartes mental and material substances possesses distinct attributes but they causally interact. Body responds to the plans and decisions of the mind. Mind receives signals from the body in the form of sensory experiences that provides the information about the state of the body and indirectly, the state of the world outside the body. The Cartesian picture is simple to explain. Imagine that a person sits on a tack planted in his chair by somebody. His sitting on the tack that is a material event involving a pair of material objects, the tack and his body, gives rise to a distinctive sensation of pain that is a mental event. This sensation or feeling in turn generates another mental event, a desire to leap upward, and this desire brings about an appropriate leaping bodily motion.

Descartes’ effort to solve the hard core problem of mental causation is to provide an account of how mind and body interact. The book ‘Philosophy of Mind’ explains the mind-body intereaction as,

Descartes does attempt an account, but it is less than convincing. The reason for this is that he tends to wrap up what is essentially a philosophical difficulty in the clock of
seventeenth-century physiological sophistication. Despite his own insistence that the soul (mind) is really joined to the whole body, he proceeds by nominating the conarion or pineal gland—a small gland in the centre of the brain—as the principal seat of the soul: that is, the place in the body where the soul “exercises its functions more particularly than in all the others”. We are not given any clues as to how we should construe this phrase but it seems that it is here that the relevant causal interactions between mind and body take place. We are then told that the soul exercises its functions by slight movements on the part of this gland, which in turn affects the course of animal spirits (a very fine wind) through cavities in the brain, driving these spirits towards pores of the brain, which then direct them through the nerves to the muscles in various ways so as to make the limbs move in the manner required. And conversely, the gland can be moved by these spirits in as many different ways as there are, for example, perceptible differences in the objects of perception. Of course, to say where these causal interactions occur is not to provide a philosophical explanation of how they are
possible. The best he can do is to suggest, in effect, that they are sui generis and cannot be modeled on causal relations between material things. In the end, however, when pushed on the point in correspondence, Descartes concedes that reason cannot provide an adequate account of the causal interaction between mind and body, though he continues to argue that experience teaches us that it is nevertheless true…

Descartes solution for the problem of mental causation may or may not be effective, but it gives a strong basis for Philosophy of mind.

1.2 Modified Cartesian Dualism

Major difficulty with Descartes’ philosophy revolves around mind-body interaction. Minds and bodies evidently interact causally. The decisions of the mind lead one to act and so to move his body in particular ways. Goings on in the mind results in conscious sensory experiences. It is difficult to understand how such interaction could occur if minds are non-material substances and bodies are material. The later thinkers try to modify Descartes’ theory to solve the problem of mental causation.
1.3 Parallelism

Parallelism accepts Descartes’ theory of dualism namely Cartesian dualism. Descartes divides the world in two distinctive subjects; they are extended material substances and unextended mental substances. Parallelists accept Descartes’ dualistic approach of the world but they reject his interactionist theory. They deny the possibility of a causal interaction between the mental and material substances. It seems that the goings-on in ones’ mind affects his body, and through it affect the material world.

When comparing the Cartesian picture with the same given by the parallelist picture, Cartesian picture clearly shows the causal interaction or it tries to reduce the conclusion such as the mental events and the material events are both causally related. The same changes when it comes to the parallelist theory. The sequences of events such as: sit on a tack, experience a sharp painful sensation, recognize the source of the discomfort and leap from the chair, includes both mental and material events. According to parallelism the appearance of the interaction between the body and mind is just an appearance. The sequences of mental events and the material events run in parallel. Sitting on a tack- a material event precedes the sensation of pain- a mental event. So it is natural to conclude
that only because of a causal relation it happens. This is a mistake for parallelists. When one decides to leap upward and subsequently leap, it feels to him as though his decision causes his leaping, but it is not. The events in the mind systematically co-variates with events in the material world, but there are no connections between mental and material events.

Picture 1

Picture 2

It is clear from the picture that A’s can co-vary with B’s without its being true that A’s cause B’s. If the co-variation is extensive and systematic, however, it is natural to seek a causal explanation.

The major question against the parallelist is that, how the sequences of mental events co-vary systematically and universally with sequences of material events. One possible answer may be that, a fact about the world, something not
capable of further explanation. Parallelism faces the problem of further explanation on the co-variation theory of mental events and the material events. But the acceptance of causal relation between the mental and material events will lead to a contradiction for the parallelist’s theory. To avoid such contradiction the parallelist invokes God. God intervenes to insure that mental and material sequences run in parallel. The introduction of God in to the co-variation of mental and material events raises many questions. Parallelism is based on the Cartesian Dualism, but for Descartes God is neither a material nor a mental substance. God is a substance of a third sort according to Descartes. If that is the case then how God can affect the course of material events and mental events? Or how God can facilitate the co-variation of mental and material events? Here all the difficulties associated with Cartesian interactionism appear to arise all over again. The parallelists can say God might create, once and for all, a world containing both material substances subject to unalterable natural laws and mental substances subject, to psychological laws. The world is designed in such a way that events in the mental realm co-vary with events in the material realm. A model for this is a clock-maker who constructs a pair of perfectly synchronized clocks the movements of which co-vary, not because they are causally linked, but because the internal adjustments in one clock perfectly reflect the internal adjustments in the other. Here again the parallelists fail to give a logical and acceptable solution for the problem of mental causation.
1.4 Occasionalism

Occasionalism, a variant of parallelism, accords God a more active role in the world. Occasionalism is most often associated with the writings of Nicholas Malebranche. Parallelism suggests systems operating independently, but side by side, in the way an automobile on a highway might shadow a train. Occasionalism makes God actively responsible for the existence and character of event sequences. When one sits on a tack, God wills the occurrence of a sensation of pain in his mind.

Picture

Occasionalism is motivated in parts by a general thesis about causation. If causation is a relation holding between events: one event, the cause, brings about another event, the effect. If one striking a billiard ball with a billiard cue, one event, brings about the billiard balls rolling in a particular direction, a second event. The difficulty is to understand what exactly this bringing about amounts to. It is ordinarily distinguished that the case in which one event merely follows or accompanies another, from those in which one event causally necessitates another. Here again the problem comes like, when the events are linked causally then what is the character of the linkage? One possibility is that there are no genuine links
between events, only bare event sequences. If causal relations boil down to nothing more than regularities, the co-variation of events of particular sorts, then it is a mistake to regard the absence of a mechanism or causal link between mental events and material events as a special problem. On the contrary, there are no such links, not even among events in the material world. According to Hume the connections among events is merely a projection of one’s conviction that, when an event of a given sort occurs –the striking of a billiard ball by a billiard cue, an event of another sort- the ball’s moving in a particular way will follow.

If causal relations amount to no more than regularities among types of event, then there is nothing especially problematic or mysterious about mental events causing material events. The appearance of a problem stems from the tacit assumption that causal relations require an intervening mechanism or a link.

Occasionalists argues that, in the absence of a causal nexus, a connecting mechanism or linkage between causes and effects, then there requires some explanation for the pattern of regularities among kinds of event we find in the world. These regularities encompass purely material event sequences as well as sequences involving both mental and material components. When an event of one kind is invariably followed by an event of another kind, this is not because events
of the first kind somehow necessitate or bring about events of the second kind. Events are discrete occurrences; no event has the power to induce another event. Here the problem comes as how it is possible that, the mental and mental events are occurring simultaneously. In this juncture the occasionalists invokes God. If events are discrete, wholly self contained episodes, the occurrence of one event cannot by itself account for the occurrence of any subsequent event. The occurrence of every event is, in an important sense, miraculous. God, as it were, creates every event ex-nihilo- from nothing. One way to think about a view of this sort is to imagine that the world is divided in to momentary temporal stages or segments.

World at t1    World at t2 World at t3 World at t4

From the above picture, one can think of the world over time as comprising a sequence of worlds, each world differing slightly from its predecessor in something like the way each image on a movie film differs from the image preceding it. In the billiard ball example, the cue’s striking the ball belongs to one temporal segment – one world, and the ball’s subsequent rolling belongs to a subsequent temporal segment- a distinct world. Every segment in the sequence that makes up what we commonly regard as our world must be created ex-nihilo.
It is widely held that no event in the world could account for the existence of the world- a world that includes that event as a part. And if what one calls the world is more accurately thought of as a sequence of metaphysically independent worlds, then it follows that no event in any world in the sequence can account for any event in a subsequent world.

An occasionalist can point out that it is one thing for a scientist to allow that the existence of a single world is simply a brute fact, a fact for which there is no explanation. It is quite another matter, however, to hold that each member of a patterned sequence of metaphysically independent worlds or world stages is brute fact. If no event in any stage explains the occurrence of that stage or the occurrence of any event in any other stage, then, it would seem, every fact is merely a brute fact. The occasionalists explanation of the God’s intervenience to the events is not satisfactory.

1.5 Idealism

Parallelism and Occasionalism hold that the impression, minds and bodies are causally linked is an illusion. One makes up his mind to wave and subsequently wave. It seems that one’s decision brings about his waving. Idealism holds the view of the world consists exclusively of minds and their contents. There are no non-
mental material objects or events, hence no worrisome causal interactions between minds and mind-independent material objects. Here the regularity and order in the experiences can be explained not by reference to a regular and orderly material world, but by reference to the intrinsic nature of minds.

If one conducts experiments designed to establish the mind-independent mental bodies like Dr. Johnson’s kicking a stone and announcing “thus I refute Berkeley” to refute the idealist view, then the idealist will point out that experimentation is a matter of arranging matters so as to yield certain observations. Kicking the stone provides observational evidence of an especially vivid sort that the stone exists. A scientist’s observation of a particular kind of streak in a cloud chamber provides rather more indirect evidence that an Alpha particle has passed through the chamber. So for idealists observations are conscious experiences, and that will not carry one outside the mind. According to the idealists experiments cannot provide us with grounds for inferring the existence of anything non-mental.

Idealism certainly covers the bases. It banishes problems associated with causal interaction between minds and the material world, and it does so in a way that bypasses worries associated with parallelism and occasionalism. Idealism has a kind of elegant simplicity of the sort valued in the sciences. Idealism postulates
nothing more than minds and their contents and explains all the phenomena by appeals to these without needing to resort to messy questions about extra mental material objects and events. Idealism explains the appearances by identifying the appearances with reality. According to Berkeley—a staunch idealist, that when philosophers pretend to talk about the material world, they are endeavoring to talk about something literally inconceivable. Berkeley holds that the common distinction of the experiences of things from the things is an empty distinction.

For example, if one perceiving a ripe tomato in bright sunlight, then he has a particular visual experience of a reddish roundish sort. If he grasps the tomato and bites it, then it tastes and sounds in a particular way. Berkeley argues that the person’s thoughts about the tomato are exhausted by these sensory features. When one thinks about the tomato, his thoughts concerns something that looks, feels, smells, tastes and sounds a particular way. But looks, feels, and the like are, popularly understood, nothing more than qualities of conscious experiences, and conscious experiences are mental phenomena. So the thoughts about the tomato are, nothing more than thoughts about certain characteristic mental episodes. In rejecting material objects, idealists insist that they are not rejecting tables, trees and galaxy and the like. Rather they are rejecting the notion that table, tree, and galaxy
designate mind-independent material objects. Here again the answers are not satisfactory.

1.6 Epiphenomenalism

Descartes depicts minds as causally interacting with the material world, events in the material world produce experiences in mind, and mental events yield bodily motions. It is seen that this kind of two-way causal interaction is difficult to reconcile with the conviction that the material world is causally self contained. The causes of every material events are exclusively material. If it is clear that the material world is causally closed, but it allows that the material events can have mental products. Mental events exist. They are the effects of certain material causes. But no mental event has a material effect; no mental event disrupts causal sequences in the material world. Mental events are epiphenomena, offshoots or side effects of material phenomena, that themselves yield no effects of any kind.

Epiphenomenalists, then, hold that mental phenomena are by-products or side effects of complex physical systems. In this regard, they resemble smoke produced by a locomotive, or the shadow cast by a billiard ball rolling across a billiard table, or the squeaking noise produced by a pair of new shoes. The smoke, the shadow, and the squeaking noise play no causal role in the operation of the
systems that produce them. The smoke, the shadow, and the squeaking noise are material phenomena, and so have some physical effects, the smoke makes the eyes burn, the shadow alters the distribution of light radiation in the region on which it falls, and the squeaking produces minute vibrations in the eardrums of passers-by. Mental phenomena, in contrast, have no effects whatever material or mental.

Epiphenomenalism appears to fly in the face of common experience. Surely one’s experience of pain as he moves closer to the fire is what brings about the withdrawal of his hand away from the fire. And surely his deliberation and subsequent decision to obtain a whopper are what lead him to pull in to the Burger King. According to epiphenomenalist, however, all the causal works in these cases are done by events in his nervous system. Those events have, as a by-product, the production of certain conscious experiences perhaps. The conscious experiences, however, are causally inert. They appear to have causal clout because they are caused by, hence invariably accompany, material events that themselves bring about various effects. Suppose a loose fan belt causes both the overheating of Yugo and a distinctive squeaking noise. The squeaking accompanies, but does not cause, the overheating. According to the epiphenomenalist, generally this is how it is with mental phenomena.
The fact, then, if it is a fact, that it feels to one as though his states of mind make a causal difference is entirely consistent with the truth of epiphenomenalism. In deciding to reach for a Whopper and subsequently reaching, he has the distinct impression that his decision caused his reaching or, at any rate, that it contributes to the occurrence of that material event. Certainly, he can reliably count on his body’s moving in a way that reflects his decisions.

Neuroscientists sometimes find epiphenomenalism attractive. In studying brain function, if mental phenomena are epiphenomenal then they are undetectable and they could make no difference to anything that transpires in the material realm. This would leave neuroscientists free to explore mysteries of the brain without having to concern themselves with the messy details of conscious experience.

Epiphenomenalism faces a number of difficulties. First, the nature of material-to-mental causal relation is none too clear. The epiphenomenalist contends that some material events cause mental events, but mental events cause nothing. One might think that there would be no harm in allowing that mental events could cause other mental events. After all, mental events have no material effects, so causal relations among mental events would pose no threat to the causal integrity of the material world. If mental events could themselves cause mental events, then
some mental events would have a life of their own. It is of the essence of epiphenomenalism, however, that mental events are by-products of material events. Epiphenomenalism also failed to give satisfactory solution for the problem of mental causation.

1.7 Materialism

Materialists deny that the world includes both mental and material substances. Every substance is a material substance. Minds are fashioned somehow from the same materials from which rocks, trees, and stars are made. The mind is not a separate, non-material entity, but only matter, suitably organized. Materialism has a long history. Democritus describes the world as a fleeting arrangement of atoms swirling in the void. Hobbes and La Mettrie regard mental phenomena as nothing more than mechanical interactions of material components. This chapter discusses the three main materialist schools; namely, Behaviorism, Mind-Brain Identity theory and Functionalism.
1.8 Behaviorism

In twentieth century, Behaviorism arose as a doctrine of the nature and methodology of Psychology. There are two types of Behaviorism, one is Philosophical Behaviorism and the second is Logical Behaviorism. Philosophical Behaviorism takes behavior as constitutive of mentality. According to this position, having a mind is just a matter of exhibiting or having the propensity to exhibit, certain appropriate patterns of an observable behavior. According to Logical Behaviorism, every meaningful psychological expression can be defined solely in terms of behavioral and physical expressions, that is, those referring to behavioral and physical phenomena. Behaviorist holds that all behavior, even complex behavior could be fully explained in stimulus response terms. The connection between stimulus and response is an unadorned reflex mechanism.

1.9 Philosophical Behaviorism

The philosophical behaviorists hold that the Cartesian conception of minds errs in a fundamental way. Minds are not entities, and mental episodes are not private goings-on inside such entities. Having a headache is solely a matter of behaving, or being disposed to behave, in a particular way, then the intrinsic qualitative nature of whatever is responsible for the behaving, or being disposed to
behave is irrelevant. It is easy to distinguish an object’s intrinsic qualitative nature from its dispositionalities or causal powers. The billiard ball has the power to roll across the table, the power to shatter a pane of glass, and the power to reflect light in a particular way. But the ball has, as well, a particular qualitative nature, a particular shape, a particular size, and a particular temperature. The relation between an object’s powers or dispositionalities and its qualitative characteristics is a subtle business. Behaviorism regards the intrinsic qualitative nature of states of mind as irrelevant.

According to the behaviorist, states of mind, ‘qua states of mind’, lack an intrinsic qualitative nature. For example: the beetle in the box analogy. Whatever is in the box has some intrinsic qualitative nature. But this nature is irrelevant to its being true that the box contains a beetle, qua beetle- considered solely as a beetle-what the box contains lacks intrinsic qualities.

1.10 Psychological Behaviorism

Philosophical behaviorism is a thesis about the meaning of mental terms and, ultimately, about the nature of mental concepts. Its proponents consider philosophical questions about the character of such concepts. They reason that, if
we want to know what minds are, we must make explicit what does mind and its cognates mean. A conception of this sort neatly divides philosophy from psychology. Philosophers are in the business of making clear the subtleties of the conception of mind enshrined in ordinary language.

Behaviorism in psychology was spawned, not by worries about the meaning of mental terms, but by a concern for the scientific status of psychology. On a traditional view of the mind, a view accepted without question by psychologists in the nineteenth century, states of mind are private states not amenable to public scrutiny. The data for psychological behaviorism are instances of behavior, behaviors, what organisms do. To explain an instance of behavior, it should not be by postulating unobservable interior states of mind, but by reference to environmental stimuli that elicit the behavior. The governing model is the simple reflex. For example, if one’s knee is taped by someone and his leg bobs in a characteristic way and here, a bit of behavior, a response- the person’s bobbing-is explained by the occurrence of a stimulus – someone’s tapping the person’s knee. Here the connecting mechanism between the stimulus and response is an unadorned reflex mechanism. Behaviorists held that all behavior, even complex behavior, could be fully explained in S-R terms (S-stimulus and R-response). Complex responses were simply the result of complex stimuli. Behaviorist’s mentions of
inner mechanisms except insofar as these are capable of exhaustive characterization in terms of relations between stimuli observable inputs and output responses observable behavior. Complex organisms are capable of learning, capable, that is of modifying their S-R relations. A particular kind of response can be reinforced if its occurrence is rewarded. A rat may not be inclined at the onset of a particular sound to respond by pressing a bar in its cage. But, if perhaps by accident, the rat discovers that it will receive a food pellet if it presses the bar when the sound is heard, then a bar-pressing response to the aural stimulus will be reinforced. The probability that the rat will press the bar at the onset of the sound increases dramatically. The rat presses the bar during and only during a period immediately following the onset of the sound. Behaviorists assume that all learning can be explained in terms of simple associative mechanisms. This assumes that complex tasks, the learning of a language can be explained in something like the way the rat’s bar-pressing is explained. In 1959, Noam Chomsky published a review of Skinner’s Verbal Behavior in which he argued that Skinners attempts to extend the behaviorist model of learning on the linguistic performances of human beings were inadequate. Chomsky claimed that linguistic abilities could not, even in principle, be explained without assuming that human beings possessed a sizable repertoire of complex cognitive structures that governed their use of language. Slowly Behaviorism lost its kind of authority it once did.
The extreme reductionist variety—requiring logical equivalence between psychological statements and statements about behavior and dispositions—is unlikely to work even for intentional states. Behaviorism appears to fall short of supplying a really satisfactory approach to mind-body problems.

1.11 Mind-Brain Identity Theory

The Identity theory of mind has emerged independently in the United States and Australia in the 1950s in the papers published by Herbert Feigl, U. T. Place, and J. J. C. Smart. According to the identity theory, minds are material entities—brains—and mental properties are, as a matter of empirical fact, material properties of brains and nervous systems. In claiming that mental properties are material properties, Feigl, Place, and Smart were not claiming merely that mental properties were properties of material bodies. One might think this, and yet imagine that mental properties were quite different from non-mental material properties. The result would be a substance monism coupled with a dualism of properties. The identity theorists, however, argued that every mental property is in reality a physical property, that is, a property of the sort independently countenanced by the physical sciences.
If being angry is a property we should classify as a mental property. The person who possesses this property can be considered that he is in a state of anger. If the state of anger turns out to be some neurological state, then this is so, because the property of being angry is identical with certain neurological property. When an object comes to be in a particular state, its coming to be in this state is an event. A process is a sequence of events. For example, feeling giddy is a matter of being in a particular state of mind. Being in a state possesses a certain, possibly complex, mental property.

Identity theorists focus on theoretical identities. Such identities are uncovered by scientists exploring the way the world is put together. An identity theorist holds that it is a good bet that research on the brain will lead to the discovery that certain properties we now designates using mental terms are properties of brain. Pain, for instance, might turn out to be the firing of C-fibers in the brain. If this is so, then the property of being in pain would be identified with the neurological property of being a C-fiber firing. There are some loose ends in the theory. The first one is the asymmetry of access to the states of mind. One has privileged access to his own thoughts and sensory experiences. Others have an indirect access to the same. But if the mind is the brain, if mental properties are neurological properties, it is hard to see how this could be so. Mental properties are
private at the same time the neurological properties are public. The detailed explanation will be in the third chapter.

1.12 Functionalism

According to the Functionalists, mental states should be analyzed in terms of their normal causal role, mediating between a specified input, example: injury-and a specified output- example: pain behavior. In effect the guiding idea behind functionalism is that some concepts classify things by what they do. For example, transmitters transmit something, while aerials are objects positioned so as to receive air-born signals. Indeed, practically all artifact-concepts are functional in character. Too many concepts applied to living things. Thus wings are limbs for flying with, eyes are light sensitive organs for seeing with, and genes are biological structures which control development. So perhaps, mental concepts are concepts of states or processes with a certain causal role or function. This idea has been rediscovered in the ancient Greek philosopher Aristotle’s writings particularly in De Anima. Its introduction in to recent philosophy of mind is chiefly due to the American philosopher Hilary Putnam, as well as the Australian philosopher David Armstrong.
Functionalism has to be seen the answer to several philosophical prayers. It, accounts for the multiple realizability of the mental states. It also has obvious advantages over behaviorism, since it accords much better with ordinary intuitions about causal relations- it allows mental states to interact and influence each other, rather than being directly tied to behavioral dispositions. Finally it remains explicable that dualism should ever have seemed an option. For although the conceptualize mental states in terms of causal roles, it can be a contingent matter what actually occupies those causal roles, and it was a conceptual possibility that the role-occupiers might have turned out to be composed of some sort of mind-stuff.

Compare the mind with any complicated machine, such as the motor car. Cars have concepts, such as ‘gear-box’ and ‘carburetor’, for describing the various parts of a car. These concepts are functionally defined, their meanings being given in terms of the causal roles of the parts within the overall functioning of the machine. Thus gear-boxes can be made out of many diverse materials, and present a wide range of appearances. All that is essential is that they should occupy the characteristic causal role of a gear-box. Similarly with the mind, human behavior characteristically results from the causal interactions of many different mental
According to functionalism, mental states are states with a certain causal role, characterized in terms of their effects on both other such states and behavior. Functionalism doesn’t by itself explain the asymmetry between knowledge of self and knowledge of others. So it does need to be supplemented by some account of how it is that knowledge of one’s own present mental states can be both peculiarly direct and especially reliable.

The first objection to functionalism is that it is committed to the existence of a distinction between analytic and synthetic truths. An analytic truth is supposed to be one whose truth is dependent solely on the meanings of the terms involved. A synthetic truth is supposed to be one whose truth depends upon something other than mere meaning, such as some state of the world.
Reference


3. Ibid 18

4. Ibid