CHAPTER II: THROUGH THE PHYSICALISTIC CORRIDOR

In the preceding chapters we have observed that in order to make sense of the behavior of other human figures we, more than often, presume that their behavior is prompted by their psychological states. We reach to such a conclusion by the process of inference as stated below:

When I am in a mental state I behave in a certain way.

He is behaving in the same way.

Therefore, He must be going through a similar mental state that I go through when I behave in the same way.

The validity of such a claim, that is so necessary for establishing analogical argument, is basically derived from a supposed relation of necessity between our behavior and our mental states. A correlation
between a bodily behavior and a mental state is a precondition for such analogical inferences. This demand can only be satisfied if a 1-1 correspondence between the behavioral state and the mental state can be established. Let us see how far this demand could be met taking, for example, the mental state of fear and the corresponding behavior it produces. A 1-1 correspondence between the emotion of fear and it’s corresponding behavior can be established if and only if the emotion of fear always evokes the same kind of behavior in every subject that experiences this emotion. But does fear prompt the same kind of behavior in everybody who experiences such an emotion? More importantly, does it invoke the same kind of behavior in a particular person on different occasions? Fear invokes different kinds of behavior ranging from running away to petrifaction in different individuals, even within the same individual on different occasions.
Can a necessary relation between a mental state and its corresponding behavior be established? Is it possible that behavior is causally related to mental states? Or can there be any other kind of relation that hold between behavior and mental states? Can there be a relation, like identity that holds between the behavior and the mental states is also the pressing question of the moment.

2.1 RAPPING ON THE BEHAVIORISTIC DOOR

Behaviorism, as we all know, is a thesis that tries to explain conscious processes by stimulus-response (S-R) formula. The main propounder of this theory is John B. Watson. It is to be noted, however, that the term ‘behaviorism’ applies both to a movement in psychology and to a philosophical doctrine. In this discussion we would, however, take the term ‘behaviorism’ not as a movement in psychology but as a
philosophical doctrine. So we are here less concerned with the ‘scientific standing of psychology’ than with meanings of psychological terms and the significance of ascriptions of them to individuals.

It is true that almost every moment of our waking life we are faced with other human figures that walk, talk and behave in certain ways and we need to make sense of what we observe. Both the dualists and the skeptics hold that the rational explanation of such phenomena lies in their ‘mind’s that are hidden behind their bodily structure and are accessible to the privileged ‘owner’ of the mind alone. Thus the mental states have become ever elusive in nature, which are neither verifiable nor falsifiable and hence, not justifiable. But does mind
refer to some immaterial substance? If ‘mental states’ can be reduced
to physical states then such a myth could be wiped out forever.

Logical behaviorists suggest that the claim about the mental states of
others are in fact, claims about their observable behaviors; ‘to be
angry’ is ‘to behave in a certain manner’. Mental talk does not have to
be construed as a state of immaterial mind.

If a proposition can be translated into other proposition or
propositions in which the original proposition does not appear at all is
enough proof to show that these two sets of propositions are identical
in nature. Moreover, two differently formulated propositions have the
same meaning only if both are true or false under the same
condition\textsuperscript{xviii}. Carl Hempel, in his famous article ‘The Logical
Analysis Of Psychology’\textsuperscript{xix} gives a unique example of the above-
mentioned situation. Pain is generally considered as a paradigm example of a mental state. So he picked up a ‘pain statement’. The example is ‘Paul has a toothache’. This proposition apparently involves a psychological concept, i.e., the concept of ‘pain’. Then he took some test sentence or ‘protocol propositions’ which describe the situation. They are as follows:

“(a) Paul weeps and makes gesture of such and such kind.

(b) at the question ‘what is the matter?’ Paul utters the words ‘I have a toothache’.

(c) closer examination reveals a decayed tooth with exposed pulp

(d) Paul’s blood pressure, digestive process and speed of his reactions show such and such changes.

(e) such and such changes occur in Paul’s nervous system.”
And so on. But it is worth noting that nowhere in the ‘Protocol Propositions’ the word ‘pain’ arrives. Therefore what the ‘Protocol Propositions’ show is that there is no impassable gap between the statements of psychology and that physics. Hempel, of course, thinks that this list could be expanded considerably but it is sufficient to bring out the fundamental and essential point, namely, that all the circumstances that verify this psychological proposition is expressed by physical test sentences.

In this way, he argues, every ‘psychological’ statement can be reduced to physical test sentences that do not contain any of the psychological words like ‘pain’, ‘anger’ etc. Thus the privacy barrier is broken and it paves the way for the knowledge of other minds\textsuperscript{xxi}. We only know the physical side of the psychological processes and that whether there is
any mental phenomenon behind the physical processes, to borrow Kant’s language, is ‘unknown and unknowable’, for it falls beyond the scope of science and psychology. Psychology should restrict itself to the study of the bodily behaviors by which man responds to the changes in the physical environment.

Mental sentences should be systematically re-formulated as a set of ‘if…then’ statements where all the components are observable behavior\textsuperscript{xxii}. If this holds true then we can possibly get out of the skeptical doubt. For Hempel says that if a person shows all the behavioral symptoms of pain then there is no point in saying that he is not in pain. But the question is what if a person shows behavioristic symptoms of pain like groaning, moaning, etc. yet is in fact not in pain? But to say that a person shows all the symptoms of pain that are
really exhaustive in nature and yet not in pain is self-contradictory in nature since it amounts to saying that it is possible for a statement to be false even if all the necessary and sufficient conditions of its truth are fulfilled. We know the meaning of a sentence iff we know the conditions under which they are true or false. Therefore, “all psychological statements which are meaningful, that is to say, which are in principle verifiable, are translatable into propositions which do not involve psychological concepts, but only the concepts of physics. The propositions of psychology are consequently physicalistic propositions.” An analogy by O. Neurath may be of assistance in clarifying the logical function of psychological statements. Neurath says that when we say ‘this watch runs well’ the term ‘run’ is introduced here as an ‘auxiliary defined expression’ which makes it possible to formulate briefly a relatively complicated system of
statements. Likewise the term ‘pain’ is an auxiliary defined expression that helps to formulate briefly a relatively complicated system of physicalistic statements.

Hilary Putnam\textsuperscript{xxv} thinks this to be false. Hilary Putnam is definitely not in favor of the theory that all talk about mental events is translatable into a talk about overt behavior. Unlike logical behaviorists, Putnam thinks that no number of cluster phenomena can ensure ‘pain’, just as in some cases all the symptoms of polio being present do not ensure the presence of a poliovirus. In fact, just as ‘disease talk’ is not translatable into ‘symptom talks’; ‘mind talks’ are not translatable into physical talks. There might be persons who do not show pain behavior even when in pain. Putnam cites the example of super-Spartans who do not show any type of pain behavior. When
hurt they do not wince, scream, flinch or sob neither do they grit their teeth, clench their fists, exhibit beads of sweat or otherwise act like people in pain. In this case there is a clear absurdity to the position that one cannot ascribe to these people a capacity for feeling pain. In fact, pains are responsible for certain behavior only in the context of a person’s belief system, i.e., in context of a person’s ideological attitudes, desires, conceptual framework etc. So from the statement, ‘X has a pain’ by itself no behavioral statement does follow even if attached with it, is a tag of ‘normally’ or ‘probably’ is there.

Moreover, behavior does not only mean the actual behavior but also includes behavioral dispositions as well. When we say ‘glass is brittle’ what we mean is definitely not that the glass really dropped and broke, but rather that if the glass were dropped it would (most likely)
break. When we say ‘X can ride a bicycle’ what we mean is that if a
bicycle were brought to him he would (most likely) ride it without
falling over. A super-Spartan is disposed to pain behavior even if he
does not show the pain behavior right now. There is no more reason to
believe that the mind is an additional substance, over and above the
body and its behavior, than there is to believe that ‘fragility’ is an
extra, non-physical property over and above the properties of the
physical glass. And so even a super-Spartan who does not show
normal pain behavior is always disposed to do so. Even an secretive
person who values his beliefs and desires to be extremely discreet
would also show some sort of behavior like lying low etc. which in
turn satisfies the axiom of ‘belief-desire’ psychology. The
unexpressed desire also tells us what a person would do if they ever
lost the desire to be secretive.
According to Franz Brentano intentionality is an irreducible characteristic feature of the mental phenomena and since no physical phenomena can exhibit it, mental phenomena could not be a species of physical phenomena. Frege has pointed out that truth-values of statements containing intentional predicates do not remain the same when identically-denoting terms are substituted as the statements of identical relations are not ‘well behaved’. If it is true that ‘George hopes to be elected as the President’ and it is also true that ‘the President is an assassin’s target’ it does not follow that ‘George hopes to be an assassin’s target’. Quine calls it referential opacity in intentional context. One cannot do logical inferences with intentional statements. One cannot pin down what hope or belief is about, since the ‘aboutness’ depends on how the subject frames a belief and what his/her system of belief is. One needs to know everything about
someone’s worldview and projects in order to predict that person’s beliefs and subsequent behavior, if any. And this is a tall order.

The models for the thesis that the psychological statements can be analyzed in terms of behavioral dispositions were successful analysis of properties like fragility and solubility. To be fragile is to be disposed to break if dropped or otherwise impacts. To be water-soluble is to have the disposition to dissolve when placed in water.

But no such plausible analysis of a single psychological state in terms of behavior and dispositions to behavior can be ascribed. It seems to be impossible to pair individual mental states with behavioral dispositions. There is no 1-1 correspondence between them. If X believes that there is a tiger nearby what behavior would follow? Would it necessarily be running? If X has gone to jungle for safari or
hunting, his behavior would definitely be different than a helpless sudden encounter with the tiger. In fact, there is just no consistent behavior that would typically follow any given mental state.

The more significant thing is that Logical Behaviorism denies a casual role to mental states with respect to behavior. When one believes that it will rain, his belief, for example, might be responsible for his being such that, were he to go out he would take an umbrella. When I cry out in pain, it is the pain that produces the cry. Therefore, our cry is causally related to our pain. ‘Being intelligent’ is causally responsible for one’s ability to solve tough problems and on the occasions when he exercises the ability will be a cause of the production of correct solutions.
We must also not forget that we have some kind of a direct access to our own mental states and processes. We can introspect them and are aware of something internal, which is not a mere behavioral disposition. If our own mental states are nothing but behavioral dispositions then we will have to know our mental states through behavioral dispositions which will lead to the absurd situation where one person meeting another on the street would have to say ‘you feel fine, how do I feel?’

“That there is other mind is certainly a fact of the day but it is flaccid stuff; we live in dark ages; our slack concepts crumble, our conceptual schemes are grappled with riddles.”
2.2 THE MIND-BRAIN KEY

Mind-brain identity theory is a kind of materialism, which has developed in the middle of the 20th century. It presumes that it is theoretically possible to observe what is going on in our brains and for that to mean the same thing as what we are actually experiencing. The famous identity theorist J. J. C. Smart holds that mind-brain identity ought to be a strict identity, i.e., mind and brain refer to one and the same thing. If so then other minds will be nothing but other brains, and hence, an open book. Modern science has discovered a ‘pervasive’ and ‘comprehensive’ system of correlations between mental events and brain processes. Brain lesions can virtually disturb any mental function. Stroke victims often lose speech comprehension if the ‘broca’s area’ of their brain is affected. In the case of broca’s
aphasia the person has symptoms like non-fluent grammatical sentences and poor articulation. In the case of ‘global aphasia’ where a large lesion of the dominant frontal parietal and superior temporal lobe is affected the person suffers from minimal speech and has non-fluent comprehension that is poor for spoken and written language. In the case of wernicke’s aphasia when posterior peri-sylvian structure of the cortical and temporal lobe is affected, the person can speak fluently but suffers from total incomprehension of spoken speech and total inability to make or repeat sound or words. Various brain injuries and diseases cause various kinds of memory loss or losing consciousness. A proper treatment of brain frequently helps to bring back such mental processes. Chemical changes in the brain also affect thought experiences. For example, LSD makes us hallucinate, analgesics relieve our pain, anesthetics cause us to lose consciousness
and so on. Therefore it is quite rational to hold that for each mental event there is a brain state and this correlation is not accidental. So philosophers like Smart hold that ‘mind is brain viewed from outside and brain in mind experienced from inside’. So if my mental state for seeing red (X) is identical with my brain state (Y) then whenever I see red I would always have brain state Y and vice versa.

2.3 THE NEURO-PHYSICAL ENTRYWAY

But if we hold this 1-1 relation of mental events with Central Nervous System we are faced with some serious problems. For some neuro-physical events prove otherwise. When a person is stung by a bee, he experiences a sudden sharp pain with a duration of one or two seconds. This particular mental event cannot be identified with a particular cerebral event for cerebral events are measured in
milliseconds and there is a big gap in our knowledge regarding the
time-space description of Central Nervous System and behavior in the
very short time interval. Paul Ziff cites another example. If my skin is
touched by a feather over and over again at the same place at different
times every time I will get the very same feeling. But there is no
reason to suppose that exactly the same collection of cerebral events
occurred. There may be a correlation between the mental state and the
brain state but it is highly improbable that this would be a 1-1
correspondence. And this makes the knowledge of minds other than
mine own through the brains that others possess, virtually
impossible. Even if we can observe the brain states of a person we
can never know ‘his feeling pain’. Even when the brain graph shows
us the intensity of feeling it can never tell us whether that feeling is
the feeling of love or hate or anger or something else.
Can the riddle of other minds be solved if the proper dyadic translation of mental states to their corresponding neuro-physical states is done? Ziff thinks that this riddle can be solved if psycho-physiology, which is a relatively new branch of science would find out and state the ‘dyadic translation functions’ i.e., ‘functions that take as argument ordered pairs, one member of which ranges over psychological matter, the other over physiological matters’.

Arguendo this is true, the problem remains. The conceptual gap between the physical states and the psychological state cannot still be bridged. Now let us take the example of an orange. An orange is definitely a cluster of molecules but to say that ‘I love to have an orange’ and to say that ‘I love to have a cluster of molecules’ can never be one and the same thing. Water is H2O but there is definitely
a conceptual difference between ordering a glass of water and ordering a glass of H2O even though water is in fact H2O. To classify things as an orange or as water are to employ a particular form of conceptualization, whereas to classify things as a cluster of molecules is another. By the same argument, mental states can no more be identified as physical states than can oranges be identified as a cluster of molecules.

The next issue is how the dyadic translation thesis will explain intentional properties like hopes, desires, beliefs, etc. It is hard to pin down a hope or a desire to a particular part of the brain (CNS). These intentional relations, as we have seen earlier, are not at all ‘well-behaved’. They depend on various subjective factors. How a subject frames his beliefs, what his system of belief is, in which socio-
economic framework he belongs to, all these factors and some more construct the ‘intentional’ world of a person. Here brain, in isolation, is not enough to play a significant role by itself.

So far no necessary connection between the behavior of a human being and his mental states can be established. We are again faced with the asymmetry between first and third person statements where we have privileged access to our own mental states and processes and hence the knowledge of our own minds but cannot have a knowledge of other minds through direct awareness of their mental states and processes. But are the skeptics justified in demanding the direct awareness as the basis of third person mental statements? If so, then are they ready to say that direct-awareness is the only source of knowledge? Moreover, why are we so vulnerable before skepticism?
“What is about human beings which makes them maintain an interpretation of themselves that sustain the threat of skepticism?”

Or is it just an illusion? These areas will be taken up in greater details in the subsequent chapters.