Chapter III

DOCTRINE OF PHENOMENALISM

(Relational Theory of Perception)

Preliminary Remarks

'Phenomenalism' is a term used to signify the epistemological doctrine which is devised for putting an end to the rather perennial tug of war between the arguments some of which carry us from dualism to subjectivism and then to solipsism, and some others which take us back to dualism. The dualistic theory of knowledge, as is already observed, makes a leap from what is experienced i.e. sense-data to what is not i.e. material substance and thereby leaves an unbridgeable gulf between the world of sense and the world of physics. The only ground adduced to establish the objective and permanent physical world is the notorious 'animal instinct' which scarcely survives a rigorous logic. This often leads to a total abandonment of the notion of physical substance and then of that mental. On the other hand, our faith in an objective and permanent physical world is too instinctive and intense to tolerate such scepticism.

One way to avoid this odd situation is that we abandon our common habit to distinguish the perceived object
from the perceiving mind and treat them as being fundamentally same stuff. This is indeed the position adopted by William James and other American neorealists. In their systems, mind and matter are assimilated into each other and a new stuff, the neutral stuff, is produced of which both mind and matter are said to be constructions. As its logical corollary, this doctrine denounces the "relation" ('being aware of', 'is revealed to') which is supposed to be holding between the knower and the known. Knowledge does not consist in the confrontation of subject to its object but in coming of the object in relation to other objects of similar sort.

It is obvious enough that this view is implausible for those philosophers who are more sensitive towards the relational nature of experience i.e., for those who think mind to be an indispensable term in any solution of the problem of perception. For such people the remaining alternative is 'phenomenalism', which although reduces, as the subjectivists do, the 'things' into 'knowledge of things', but retains their 'objectivity' and in some sense 'permanence' too.

One's knowledge according to this doctrine is of course of one's private 'sense-data', not the real thing,
but the fact that there may be a great many sense-data (both actual and possible), some of which closely resembling, a collection of these sensed data and these possibly sensed may be supposed as public and belonging to an objective space. Moreover, the fact that the sense data are quite distinct from (in their being given to) sensations, already proves that they are not mental and are proper subject matter of physics. In this way we see that this doctrine, on the one hand, attempts to overcome the difficulties of dualism (i.e. by abandoning the inference of transcendent dental things-in-themselves) and on the other, saves one from being entrapped into the prison of subjectivity.

**Mill's Phenomenalism**

Historically this position was first adopted by John Stuart Mill, who reduced material things into what he called 'permanent possibilities of sensation'. A physical thing, according to Mill, is an assemblage of the actual sensations which I have at a given moment of that thing and those which I had in past and will have in future together with those innumerable sensations which other people might have at different times and also those which cannot be experienced at all. My own knowledge of a thing at any moment is only a fragmentary part of the
total aspects in which it might be sensed. Mill says:

"The concept I form of the world existing at any moment, comprises along with the sensations I am feeling, a countless varieties of possibilities of sensations; namely the whole of those which past observation tells me that I could, under any supposable circumstances, experience at this moment, together with an indefinite and illimitable multitude of others which though I do not know that I could, yet it is possible that I might experience in certain circumstance not known to me."

Mill, in his book *An Examination of Sir William Hamilton's Philosophy*, propounded what he called the 'Psychological theory of belief in an external world'. His main claim was that our belief in an external world is not intuitive but an acquired product. By this he meant that our world, known to be existing only by virtue of its being known must be given only an experiential significance. That is to say any belief which is not amenable to experience would be incredible. That there are the substantial physical things is one such incredible belief. What however cannot be denied is that there is world external to us which we fairly know that we know. Thus, his problem was to show the possibility of an external and enduring world which does not admit the precarious assumption of physical substance. On the basis of what he called "psychological truths", all of which proved by
experience”², he thought, he could show the viability of his 'permanent possibility of sensations', as a functional substitute of physical substance. The psychological truths were as follows:

In the first place, we may see, that human mind is capable of expectations. We can expect after having had sensed some actual sensations, some possible sensations which might occur to us in suitable circumstances — circumstances, the nature of which is known through experience. For example when we perceive the surface of the table as of certain kind we can expect beforehand what sensations will we have by raping it or by pressing it with fingers. Thus the inference of unsensed sensations from the sensed ones is natural and involves no precariousness.

In the second place, according to Mill, there are certain laws — laws of associations of ideas — which justify our belief in possible sensations.³ Firstly there are appearances which being similar to one another are thought to be associated. Secondly there are phenomena which occur contiguously to one another and are therefore associated in our thought. This relation of contiguity
may be in the form of 'simultaneity' or 'immediate succession'. Facts which have been experienced or thought of simultaneously, recall the thought of one another (for example, the raining and the sound of pattering). Of facts which have been experienced in immediate succession, the antecedent or the thought of it recalls the thought of consequent but not conversely (for example, smoke and fire).

The third law of association is obtained when "contiguity becomes more certain and rapid by repetition". That is to say, when two phenomena are always experienced together and in no instance otherwise, then the certainty of their being associated increases greatly and we may then reasonably call the association inseparable, or as Mill says, 'less correctly' "indissoluble". But by inseparability it is not meant that they are conjoined once for all and it is impossible to conceive them apart. It simply means that as long as no such experience or process of thought has taken place, the association is irresistible. The last and the most important thing is that when such inseparability of two ideas is achieved, it suggests a similar inseparability between two things of actual world which answer the two ideas. 

"Things which
we are unable of conceiving apart appear incapable of existing apart. Everybody finds in his consciousness a typical order of sensations and of reminiscences of sensations which he falsely thinks as having counterparts in actual material world. Therefore, a little cautiousness is needed in order to get rid of one's superstitious belief in substantial things. For Mill the order by itself, suffices to account for the facts of externality and permanence with which the material world is characterised.

For further illustration Mill takes into account the notion of cause and effect which is the backbone of all the representative theories explaining perceptual phenomena. What we ordinarily think as cause and as effect, is for Mill a "constancy of antecedence and sequence". Now obviously according to his theory this relation of antecedence and sequence does not occur between two substances but, instead, between two fixed groups of sensations arranged in a fixed order. It will be seen that the constant sequences only rarely exist between the actual sensations. Our actual sensations are only a portion and representative of a whole cluster of the possibilities of sensations. Therefore, the relation of sequence is between these clusters and not between those which come in our actual experience. This very fact prevents us to attach the relation in question to actual
sensations; we tend to conceive it as occurring in two
groups of possibilities of sensation. We also come to think
that the groups of possibilities of sensations are external
and are underlying cause of which the actual sensations are
arbitrary effects. Mill says:

"The whole set of sensations as possible form
a permanent background to any one or more of them,
that are at a given moment actual; and the possibili-
lities are conceived as standing to the actual
sensations in the relation of cause to its effects
or of canvas to the figure painted upon it, or ....
in transcendental language, of Matter and Form".6

Mill, in this way, reduced the physical things into
the groups of actual sensations and those "contingent" by
which are meant, "sensations that are not in our present
consciousness, and individually never was in our consciousness
at all, but which in virtue of the laws to which we have
learnt by experience, that our sensations are subject, we
know that we should have felt under given supposable circum-
stances and under these circumstances might still feel"7, and
thereby renders the postulation of subsisting material
entities gratuitious and logically unnecessary. Material
world is material not in the sense in which common men or
scientists together with a group of philosophers take it to
be; but in the sense of being objective, permanent, enduring
and strictly real. Different people cannot share in one
another's actual sensations but they do share in the per-
manent possibilities of them. It is enduring since it is
independent of our perceiving them; i.e. it is something
more than and transcendental to our actual sensations.
Permanent possibilities possess all the characteristics that
we commonly attach to material substances and therefore its
function is same as that of latter. It is Mill's conviction
that "this is the meaning of matter in the minds of many of
its most esteemed metaphysical champions though they them-
selves would not admit as much". 8

Russell's Phenomenalism

It is not quite easy to speculate about the extent
to which Russell owes for his doctrine of phenomenalism to
that of Mill. Russell put this doctrine in his Our Knowledge
of the External World and two of his articles "Relation of
Sense-Data to Physics" and "On the Nature of Acquaintance"
(originally given as Lowell lectures in America), all pub-
lished in 1914. But despite great affinities at very crucial
points, at no place Russell has given a reference to Mill.
On the other hand, it is also difficult to accuse him of
being ungrateful as he is quite famous for being overgenerous
in admitting his debts to others. In any case, it is clear
that the similarities between the two philosophers are immense—
so much so that the views of Russell can be said to be an
enlarged and technicalised version of those of Mill.

Mill, in his attempt to reduce the inferred physical
substances was, as is evident from the preceding account,
primarily actuated by his desire to avoid the difficulties
in which the dualistic theories were thought to be involved
while retaining the belief in an objective and real world.
Russell is more positive. His problem was to provide the
physics an experiential basis so that it may genuinely be
called as an empirical science 'based on experiment and obser­
vation'. In other words, his aim was to bridge the gulf that
was caused between the world of physics and world of percep­
tion due to physicist's apriori assumption about the subsis­
ting material substances—an assumption which he himself
entertained in his Problems of Philosophy.

The guiding principle that lurked behind the whole
endeavour was that embodied in the maxim of Ockam's razor
which, as has been seen, stood for the reduction of inferred
entities and their replacement by logical constructions so
that there do not remain any necessity to assert the logically
precarious entities.
Preliminary Analysis of Knowledge

The problem then at hand is how to establish an independent physical world purely on experiential grounds. Russell starts himself with a preliminary analysis of our common perceptual knowledge. We know a lot of physical things given in the universe which we think are based on the evidence of sense, viz. chairs, tables, trees, rivers etc. etc. But the psychologists make us believe that what we actually see is far less than what we say we see; the greater part of our knowledge is always inferred. For example, when we say we see a table, it is not that the whole table is presented to my senses; we see, instead, only some of its parts (say, its upper surface, when seen from the above); the whole table is inferred by us from these sensible parts. Moreover it is also to be observed that we often tend to believe that we know the real shape or size or colour of the table (or real table). But as what has been previously discussed shows, it is amply evident that we never come across the real table (if there is one). The immediate data of our knowledge are certain sensible qualities from which we infer a real substantial table. The knowledge of the things that are immediately and directly given to the senses, Russell calls now as 'primitive knowledge' and the knowledge deduced from it are called by him as 'derivative knowledge'.

The derivative part of our knowledge may be of two kinds viz. psychological and logical. "Psychologically, a belief may be called derivative whenever it is caused by one or more other beliefs or by some facts of sense which is not simply what the belief asserts." A logically derived belief, on the other hand, is that which we arrive at by the procedures of logical deductions and inferences.

The derivative beliefs in psychological sense are quite common place for us; we judge about a man's inner feelings and emotions merely by observing certain appropriate outside behaviour of that man and in this no logical procedure is involved. But since no logical procedure is involved, these psychologically derivative beliefs are logically primitive. It is then obvious that there are countless beliefs which although psychologically derivative are logically primitive since they are arrived at without taking any help of logic.

Russell maintains that our psychologically derived beliefs, in order to be certain, must need be logically deducible from those from which they are psychologically inferred. Unless this is done their truth will remain precarious and question begging. Our beliefs in external things like table, chair, mountain etc. which are derived from the psychologically primitive beliefs (i.e. from sense-data), for being certain,
are in need of logical justification. Any apriori assumption cannot provide them with the desired certainty. But the case is not same with the beliefs which are logically as well as psychologically primitive. They are self-evident, proved on their own account.

For the objects whose knowledge is psychologically not derivative i.e. which are known through acquaintance, Russell now christens the term 'hard data', and those which are inferred from these psychologically primitive data are called by him as 'soft data'. By 'hard data' are meant "those which resist the solvent influence of critical reflection" and by soft data are meant those "which under the operation of this process become to our mind more or less doubtful." 11

Apart from those presented directly to our senses, the objects that Russell, in his Problems of Philosophy described as examples of hard data were those known through memory and introspection. He now includes 'some spatial and temporal relations' such as the case of a swift notion falling within the species present, 'some facts of comparison' such as likeness or unlikeness of two shades of colours, and above all the 'truths of logic' as hard data. 12 At another place, the list is further enlarged by adding 'the faint and
peripheral sensations' and 'the present true beliefs' as the objects of direct acquaintance.

In regard to memory, Russell in *Problems of Philosophy* argued that when I recall an object, it is immediately presented to me although it appears as past not as present. But the objection may be raised that in a case of remembering it is not the object to which the remembering actually refers, that is presented to me, but instead, a replica of that. My present image of Mr. Jones whom I saw yesterday is not the same which I actually saw and therefore my present knowledge of Mr. Jones must be inferred.

Russell meets this objection by proposing to make a distinction between what he calls the 'intellectual memory' and 'sensational memory'. When I say I know that "I saw Mr. Jones yesterday", it is a fact which I know without the mediation of any idea and this affords a proof that memory-objects are the objects of my acquaintance. The cases of such type are those of intellectual memory. The case of sensational memory is that in which something has just happened and an image is still ostensibly present in my consciousness. In such cases, according to Russell, the thing remains an object of acquaintance although it is no longer present. Thus, in both kinds of memory, the object recollected remains an object of acquaintance.
So far as the knowledge of faint and peripheral sensations is concerned, Russell thinks that in some cases at least we should admit them as objects of acquaintance i.e. as hard data. It is clear that in a normal case of visual sensation our attention is almost centered upon what is in the middle of the field; the margins are generally ignored by us though if we will fully attend to them they will become our data. It is obvious that what I experience effortlessly and what after a conscious effort, both are in some sense 'before my mind' and are therefore my immediate data. The mere fact that the knowledge of peripheral sensations needs effort on our part cannot imply that they are to be outclassed from the category of hard-data. "It seems", Russell concludes, "we must admit things (as hard data) to which we do not attend, for attention is a selection among objects that are 'before the mind', and therefore, presupposed a larger field, constituted in some less exclusive manner, out of which attention chooses what it wants". 13

The same however cannot be said to apply in the cases where no sensation occurs although appropriate physical conditions exist to cause them. For example, we often fail to hear a faint sound although we might have experienced it if the attention was duly paid. In this case there is a sound-stimulus to cause a sensation but I am prevented of
having its counterpart inside my mind. Faint sound (and for this reason, all faint sensations), thus, do not constitute hard-data. What is true for faint sensations is also true for faint wishes, dim thoughts and "whatever else is not in the focus of attention".

About 'facts' it can be said that most of them cannot be hard data. A fact being always complex is opposed to the sensible object which is always simple or at least relatively simple. Fact is an object of our belief which we express in a proposition. Now the belief in facts is no doubt immediately experienced by me, but the fact itself, obviously enough, eludes our direct access. We do not experience that 'earth goes round the sun' or 'London has six million inhabitants' or that 'Napoleon was defeated at Waterloo'. But, however, Russell thinks, the facts in which we ourselves are constituents and in which no testimony or deduction from other facts is involved must be somehow known to me directly. For instance in the case above mentioned viz. 'I saw Mr. Jones yesterday', the fact I claim to know is as indubitable and certain to me as are the objects of outer senses.

It is seen that most of the things of the external world fall outside the scope of immediate experience. Our
knowledge of tables, chairs, trees, other people's bodies and minds is all psychologically derivative and hence constitute the examples of soft data. But what about the knowledge of our bare selves devoid of all their contents? In *Problems of Philosophy*, Russell tentatively suggested the possibility of their being directly experienced. His main argument was that I know that *I am acquainted with this sense-datum*. This being so it is clear that the whole object I am acquainted with is the 'self-acquainted-with sense-datum', therefore, self is also a hard datum.

But at this stage he altogether rejects the possibility of direct knowledge of self. In the first place, he says, *'I' must be distinguished from 'ego' which is universal and of which *'I* is merely an instance. When the word 'I' is uttered, there is only one person who uttered it for himself although this person varies according to the utterer. Now, Russell thinks, although 'I' makes perfect sense to the person when he uses it, it cannot be said to be known to him introspectively. Hume's inability to perceive himself was not peculiar and "I think" (says he) "most unprejudiced observers would agree with him".

Some mystics, have no doubt claimed to encounter their selves but such cases are very rare and the term 'I'
as it is meaningfully used by common man, must possess "some easily accessible meaning". "It follows", Russell concludes, "that the word I as commonly employed, must stand for a description; it cannot be a true proper name in the logical sense, since true proper names can only be conferred on objects as to which we are acquainted". 15

**Analysis of Experience**

The soft data although not as indubitable and certain as hard data, are nevertheless the objects of our knowledge. Russell, indeed, denies the theory held by many philosophers that the knowledge of the objects beyond our experience is not possible. To substantiate this suggestion, he makes a very subtle and detailed analysis of the term 'experience' where it is taken to mean as 'direct experience'. At any given moment we are aware of certain things which constitute 'my present experience'. This 'my present experience' which we say are the sole data of our knowledge, according to him, possesses certain unity "important to realize but hard to analyse". It might be defined in terms of what 'I' experience 'now'. But the terms 'I' and 'now' are such that they themselves are to be defined in terms of 'my present experience' and in no case can be presumed. It also cannot be
defined as 'all experiences contemporaneous with this' where this stands for some actual part of what I am presently aware. For there is the possibility of its being experienced by some other minds. Similarly to define it as 'all experiences which I experience as contemporaneous with this' will also not do since now we will be ignoring those portions of our knowledge which fall short of our attention i.e. which presently we are not introspectively aware of. Russell thinks that 'being experienced together' is a relation between experienced things which itself can be experienced and if so then we can define 'my present contents of experience' as 'everything experienced together with this' where this is any experienced thing selected by attention. 16

Russell's actual problem is to show that 'present contents of my experience', or even, 'my total experience' which I had in past, am having presently and will have in future is not all embracing. That is to say, there do exist some knowledge-objects which transcend i.e. lie outside the periphery of my subjective experience. The question of transcendence, according to Russell, is vital in theory of knowledge and has important bearings upon one's epistemological views.

The solipsist theory which denies the possibility of
knowledge beyond what we perceive just now, was one which Russell himself always thought as being logically irrefutable. Everything is asserted only after its being known and to say that we can know what is not our immediate data at present is virtually to say we can know what we cannot know. "Every word that we now understand must have a meaning which falls within our present experience; we can never point to an object and say: this lies outside my present experience". 

Despite this persistent allegiance to the irrefutability of the solipstist doctrine, Russell, advances here two arguments, one empirical and the other logical, which according to him, render it implausible. In the first place, he says that we claim to know things which we have now forgotten. We often, for example, try to recall the name of a person whom I met sometime in past. I am certain that the name came into my experience though presently I am missing it. This palpably shows that there are data which transcend my present experience.

The same is seen in the province of mathematics "where we may remember that there are 144 entities in the multiplication table, without remembering them individually and we may also know that there are an infinite number of facts in arithmetic of which only a finite number are present to our mind". Moreover our memory tells us that we are
used to come to be aware of the objects which did not until that time occur to me. This shows that throughout past our experience has not been all-embracing. This also shows that if there is any future, we must encounter the data which we have not hitherto come across. A complete knowledge of the universe, Russell says, must include what is yet to come besides what is and what has been in my experience.

On the logical side, Russell says that although the soft data is not given to me directly yet I know certain characteristics which I think, applies to it. In other words, we know certain descriptions, which occur in the propositions about a particular soft datum. This proposition can be analysed into simpler propositions which will be about those objects which we may directly experience. If there are objects in my experience which answer the terms of simple proposition, then the complex propositions about the thing must be true. That is, we may be sure about the existence of a things when it eludes my immediate experience, if the proposition about it can be analysed into the propositions which have purely experiential objects as their constituents. For instance, if we know Jones and paternity and the fact that every person has father, we can know the truth of the proposition that "Jones has a father" without
directly experiencing this complex fact. In the region of mathematics too we acquire knowledge through descriptions. For example "we know that there is no greatest Prime number. But of all the prime numbers that we shall have ever thought of there certainly is a greatest. Hence there are prime numbers greater than any that we shall have ever thought of". 19

From the reasons above adduced, it can be concluded that we can know pretty much things apart from those that fall within the scope of my present experience. Some other reasons are also helpful in answering the question how do we come to know that 'our total' experience is not all embracing? This question, presupposes another question which it is necessary to disentangle to. It is why do we regard our past and present experiences as all parts of one experience, namely, the experience which we call ours?

It is obvious that it is memory through which we come to know our past experiences and which enables us to call them as 'ours'. It is not that only those objects that we are presently remembering are our experience, but that there is a whole nexus of experiences linked by memory which all together constitute our experience.

But, however, Russell thinks, it is not memory per se that connects present to our past in this manner, but memory
of a certain sort. The objects of memory are not only those which we actually have experienced but also those which we have not experienced at all. For example when I hear a striking clock I come to know that it has already struck at several times, though I was not attentive enough to hear the previous strokes. Even if I have actually experienced them, I am now failing to remember that I have done so. In this case, therefore, there are two kinds of memory distinguished from each other. One is the memory in which we remember only the striking of clock which is an outside event and the other in which we remember the experiencing of the event. Russell maintains that it is the latter kind of memory that forms links between our present experiences and those of past. To remember the experiencing of something, according to him, implies that we can include that remembered experiencing in our present experiencing and so also those which we might have remembered at that earlier time and "so back hypothetically to the earliest infancy." In the same manner we, can hypothetically stretch our personality forward in time to all experiencing which will remember our present experiences directly or indirectly.

It is evident from what is said above that apart from present contents, our total experience includes the objects
that we have experienced in past and if time is continued, as it is really pretty probable, then also those which we will experience in future. Russell sums up the whole discussion in following passage.

"The conclusion to which we have been led by the above discussion is that some of the things in the world, but not all, are collected together at any given moment of my conscious life into a group which may be called 'my present experience', that this group embraces things existing now, things that existed in the past and abstract facts; also that in my experience of a thing, something more than the mere thing is involved and may be experienced in memory; that thus a total group of my experiences throughout time may be defined by means of memory, but that this group, like the momentary group, certainly does not contain all abstract facts and appears not to contain all existing particulars and in especial does not contain the experiencing which we believe to be associated with other peoples bodies". 22

Relational Nature of Experience

In his analysis of experience of this stage, Russell retains the overbound emphasis that he previously laid upon its relational nature. He criticises the neutral monists who reduce mind into the stream of consciousness saying that in a case of knowing the known object does not confront any transcendental subject, but only some other object of the similar sort. According to him, an object might be experienced by two persons simultaneously but the experiencing of the
experience of that object is exclusively one's own and does not in any case overlap. I can experience my experiencing of an object and this is in no way logically bound up with my other experiencing as the neutral monists suppose. Hence experiencing is a simple relation between the thing experiencing i.e. subject and the thing experienced i.e. object and this relation can be named as 'acquaintance'.

Each case of acquaintance is essentially a mental occurrence, although the objects need not be mental. The acquaintance is possible only when the objects by relation themselves with subjects make it a complex fact. The bare object un-espoused with subject is always physical. Subject and object are two distinct and independent terms of a case of knowledge, subject is mental and object is physical. That the sense-data (object) are physical, has already been discussed in previous chapter and this question, for that matter, need not engage us here. A quotation from his article "Ultimate Constituents of Matter" is, however, worth repeating here.

"When I see a flash of lightning, my seeing of it is mental, but what I see.... is not mental. I maintain, in fact, that if the physicist could describe truly and fully all that occurs in the physical world when there is a flash of lightning, it would contain as a constituent what I see and also what is seen by any body else who would commonly be said to see the same flash. What I mean may perhaps be made plainer by saying that if my body could remain in exactly the same state in which it is, although my mind had ceased to exist, precisely the object which I now see when I see the flash would exist, although of course I should not see it, since my seeing is mental."
Russell, indeed refuses to subscribe to the idealist's contention that objects are mental since they are dependent upon the mental selves. A careful analysis of the words 'independent' and 'self', according to Russell, will amply show that in a particular case of experiencing, 'self' and 'object' are two distinct terms and none can be reduced to other.

To take 'self' first, it may be seen that it can be defined in two ways viz. in terms of bare subject to which objects are presented or otherwise in terms of the 'whole assemblage of the things that would necessarily cease to exist if our lives come to an end'. For our present purposes, the first definition is inadmissible since our knowledge of bare subject is inferred. The second definition too involves a practical difficulty which is that we can not specify which things are dependent upon our lives. Moreover this definition introduces the term 'dependent' which requires a definition in the same manner as our second term 'independent'. It is therefore better to analyse first the term dependent (or independent) and then proceed to do same with 'self'.

One thing is said to be dependent upon another when either it is that it is not logically impossible to conceive one without the other or otherwise when the two are so causally related that one can exist only as being an effect of the other. Moreover one thing is said to be dependent upon other
other when the former is a part of latter. To say, thus, that no reality exists independent of our selves is to say that our self is a necessary ingredient of all reality. Now whatever be the definition of self, this contention is palpably absurd. Idealism is thus shown false by *reductio ad absurdum*.

The question whether or not the objects of experience are causally related to the subject is one which involves great complications. It is quite obvious that mental events like feeling, desiring, judging are causally dependent upon the subject for their occurrence. But it is difficult to say that same is the case with the sensations. Common sense assumes that sense-objects persist even when we cease to experience them, and, are therefore, independent of our selves. But if it is shown, as some philosophers really pretend to do, that they cannot exist unless sensed, the belief in their independence would become question begging.

The question at hand is therefore reducible to the question that whether or not the objects persist when they are not given to our sense? This latter question too involves two separate problems. First, can we know that the objects of sense or very similar objects exist at times when we are not experiencing them and second, if this cannot be known,
can we know that other objects inferable from the objects of sense but not necessarily resembling them, exist either when we are experiencing the objects of sense or at any other time? These questions require a detailed discussion for their precise answer and we shall return to them a little later. For present we may assume in the light of preceding discussion that a case of experiencing always involves an irreducible relationship between the experiencing subject and the experienced object.

But here the objection may be raised that if, as Russell himself admits, we do not have the knowledge of our bare selves, how can we justifiably sustain our subject-object distinction in experience. Russell confesses, that if the knowledge of bare selves is indispensable for maintaining the dualism, we certainly can no longer assert it with warrant and that the doctrine of neutral monism will then be true. But he thinks that he can show that there does not exist any necessary connexion between the knowing of subject and asserting the subject-object dualism such that the former is indispensable for the latter. His argument is simply this:

It may be seen that when we are experiencing an experience of an object (say 0) what is before my mind is the complex "something acquainted with 0". The subject is here an
apparent variable rather than any precise individual. Therefore it is perfectly possible to suppose the above complex as a datum, inspite of our incapacity to be acquainted with subject. Moreover when two objects, say 0 and 0', are simultaneously presented to me, the fact I experience is "something acquainted with 0 and 0'. That is to say, the two objects have a common subject although it is not directly known.

It follows that the mere fact that we do not have acquaintance of self does not prevent us from maintaining a subject-object dualism in experience. The self is known albeit indirectly and is therefore a necessary term of experiential relation.

Russell admits the mental substance as a necessary ingredient of the fact of a given case of experience. He, however, does not do the same in regard to material substances. His theory of experience is a two-factor theory in which objects come in a simple relation to the subject. But the 'objects' are not material substances which subsist different data but data themselves. Due to the passive character of sensations, it is natural to assume that they are produced by some outside cause(s). But that is all. That is, what, at best, we can say is that our sensations have some outside cause, not that the objects of sensations themselves are caused
by some external thing. Our experiencing is no doubt causal and relational in nature, but the relation in question is by no means between mind and material substance; it is simply between the mind and data. The attempt to bring in the notion of material substance is both dubious and unnecessary.

**Content Theory Rejected**

It is fairly evident from above that Russell's theory of experiential knowledge is a two-factor theory and being so, is sharply contrasted with the representative theories of Meinong and American Critical Realists who introduce a third factor, the 'content' between the subject and object. It is held that in a case of knowledge, the object known to subject is always represented by the 'content', or 'image' or 'idea' which is always, like the act of experiencing, phychical as opposed to the object itself which need not necessarily be so.

One of the arguments adduced to substantiate this theory is the argument from 'illusion'. We often come across the appearances of objects which we think are not real such as the bent stick, mirage, dream-objects. There are also the ideas which do not have their referents in actual world such as the ideas of 'unicorn', 'winged horse', 'golden mountain' etc. Likewise there is the phenomenon of memory in which
something is known although it is not present to the senses. It follows from all these that something other than the object is presented to subject in order to constitute a case of knowledge.

Another argument for the content theory is this: We have the experience of blue and the experience of green. Now, obviously, the two objects share in the quality of both their being objects of experience. But they are also different in some other respect, for otherwise no distinction between them will remain. This difference, it is alleged, is due to the contents which we have in our minds.

But Russell, in the first place, denies altogether the existence of illusive or delusive experiences. What indeed is the basis of our discrimination and distinction between the so-called real appearances and the illusory ones. There is qualitatively no difference between the appearance of straight stick and the bent one and therefore both must be equally genuine. It is matter of sheer habit and prejudice on the part of common man, and in the case of philosophers, of logical inconsistency to take one as real and the other as non-real.

The supposed non-reality of bent stick or other like
phenomena is due to their unusual nature i.e. due to the fact that it is not possible for us to correlate and make them consistent with other objects of experience in the way which experience has led us to regard 'normal'. Had the dream-objects (for example) been more recurrent, more consistent and lasting for a fair long period of time we would have put some faith in them as we do in the events of actual world. "Objects of sense", Russell says, "are called real when they have the kind of connection with other objects of sense which experience has led us to regard as real; when they fail in this they are called 'illusions'. But what is illusion is only the inferences which they give rise; in themselves they are every bit as real as the objects of waking life". It is, as a matter of fact, our instinctive faith in the 'thing in-itself' being beyond and behind sense-data that leads us to discriminate one experience with other (say) the appearance of the bent stick with the straight one.

That there should not be any discrimination between the 'real' and 'illusory' appearances of a thing was historically contended, far before Russell, by Ernst Mach, a German physicist, in his work Analysis of Sensations. In this, Mach like Russell, proved a physiological basis to hitherto psychic phenomena and, as a logical corollary, put
an end to the age-long contrast between what he called "appearance" and "reality" meaning obviously by them the 'illusory appearance' and the 'real one' respectively. We say that the pencil dipped into water appears crooked while in reality it is straight. "But what justifies us", asks Mach, in declaring one fact rather than other to be the reality and degrading the other to the level of appearance? In both cases, he goes on, we have to do with facts which present us with different combinations of the elements, combinations which in the two cases are differently conditioned .......

Like Russell, Mach says that it is rather due to their abnormal nature that we take the dream-objects or bent stick as appearances as contrasted with reality. "To be sure", says Mach, "our expectation is deceived when not paying sufficient attention to the conditions and substituting for one another different cases of combinations, we fail into the natural error of expecting what we are accustomed to, although the case may be an unusual one ....... In this case, "he continues, "to speak of appearance may have a practical meaning but cannot have scientific meaning ....... In our waking hours the relations of elements to one another are immensely amplified in comparison with what they were in dreams. We recognise the dream for what it is. When the
process is reversed, the field of psychical vision is narrowed; the contrast is entirely lacking. Where there is no contrast", concludes Mach, "the distinction between the dream and waking (or for that matter between the bent and straight appearances of pencil), between appearances and reality, is quite otoise and worthless". 28

Now returning to Russell, we find that the case of memory-experience is a little more complicated. It prima facie appears that unless there is a content representing the object of memory the experience in question cannot occur, for the actual object is not present. My 'state of mind' when I am remembering an object must be different from my state of mind when I do not. Meinong's contents, Russell thinks, can be reduced into what is ordinarily called the state of mind. The question therefore is that whether or nor there are 'states of mind' as opposed to the objects cognized in various ways. But, as Russell has already shown, the memory-experience consists in the experience of a complex fact vis. "experience of the remembering of the object", now since this complex cannot be placed at any definite position intime series, the supposition that the "contents must be present becomes gratuitious. The remembering subject is no doubt present but the contents of memory need not be "present" in any definite sense of the term.
What is true for the memory-objects is also true for the objects which do not belong to any time at all. So far as the case of chimerical entities like unicorn, Golden-mountain etc. is concerned, Russell had already shown them to be non-entities by his theory of descriptions. It is not that they are objects non-existent, but rather they are not objects at all.

The most forceful argument in favour of content theory, was, according to Russell, that derived from the extensive difference between the two experiences. The experience of blue and the experience of green cannot be differentiated in terms of the 'act' which is common between them; it is only the content of the act in which the distinction can be sought. Superficially it may seem that in experiencing blue and then experiencing green our mind undergoes some modifications. But in this idea of subjective modification, thinks Russell, lurks the axiom of internal relation which he had already rejected. It might have been thought that the difference of objects must correspond to some difference in the subject to which the objects are presented. But, according to Russell's own theory of external relations, the difference of relations affords no evidence for difference of intrinsic predicates. It follows that the difference in two experiences is not due to some 'intrinsic change in mind' which occur when two different objects make
their impressions upon it; the difference between objects by itself suffices to explain the different in experiences.

On the positive side, the chief difficulties that the content theory faces is that the supposed contents are not the objects which we can be aware of. We are presented with external tangible things and that there mediates some content between them and our mind is certainly not known to us. The same difficulty is of course, with Russell's own theory of acquaintance in which the subject is admitted although it is not experience. But as Russell himself says, his theory, "it based on inference from the nature of experience, not on any supposed introspective perception of the subject." The representative theory of the other hand can substantiate itself only on the possibility of introspective awareness of the contents. For the arguments that it adduces in support of it, as in shown above, are not valid and cogent. Had they been valid and cogent, then, says Russell, he might have accepted it. "If", Russell goes on," the arguments by which Meinong supports his belief in contents had appeared to us valid, we should have admitted contents; but in the absence of valid arguments introspective evidence alone could lead us to admit contents. Since such evidence is lacking, we may therefore conclude that there is no reason to admit contents". 30
Reduction of Common Sense World

It has been noted earlier that for Russell, the object term in experiential relation is sense-data and not any material substance. Sense-data in themselves constitute the object of knowledge and are not representative of anything beyond themselves. The view that sense-data represent something of which they are functions is, according to Russell, a product of an unfortunate blending of our two beliefs—one that there must be something persisting independently of being known in sensation and the other that the changing appearance of a thing is due to changes in our own position not in the thing itself. Our instinctive faith in the persistence of objects of knowledge is the root cause of our belief in the existence of an independent physical world.

But, strictly speaking anything we are entitled to assert is that which we experience at a given moment. Matter of physics, even if it exists, is quite elusive to our direct experience. It follows that if physics is to be verifiable it must base itself upon these momentary sense-objects or at best on an aggregate of these objects and those which are very much similar to these in their nature. In other words, we must reduce physical world into the actual sense-data as well as those which are possible i.e. sensibilia, in order to make physics an experiential science.
Russell proposes to reduce substantial material thing into sensibilia which includes both actual and hypothetical sensa. Hypothetical sensa are not experienced; their knowledge is inferred from the actual sensa. But the question was that why we infer hypothetical sensa from the sense-data? Why do we not infer from them the substantial material thing? For Russell, the reason is that the latter involves more risk than the former. Unexperienced sensa are similar in their nature and status with the experienced data, while the material things are radically dissimilar and different. Sensibilia are what are capable of being experienced whereas the things are utterly inexperiencible. Therefore it is safer to infer the former as against the latter.

In straightforward cases the reduction is not far too difficult and can be accomplished without much ado. In common-sense language, for example, we state our different experiences of a table while moving about it by saying that we get different appearances of the same table while moving around it or we say that a table causes different appearances when viewed from different places. Now if we avoid the talk of fixed and permanent table we can simply say that there are some muscular and other changes which make us say we are walking, which are connected in some way with the continuously changing visual sensations in the way that gradual changes in (say) colour are
slight enough to remain unnoticed. Talking this way, we will be stating same fact although no assumption would be involved.

But this reduction is a bit difficult in cases where the alterations in appearances are due to what common sense would call alterations in intervening medium such as when we put on blue spectacles or look through a microscope or press our eye balls. The problem is how to maintain subject-object dualism while accounting for the presence of something which makes the appearances changed? For example, we put on blue spectacles and things appear blue. Now for common sense it is easy to say that appearances of things are changed because a blue glass intervenes between the eyes and the things seen.

But according to Russell's theory subject is acquainted only with the objects seen (here blue things) and is not aware of any intervening thing. Yet he thinks that colours are changed. It will not do to say that as when we see through a dirty pan of glass, glass remains visible so also can we see through blue spectacles while being unaware of the presence of it. For in dirty glass it is only cleaner parts that make us see beyond it and they remain invisible; dirtier specks themselves become objects of sense. It follows that by means of sense of sight alone we cannot account for the changes in appearances which according to commonsense are due to changes in intervening medium.
The existence of blue glass, although unknowable to sense of sight, can be known by sense of touch. We can correlate the space of touch with space of sight and thus assert that there is something intervening between ourself and the objects which makes their appearances blue. This correlation may be exposed to certain practical difficulties but is theoretically possible and may therefore be supposed accomplished.

But one difficulty still we face which is this. We are assuming that blue spectacles exist when we are not touching it. From our theory it can exist only so long as it is object of our sensation. And Russell comes to the conclusion that this assumption is actually inescapable in accounting for the changed appearance of things and that is why he proceeds to seek grounds for this assumption.

It will not be refuted that when we see a coloured surface we can expect certain tactual sensations that we can have if we touch that thing. This leads us to say that it has those qualities of hardness or softness whether or not we touch it. Thus whenever there is some alteration in visual appearances of things (in this case, change in colour), we must presume on the basis of fact of alteration that there is some intervening thing which would be tactually experienced if we put our fingers at a certain place in touch space.
Strictly speaking the presence of spectacles is still not satisfactorily accounted for, but, says Russell, if we wish to avoid the greater assumption of material substance, this much of assumption is necessary.

Russell sums up the whole discussion in following words:

"We can now give a statement of the experienced facts concerning the blue spectacles which will supply an interpretation of common sense beliefs without assuming anything beyond the existence of sensible objects at the times when they are sensible. By experience of the correlation of touch and sight sensations we become able to associate a certain place in touch space with a certain corresponding place in sight space. Sometimes, namely in the case of transparent things we find there is a tangible object in a touch place without there being any visible object in the corresponding sight place. But in such a case as that of blue spectacles we find that whatever object is visible beyond the empty sight place in the same line of sight has a different colour from what it has when there is no tangible object in touch space, the blue patch moves in sight space, when we have no sensible experience of an intervening tangible object, we nevertheless infer that if we put our hand at a certain place in touch space we should experience a certain touch-sensation. If we are to avoid non-sensible objects, this must be taken as the whole of our meaning when we say that the blue spectacles are in a certain place though we have not touched them and have only seen other things rendered blue by their interpositions."

Reconstruction of Physical World

From above what in nutshell Russell wants to say is that our whole knowledge consists of the objects which actually come in our experience plus those which although not data of
experience are, nevertheless, capable of being data. The latter Russell calls 'sensibilia' which include the sensa which can be experienced by some one provided he comes in contact with that and those which are not experienced at all, but are of same nature and status.

It is necessary to make the distinction between sense-data and sensibilia for whereas the former are our most indubitable knowledge, the latter, being inferred, admit an element of doubt. It is obvious that all sense-data are sensibilia but not conversely. Russell illustrates the relation between sense-data and sensibilia by the analogy of husband and man. All husbands are men but not all men are husbands. Moreover, as a man becomes a husband after coming in the relation of marriage so does become the sensibilia, sense-data after being a term of experiential relation. One cannot meaningfully ask the question whether sense-data exist when they are not experienced? For sense-data is by definition what is actually given to the senses. The right question will be whether sensibilia exist without being given? or whether a particular sensible can be at one time a sense-datum but at other time not.35

After reducing the common sense world into sensibilia, what remains for Russell is to provide it with the persistence and permanence as well as objectivity that the latter enjoyed.
In other words, he had construct upon the debris of common sense world, a real specio-temporal world consisting only of sensory objects.

We all use in our ordinary life words like near, far, here, there, time space and so forth. The problem was how to give an interpretation of these words solely in terms of sense? Russell had to bridge the gulf that exists between the fugitive and fluctuating world of sense and the permanent and tangible world of physics. The talks was formidable and Russell claims only to give a rough sketch of the way through which it can be accomplished. The third article of his Lowell Lectures under the title "The World of Physics and the World of Sense" is devoted to this possibility. Since the subject is, in the main metaphysical we shall consider it so as to make our present discussion complete.

The main difficulty that beset the task of reconstruction was the notion of 'content' which supposedly intervened between the mental subject and its physical object. The theory was such that Russell himself was once convinced of its force. But, as he himself related, Dr. T.P. Nunn's article "Are secondar Qualities Independent of Perception" showed him a way out.34

We have seen how Russell rejected 'content theory' by rendering the arguments upon which it is based, false besides
pointing to the difficulties to which it is exposed. The main argument for this theory, as we have seen, was the alleged impossibility of two contradictory appearances of the same thing. Russell now says that the view that the two contradictory appearances of a thing cannot both be real, is a product of an oversimplified view of space. An object of experience does not exist at one place. Instead, two places are involved—one at which it is experienced and the other from which it is experienced. These two places are located in two different spaces. The place from which a sense-datum is experienced, Russell calls 'private space'. When I am seeing (say) a patch of colour, I am seeing it in a space which is private to me and if the existence of other observers is assumed then there may be an indefinite number of spaces in which that patch of colour can be experienced. The difference in appearances is due to the diversity of spaces in which they are situated. But as they are nonetheless situated in spaces, their physical and objective character is by no means damaged. And hence no question arises as to their being merely subjective fantasies with no objective content.

Russell compares his theory of space with Leibniz's theory of monads. Like monads, each person has their own three dimensional world in which they perceive things. And
since all these monads have no place common among themselves, they cannot see exactly the same thing simultaneously. There must be difference in appearance, however slight it may be. When the appearances that two or more than two persons have are so similar that they use one word to name them then arises the notion of an external thing other than and independant of the appearances. All appearances are real in as much as they are objects of knowledge; the thing beyond appearance is not known to exist.

A given place from which the things are experienced, is named by Russell, 'perspective' and all the places from which sense-data are actually experienced i.e. private spaces he calls 'perceived perspectives'. Besides perceived perspectives, there may be an innumerable perspectives from which a particular thing may be experienced in the same way as in the former. If two men are seeing a table in the room then there are two perceived perspectives in which the two visual tables are situated. But between these two perspectives there is a series of unperceived perspectives and if a third man comes and sits between the two persons then a third perceived perspective comes into existence. Logically, admits Russell, we cannot know and for that matter assert the existence of these unperceived perspectives. But as a possible phenomenon their existence is not inadmissible. Perspectives ——— perceived and unperceived, collected together form what Russell calls 'system of perspectives'. 35
Besides the many private spaces, there is one all-embracing objective space of which all private spaces are members. Russell calls it 'perspective space' and it contains as its elements the perceived perspectives as well as an innumerable unperceived ones. This 'perspective space,' according to Russell, cannot be known through experience; it can only be known by inference. We can construct it by connecting and correlating perspectives which are similar enough to be called by a single name.

Supposing for example, I am seeing at this moment a circular penny. This means that there is a perceived perspective which contains a circular appearance to be called 'penny.' Now I move a step towards penny and it begins looking a bit bigger and clearer. Then by reverting I get a step backward from my original position. This time the appearance of penny becomes slightly smaller and vaguer. In this way we get three positions (we can multiply the number of positions by moving forward and backward) in a series of line from which the penny gives varying appearances. These perspectives (in which the penny looks circular) will be said to lie on a straight line in perspective space and their order on this line will be that of the size of the circular aspects.

We may draw a straight line connecting the perspectives
whose order is such that every second perspective contains appearance of circular penny bigger than its first, the termination of which is the perspective where the penny ceases to give any appearance (as it comes so near to our eyes to cover them, as we say). Then we draw a similar straight line on which lie the perspectives containing elliptical appearance of the same penny in the same order. The place where the two lines will intersect, will be the place where the penny is. This place will be an element in the perspective space and it would be the place from which the penny produces varying appearances to the perceivers situated at different places. It would also, according to Russell, be the place with which physics is concerned as against psychology which concerns itself with the places in private spaces from which the given penny is experienced.

The thing in perspective space with which physics is concerned, is however merely a logical construction. Only the system of its different aspects that occur in the perceived and (hypothetically) in unperceived perspectives, are real. It is when the 'perspective' (private space) in which a given thing looks larger is nearer to the place where the physical thing is that we say that that perspective is nearer to the thing in comparison with other perspectives in which it
smaller. Moreover the place in the perspective space which is occupied by our private space would be called 'here'. When the place where the thing is situated is nearer to our private space we would say to it be near to 'here'. Similarly our saying that our minds are inside our heads can also be explained by saying that our private world is a place in perspective space and may be part of the place where the head is. And so on and so forth.

In this way, Russell constructed a picture of the world which, however, was in his own words largely hypothetical. It was hypothetical in that it admitted and included into its materials those facts which were not psychologically primitive but derived from them. It was never-the-less the world which may be actual. There were positively no grounds to support neither were there any to demolish it. The only ground for its preference upon the world of common sense was that after assuming it there did not remain any necessity to assume gratuitously the so called things. In other words it filled the demand of Occam's razor which, as in the very beginning of chapter said, was the sole motivating and guiding idea of Russell in his endeavour to provide the physics an empirical basis. The world of sensibilia, in Russell's own words, could be used with a certain amount of trouble to interpret the crude facts of sense, the facts
of physics and the facts of Psychology—much of this analysis is retained by Russell in his mental monistic stage (upon which we are now to embark), only the scope in which the same apparatus is to be applied is enlarged and extended. The 'ego' or 'self' is removed from the world in the same way in which the 'thing are removed.