Chapter II

EARLY REFLECTIONS

(The Theory of Epistemological Dualism)

Preliminary Remarks

Bertrand Russell's early formulation of the problem of perception consisted in making a distinction between what he called 'knowledge by acquaintance' and 'knowledge by description' meaning by the former a direct and unmediated and by the latter an indirect and mediated awareness with the objects known. Russell asserted that whenever we claim to know a thing, what we come in direct contact with, what we actually know is something other than what we claim we know. The knowledge of the thing we claim to know is always through i.e. mediated by certain other things with which we are immediately acquainted. To put the same in other words, we know the former in terms of latter not directly. Russellian way of saying the same would be that their knowledge is descriptive as against the knowledge by acquaintance which we have of things immediately presented to us and which actually describe the things indirectly known.
The contradistinction of 'knowledge by acquaintance' and 'knowledge by description' stems from a very simple and primitive fact which we in our unreflective life tend to ignore. In common parlance we identify the reality of a thing with the appearance of it notwithstanding the fact that while the former is static and permanent the latter is fairly changeable. If we are asked to describe a table what we will do is to point to its qualities, say, brown colour, smoothness, smoothness or roughness etc. that it seems to have at a given time. We think that these qualities belong to an objectively existing table which they represent. But this is false.

Infact, no quality of an object can be said to be the quality of that object. Observing from a place where there is enough light, the table looks brown and shiny. But if we move to a slightly darker place, it changes its colour; it starts looking dark brown. And if we move further to a place where there is no light, the table altogether ceases to give any appearance. Similarly the table looks bluish when the observer has blue spectacles on his eyes and yellowish when he is suffering from jaundice.

It is clear that a thing changes its appearances —— to same person in different conditions and to different
persons in same condition —— while itself remaining same and static. Now from the fact that one appearance is qualitatively indistinguishable from other, it is also clear that all appearances of a thing are equally genuine and no one of them can be said to be illusory. It follows therefore that appearance of a thing and the thing itself are two altogether different things and can in no case be identified.

It also follows that the appearance of a thing has a dual reference being related with the experiencing subject on the one hand and with the reality of the object on the other. In other words, appearance mediates between the subject and the object. This implies that the perceiving subject never comes in direct contact with the real object. His immediate encounter is only with the appearance which comprises sensible qualities like colour, taste, smell, etc. In Russellian terminology these qualities are called 'sense-data' i.e. the things given or presented to senses.

Our direct knowledge is knowledge of sensible qualities i.e. sense-data. Russell calls this direct knowledge as 'knowledge by acquaintance'. Things in themselves are known, if at all, only in virtue of their being inferred from
or being described in terms of sense-data. This inferred knowledge is "knowledge by description". 'Acquaintance' and 'description' are, thus, two fundamental categories upon which Russell builds the entire structure of his early epistemology. And for this reason it is necessary to go in some detail as to how Russell arrived at these two categories. Probing into their sources is all the more necessary because it throws a flood of light upon the nature and logical status of sense-data which is so fundamental to the understanding of Russell's philosophy of perception of this stage and of subsequent stages.

Logical Status of Sense-data

Russell's distinction of 'acquaintance' and 'description is an outcome of his two celebrated logical theories, namely: 'theory of Types' and 'theory of Description' which he developed in the realm of mathematical logic in order to dispense with some superstititious and mythical entities (such as, golden mountain, round squair, unicorn, numbers etc. etc.) in which he was obliged to believe due to his commitment to the Meinongian ontological theory.

Meinong had held the view that every term or phrase which can be a subject of a logically meaningful proposition
has always its extraverbal counterpart in the physical world which constitutes it meaning. In other words, meaning of a term or phrase is identical with the object it denotes. Thus, unicorn, numbers, golden-mountain, round square are all entities of some kind for they can be meaningfully used as subjects in logical propositions. "Golden mountain does not exist" or "round square is a fictitious entity" are true propositions which implies that 'golden mountain' or 'round square' must subsist if not exist, in some other world if not in this world, because golden mountain is something which is non-existent or round square is an entity which is fictitious.

But this theory, if true, carries with it, as Russell later pointed out, certain insuperable difficulties. One such difficulty is with regard to George IV's statement in which he wished to know whether Scott was the author of Waverley. The point is that if Meinongian theory is true, the term 'Scott' and the phrase 'author of Waverley' must be substitutible to each other, since they refer to same entity viz. the person Scott. But if we replace the phrase 'author of Waverley' with 'Scott' then what George IV wished to know becomes whether Scott was Scott which is absurd.
The another difficulty is this: If the law of excluded middle holds then one of the two statements "Present King of France is bald" and "Present King of France is not bald" must be true. Yet if we enumerate all the things that are bald and then those that are not bald, we will not find in either of the lists any such thing as 'present King of France', "Negelians", Russell characteristically says, "who love synthesis will probably conclude that he wears a wig". Similarly, compare the two propositions "the tallest building of America exists" and "the golden mountain exists". Both the propositions are of the same logical form but whereas the former is quite meaningful, the same cannot be said about the latter. It also cannot be said to be meaningless for its opposite "the golden mountain does not exist" is true and makes perfect sense.

Russell's solution of these difficulties in his theory of description consisted in the elimination of the descriptive phrases by analysing the propositions in which they occur. His conviction is that denoting phrases (the so-and-so, a so-and-so) have no meaning in isolation; their meaningfulness is determined by the sentences of which they are ingredients. Thus, "if I say", Russell goes
on, "Soo was a man", that is a statement of the form 'X was a man' and it has Scott for its subject. But if I say 'the author of Waverley was a man', that is not a statement of the form 'X was a man', and does not have 'the author of Waverley' for its subject. 2

To ascertain whether a given proposition containing a descriptive phrase of the form "the so-and-so" is meaningful or otherwise, we are required to make a correct analysis of that proposition. The analysis would be such that the sum total of analyses must be equivalent to the analysandum i.e., the proposition being analysed. To use a Russellian term, the latter must be a truth function of the former which means that what is being followed by the analysed propositions should be same with what was asserted in the unanalysed original proposition.

Thus, the proposition "the author of Waverley was Scott" is a meaningful proposition, for when rightly analysed, it becomes "one and only entity wrote Waverley and Scott is that one". Or, more fully "it is sometimes true of X that X wrote Waverley and X is identical with Scott and in any case of Y if Y wrote Waverley, Y must be identical with X". But the proposition "golden-mountain does not exist" is a meaningless proposition, for, when translated,
it becomes "there is no entity C such that 'X is golden and mountaneous' is true when X is C but not otherwise".³

The relevance of theory of description to our problem is that it emphasises analysis. We analyse complex propositions into simpler propositions and then into still simpler propositions. And this process continues up to the stage where the propositions at hand are further un-analyzable. These are, in Russellian terms, atomic propositions and have for their subjects and predicates what Russell calls 'simples'. And what in the context of theory of Descriptions Russell calls 'simples', he, in the context of theory of Types, calls 'individuals'.

Russell had said in his theory of Types that different propositions stand in a vertical relation to each other. They are ordered in a hierarchy such that the proposition of a higher order, or as he himself would put, of a higher 'type', presupposes or has as its variables the propositions of a lower type which themselves, in turn, presuppose the propositions of their lower type. Descending in this way downward, we reach the lowest type which has no propositions as its variables. These are the propositions who have as their terms 'individuals' which are opposed to the propositions in that while they are unanalysable simple terms, the
latter are always complex.

The concept of logical 'simples' (or 'individuals') must be clearly understood for it is of great importance in the system of Bertrand Russell's theory of perception and it is one that its misunderstanding has led many philosophers such as Urnson astray. Its importance is further increased by the fact that it constitutes the conflux of Russell's mathematical philosophy and his epistemology.

According to Russell "it is not at all necessary to know what objects belong to lowest type or even whether the lowest type of variables occurring in a given context is that of individuals or some others". In practice, only the relative type of variable are relevant. Thus the lowest type occurring in a given context may be called that of individuals, so far as that context is concerned". At another place, in the context of theory of Description, Russell, answering the objection raised by Urnson that we cannot reach simples however farther we carry our analysis, says: "as regards simples, I see no reason to either assert or deny that they may be reached by analysis". Moreover, "I think it is perfectly possible to suppose that complex things are capable of analysis ad infinitum; and that you never reach the simple .......".
It is clear from the above theory of Description that according to Russell the descriptive phrases did not name any object; they, rather, denoted the object. In other words, they stood for the objects with which we have only indirect acquaintance. The word 'Scot' stands for an object which we can directly see or touch. But the phrases like a man, some man, any man, every man, the present King of France, the centre of mass of the solar system at the first instant of the twentieth century etc. denote objects (existent or non-existent) which we do not directly perceive. Their knowledge is knowledge about something of which only some characteristics are known. They simply describe the object they stand for.

The distinction between naming an object and describing an object is fundamental not only in logic and mathematics but also in theory of knowledge. Although, for the sake of understanding we have spoken as if the words like 'Scot' name an object, but, in fact, they too are descriptive phrases. They are names only in the sense of our ordinary usage; they are not names in logical sense. A logically proper name always stands for a purely existent object i.e. 'simple' or 'individual'. The person Scot is a complex object which is known through his certain qualities. What is purely existing is what we directly come across i.e. whose
knowledge is indubitable in an absolute sense. The kind of knowledge which is absolutely indubitable is knowledge of sensible qualities or 'sense-data' as Russell calls it. All the ordinary objects like John, table, tree etc. are only descriptively known in that their knowledge is dependent upon the knowledge of sense-data. In this way we see that Russell’s logical theories are quite integrated with his theory of knowledge.

Formulation of the Problem

As just seen, Russell embarked on the realm of epistemology through the considerations of his logical theories. Although he began to reflect upon the epistemological problems after 1910 which is the year of completion of this *Principia Mathematica* he appears to be busy in establishing some relationship between his logic and questions pertaining to human knowledge even in 1905 when he was working on his theory of descriptions. This is indicated by the following passage which is given in the beginning of his article "On Denoting" (published in 1905). He says:

The subject of denoting is of very great importance not only in logic and mathematics, but also in theory of knowledge. For example, we know the centre of the mass of the solar system at a definite instant in some definite point and
we can affirm a number of propositions about it,
but we have no immediate acquaintance with
this point which is only known to us by de­
scription. The distinction between acquaint­
ance and knowledge about is the distinction
between the things we have presentations of
and the things we only reach by means of
such phrases. It often happens that we know
that a certain phrase denotes unambiguously,
although we have no acquaintance with what it
denotes; this occurs in the above case of the
centre of mass. In perception we have acquain­
tance with the object of perception and in
thought we have acquaintance with objects of a
more abstract logical character, but we do
not necessarily have acquaintance with the
objects denoted by phrases composed of words
with whose meaning we are acquainted. To
take a very important instance: there seems
no reason to believe that we are acquainted
with other people's minds, seeing that these
are not directly perceived; hence what we
know about them is obtained through denoting.
All thinking has to start from acquaintance;
but it succeeds in thinking about many things
with which we have no acquaintance. 9

It is, however, fairly obvious that at that time, due
to his overabound preoccupations in *Principia Mathematica*,
he scarcely had time to digress from his main task and to
contribute any thing in this area of burgeoning interest.
But in the subsequent years after 1910, when the work was
completed, he relaxed to think over the epistemological
issues with some peace of mind. These reflections consti­
tuted his early formulation about the problem in question
which he compressed in a paper entitled "Knowledge by
Acquaintance and Knowledge by Descriptions", first published
in the Proceedings of Aristotelian Society for 1910-11 and reprinted in *Mysticism and Logic*. This was followed by his small book *Problems of Philosophy* in which the former was included with some modifications. In this book, Russell discussed his views in relation to various other standpoints and developed its implications. In what follows we shall discuss at some length his position regarding the problem of perceptual knowledge and also survey the arguments that he adduced to justify his position. But before we embark on describing his theory, it is worthwhile to see how he actually takes the problem in question, that is to say, what according to him is precisely the nature of the problem of perception.

It is obvious that in our unreflective moments we believe in very many things like table, chair, trees, sun, other men, other minds etc. etc. But as soon as we start critically examining these beliefs, they seem to be ramshackle. The table which appears to be brown and dim, which I tend to regard as the real appearance of the table, may appear to another person who is observing it from slightly different place, white and shiny and to still another person, of some still another colour. Even if the same person sees the same table in being different conditions, the appearances will change accordingly. For example, if
I put blue spectacle on my eyes, the object will look blue, if I am suffering from jaundice, they will look yellowish and if there is dark they will be of no colour at all. It is evident that the colour of a particular object (say, table) depends more upon the perceiver's subjective and environmental conditions than the table itself, if at all. It follows, therefore, that there cannot be any colour to which we can say 'the colour' of the table. The same applies to the shape, texture, sounds etc. of the table, because awareness of these qualities varies from person to person and to same person in different conditions (the smoothness of table gives place to the roughness when seen from a microscope and similarly the hardness varies according to the pressure that we exert upon it and like).

But if a thing causes different appearances to different persons in different conditions, it is hardly justified to say one appearance as genuine (i.e. real table) — as is often done by common mortals — and the others as fake ones. Since there is no qualitative difference between different appearances of an object, to consider one as real and others delusive, is simply a sheer prejudice. From this it is also plain that appearances and reality of an object are two distinct things and in no case can they be identified. Our
awareness of a thing is that of how it appears to me, not of what it is 'really' like. What we are immediately aware of when we say we observe a table, are what comes to us through our different sense-organs i.e. certain sensible qualities — its colour, shape, sound etc. The table itself is utterly beyond our access; if it is known, its knowledge is inferred from what is directly experienced. But if so, two questions arise — one is that, is there really a table which is capable of being asserted, and the other is that what sort of object this is like? These questions after being generalised, become, is there any such thing as matter and if so what is its nature?

As just said, the objects of our immediate awareness are certain sensible qualities; Russell calls these qualities 'sense-data' and their awareness as 'sensation'. The important thing is that the sensation which is essentially an act cannot be identified with the sense-data which is its object i.e. of which it is a sensation. "Let us give", says Russell,"the name of 'sense-data' to the things that are immediately known in sensation; such as colours, sounds, smells, hardness, roughness and so on. We shall give the name 'sensation' to the experience of being immediately aware of these things. Thus whenever we see a colour, we have a sensation of the colour, but the colour itself is a sensedatum, not a sensation. The colour is that of which we are
immediately aware and the awareness itself is the sensation.¹³

What is said above can be summarized in these words: Our direct knowledge is about sense-data and knowledge of things, if they exist, is inferred from those data. The important question that arises here is that how far this inference from experienced 'data' of unexperienced 'things' is legitimate? Or, in other words, what is the nature of this transition from known to unknown? It is natural to suppose that the physical thing is underlying cause of its different appearances and being so it is in some way related to sense-data. Then the problem is in what manner is sense-data related to the world of physics? This problem, as we shall see, has been a persistent concern for Russell till the last of his philosophical career. But this question can never be properly answered unless we already know what exactly is the nature of sense-data.

The Nature of Sense-Data

The problem of nature of sense-data is, according to Russell, of great importance, for, as he thinks, a wrong analysis of it has led many philosophers, in the past, astray and is still a source of many confusions. In history of philosophy, it was Locke who told that the qualities (called
by him secondary qualities) like colours, tastes and smells as opposed to the primary qualities like shape, texture etc. are not contained in the physical things, but rather, are dependent upon their being sensed. Berkeley, carrying the argument further made the ideas of all sensible qualities subjective, since primary qualities were as dependent upon mind as were the secondary qualities for their existence. But the difficulty before him and for others after him was how to establish an objective world existing independent of our minds. Since, otherwise, all things unexperienced would be called non-existent which is impossible. It is absurd to say that when we shut our eyes, the table before me ceases to exist, or, as Russell says, when table is covered by a cloth, there remains no table (because it is no longer my sense-data) and the cloth is miraculously resting in the air.

Russell takes sense-data to be subjective, but not in the psychological sense as Berkeley and others did; he takes it rather in a physiological sense and thereby makes it objectively accessible for physics. The fallacy, according to him, in idealist's reasoning is that they fail to distinguish the awareness from the data it is awareness of and argue that since the awareness is mental its data also
must be mental. Russell, on the other hand, emphasises the relational nature of our knowledge. The moment we say we are conscious of sense-data, we are already out of the circumference of subjectivity. Infact, sense-data is what is given or presented to the senses and hence distinct from the sensation itself which is ofcourse mental. Sense-data, Russell concludes, is certainly outside the periphery of psychology and can be dealt only by physics or physiology. A crucial passage from his article "Relation of Sense-data to Physics" (published in 1914) to this effect reads thus:

I propose to assert that sense-data are physical, while yet maintaining that they never persist unchanged after ceasing to be data. The view that they do not persist is often thought, quite erroneously in my opinion, to imply that they are mental, and this has, I believe, been a potent source of confusion in regard to our present problem. If there were, as some have held, a logical impossibility in sense-data persisting after ceasing to be data, that certainly would tend to show that they are mental, but if, as I contend, their non-persistence is merely a probable inference from empirically ascertained causal laws, then it carries no such implication with it and we are quite free to treat them as part of the subject matter of physics."14

As a matter of fact, there is no incongruity involved when Russell holds sense-data to be physical. For, when I say I see a star, what happens is that some light waves emanating from star strike my eyes' retina which produce
certain disturbances in my nervous system and several currents carry the message of the occurrence to the brain. Through this physical and physiological processes, mind becomes conscious of what has happened to body. But that is all. It is only the consciousness of the happening which is on the side of mind; the happening itself is quite outside it (mind). A case of awareness, in fact, presupposes two elements — (1) the awareness which is mental and (ii) the data it is awareness of which, by no means, can be said to be mental. "What the mind adds to sensibilities, in fact is merely awareness; everything else is physical or physiological."¹⁵

Since it is only awareness which is related to the mind, it is plain that in any case of a particular experience, if mind ceases to exist, it is only awareness that would vanish; the sense-data would remain there. So if, Russell contends "my body could remain in exactly the same state in which/is, although my mind had ceased to exist, precisely that 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."¹⁶
Knowledge by Acquaintance and Knowledge by Description

The knowledge of sense-data is called by Russell as "knowledge by acquaintance". The epithet 'acquaintance', in Russellian nomenclature, is a contrast of the epithet 'description' which stands for the knowledge of things which we are not immediately aware of, whose knowledge is derived from and dependent upon sense-data. We say we have knowledge by acquaintance when there is nothing mediating between the perceiving subject and the perceived object.

And to say that I am 'acquainted' with an object is same as to say that the object is 'presented' to me. According to Russell, the cognitive relation of being acquainted is simply the converse of the relation of being presented. Both signify to the experiential relation occurring between the subject and the object. But whereas in the former, the emphasis is on subject, in the latter it is on the object. We say subject is acquainted and we say that the object is presented. In fact, as Russell himself says, the term 'presentation' might have been a viable and preferable substitute for acquaintance but two considerations prevent him to do so.

In the first place, it is seen that the 'acquaintance' has wider range of its applications as compared to the
presentation. I can say that I am acquainted with an object which is presently not before my mind although it has been at some earlier moment present before my mind. But the same cannot be said about presentation. 'Presentation' implies that the object is given to my mind 'just now'. In the second place, Russell thinks, the kind of relationship that exists between the perceiver and perceived object in a particular case of direct awareness, is such that the two terms of relation must be juxtaposed, otherwise, there is an inherent danger of one's being plunged into either idealistic or materialistic monism. To use the term 'acquaintance' is to give equal status to both the subject and the object, whereas using the term 'presentation' would lead to inflate the object which is being presented. This may result either into identifying the object with the subject as the idealistic philosophers did or in assimilating subject into object, as the materialists generally do. "Now I wish to preserve", so Russell says, "the dualism of subject and object in my terminology, because this dualism seems to me a fundamental fact concerning cognition. Hence I prefer the word 'acquaintance' because it emphasises the need of a subject which is acquainted. 17

Knowledge of the objects by acquaintance is so immediate and simple that it is "logically independant of knowledge
of the truth". But there are very many cases where our knowledge depends upon some known truth about the object being known. That is to say, we do not come in direct contact with the object; it is only certain known characteristics which we suppose applying to the object in question that lead us assert the knowledge of that object. To put it differently, we know only certain descriptive phrases of the forms 'the so-and-so' (definite description) or 'a so-and-so' (indefinite description) which we think as applying to a particular object. In such cases the knowledge is described as 'knowledge by description'. "I shall say", says Russell, "that an object is known by description when we know that it is 'so-and-so' i.e. when we know that there is one object, and no more, having a certain property; and it will be generally implied that we do not have knowledge of the same object by acquaintance". 18

For example we know that the person 'who used to wear an iron mask' existed although we never saw him. Or we know that 'the most long lived man' belongs to Russia, but we do not know who he was. Similarly, "we know that the candidate who gets most votes will be elected" and in this case we are very likely also acquainted (in the only sense in which one can be acquainted with someone else) with the man who is, infact, the candidate who will get most votes, but we do not
know which of the candidates he is, i.e. we do not know the proposition of the form, 'A is the candidate who will get most votes where A is one of the candidates by name.' In such cases our knowledge is knowledge by description.

In this connection it is important to note that Russell takes ordinary proper names as descriptions. It has already been seen that sense-data, being purely demonstrative, are designated only by logically proper names which refer to what Russell calls logical simples or individuals. Meaning of a proposition containing an ordinary name, can be made explicit only by analysing it into simpler propositions which would, in the last analysis, be about sense-data. For example, supposing a person makes a judgement about Bismarck. Now what at all he knows about Bismarck are certain characteristics (known through acquaintance or hearsay or history) which he thinks are about the body (or mind) of Bismarck; Bismarck's body (and mind) are the things, he is not acquainted with. Therefore, being inferred, his knowledge of Bismarck is knowledge by description. But if Bismarck himself has made some judgement about himself and if there is any possibility of being acquainted with oneself, then, certainly, Russell says, that knowledge will be knowledge by acquaintance. The second thing is that, it does not matter what
what descriptions are being used in order to express a particular thought. Different persons or the same person at different times may use varying descriptions in their statements about any object. In so far as the descriptions are correct, i.e. the object to which those statements are intended to refer is constant, the propositions will be equally meaningful. For example, a person whose knowledge about Bismarck is only historical, will use the description 'the first Chancellor of Germany' while making any statement about him. Another person who has had an occasion to meet Bismarck can assert the same proposition by using a different description e.g. 'the person who used to wear iron mask'. A third person can use still another description. Russell contends that it is merely by chance that what characteristics of an object are known to a person making statement. The essential point is that they all must apply to the same entity.21

Foundations of Empirical Knowledge

Russell gives the knowledge obtained through acquaintance, a foundational status upon which the whole structure of human knowledge is built. Our knowledge of physical things as well as truths presupposes acquaintance. But the important question in this connection is that what are the objects of
of acquaintance. Are sensible qualities the only objects which we know through acquaintance? If so, then, to be sure, the sphere of our knowledge is very narrow. We shall be certainly entrapped into the prison of our own private subjective world. There must be things, contends Russell, besides sense-data which are equally tangible and certain. The first extension that he proposes to make is 'acquaintance by memory'. In any case of remembering, the object being recalled is such that it is directly presented to my mind, although it is a past event. Such unmediated knowledge through memory are, according to Russell, the source of all our knowledge concerning the past.²²

Besides memory, we have also acquaintance by 'introspection'. Man, it is said, is privileged, in possessing the capacity to access his own mental states. Sense-data produce sensation in the body of animal in the same manner as in the human organism. But the difference in two cases is that whereas the man is conscious of being aware of a particular sense-datum, the animal is not. In other words, we can say that man, as opposed to animals, is capable of asserting the proposition i.e. he can say "I know I am seeing the sun". It is not only the sun, but also the 'awareness of the sun', which is his data. An animal feels pain in the same way as a man
does, but unlike man, animal cannot be said to be aware of his feeling pain. In old terminology such subjective experiences were called as 'self-consciousness'. "This self-consciousness", according to Russell, "is the source of all our knowledge of mental things." But from this, Russell warns, it would be erroneous to conclude that we are also aware of other people's mental states. Our knowledge of the other persons is confined only to sense-data which we attach to their body and mind; their body or mind are never objects of my direct knowledge. Hence they must elude our knowledge by acquaintance.

But the knowledge by self-consciousness, is not about the 'self' eviscerated of its contents. Whenever we reflect introspectively in ourselves, it is not the bare 'self' which we come across; it is, rather, certain thoughts and feelings which are the data of our experience. The question whether we ever come across our bare selves is one that Russell is hesitant to give any categorical answer to. On the one hand, it appears that since our acquaintance is only with particular bits of ideas and sensations, the self which is supposed to inhere them is as beyond our direct access as are the physical substances. But on the other hand, there are certain considerations which lead us to believe that we are also acquainted
with our selves. In the first place it is seen that in a particular case of introspective awareness, two elements are extensively involved viz. the perceiving subject and the object being perceived. They stand in some kind of relation to one another in which we are related to them. For example, when I am aware of my perceiving the table, the sense-datum which represents the table and the self to which this sense-datum is presented, are both contents of my knowledge. Thus, we can say that the whole fact I am aware of is 'self-acquainted with sense-datum'. Hence it can safely be concluded that my 'self' is as well the object of my acquaintance as the sense-datum.

In the second place, it is plain that I know that the proposition "I am acquainted with the sense-datum" is true. This implies that in some sense I must be aware of the 'I' along with datum. Otherwise I could not understand what is meant by the proposition in question. From this we can conclude that although there are certain reasons which prevent us asserting our knowledge of 'self', some others carry us positively to affirm it. Russell says:

"Thus in some sense it would seem we must be acquainted with ourselves as opposed to our particular experiences. But the question is difficult and complicated arguments can be adduced on either side. Hence although acquaintance with our selves seems probably to occur, it is not wise to assert that it undoubtedly does occur."
In the last, there are some general ideas, or what Russell proposes to call the 'universals' such as whiteness, diversity, resemblance etc. which are to be included among the objects of direct knowledge. In the first place, it is obvious that we are acquainted with such universals as white, red, black, sweet, sour, loud, hard etc. A patch of white colour, in the first instance of our acquaintance with it, is a particular. But when, after seeing many white patches, we abstract the whiteness which is common among all of them, we are acquainted with white as a universal. Similarly about other sensible qualities.26

Moreover, we are acquainted with relations of being 'left to', 'above', 'below' etc. For example we see successively a number of sense-data, some of which are left to others. In all such cases of successive perceptions, we find that the data have common among themselves the relation of "being to the left of". Thus we can say we are acquainted with universal relations.27

We can also likewise be acquainted with resemblance or similarity. We see simultaneously two shades of green and we say they resemble to each other. If we also see a shade of red at the same time, we would find that the two greens have more resemblance to each other than either has to red. In this way we become acquainted with the universal 'resemblance' or 'similarity'.28
Concluding this part of discussion, it may be remarked that for Russell, our knowledge of objects by acquaintance does not involve the problem of error. In so far as we are acquainted with a datum, the knowledge can never be illusive or fake. The bent stick or dreams or other hallucinatory phenomena are genuine inasmuch as they are objects of our direct knowledge. They would be deemed erroneous only when they are regarded as marks of some physical object. The bent stick is not really a thing, but it is really an object of perception. Thus the knowledge by acquaintance raises no problem of error. This problem arises only in the matters of beliefs and truths. A belief may be true or false. But a perception is never true or false. Our seeing a red patch of colour is neither true nor false; it is just what it is. But our belief that "this is red" may be true or false.

The World of Sense and the World of Physics

From what is said above, it is clear, that Russell, in his analysis of experience, gives fundamental importance to the knowledge obtained through acquaintance which consists in a simple and unanalysable relationship between the subject and its object. Objects of acquaintance are not necessarily those presented to outer senses; they include the objects which we
cognise through memory and introspection. Universals are as well our data of acquaintance as are the particulars. We can possibly add the selves also in this list. All our knowledge of physical things, other minds, facts and cognitive relations such as feeling, imagining, believing etc. are based upon and presuppose these primitive data of experience.

But if the knowledge of physical things etc. is based upon i.e. inferred from the sense-data, the vital question, for Russell, as we have already seen, was that how can this inference be justified? What reasons, if any, are there for the belief that there is a permanent, stable world (physical and mental) which sustains and subsists the fugitive and fleeting world of sense-data. Moreover, if there is really such a world, in what kind of relationship does it stand with the world of sense.

Russell, at the outset, makes it quite clear, that the knowledge of any thing other than one's own sense-data can not be demonstratively proved. Knowledge of external things, other person's bodies are less certain and still less certain is the knowledge of other minds. It may even be said that we do not possess any knowledge except of the datum which/occurring to me at the given moment. "No logical absurdity results from the hypothesis that the world consists of myself and my thoughts and feelings and sensations and that everythings else is mere fancy".31
For, in dreams we perceive an alive world of things and events which vanished as soon as we awake. We conclude that the world of dream was fictitious and not real as compared to the actual world. But if it is so, there is no lesser possibility that the world we suppose to be actual may prove conjectural and 'not real' as compared to some still other world. There is no logical impossibility in the supposition that the whole of the life is a dream, in which we ourselves create all the objects that come before us."

This is a solipsistic conclusion and Russell's opinion about it is that although this doctrine "cannot be strictly proved to be false, there is not the slightest reasons to suppose that it is true". At another place he says: "But although this is not logically impossible, there is no reason whatever to suppose that it is true; and it is in fact a less simple hypothesis viewed as a means of accounting for the facts of our own life, than the common sense hypothesis that there really are objects independent of us, whose action on us causes our sensation."  

It is natural that in answering our first question we take recourse to the fact of testimony of other people. But that will beg the very question at issue. That is, it will not do to say that since the sense-data of many people simultaneously observing an object (say, a table) are more or less
similar there must be a physical, objective table to cause these appearances to different people. For, our knowledge of other people itself is inferred from the sense-data I have of them and unless it is not established that sense-data refer to some external physical object, knowledge of other peoples remains precarious.

All the same, one thing, Russell thinks, must be assumed, if we want to proceed in our way. It is that a physical object is something more than its sense-data i.e. it persists even when it is not the data of any mind. A cat cannot be said to be vanished when we shut our eyes and again come into being when we reopen them. It must have been persisting even when we were not seeing it. Moreover the cat gets hungry as soon as the time of its next meal arrives and it is preposterous to suppose that it got hungry although it was a non-entity, since it was not my sense-data in the intervening period of two meals. Russell further argues that if cat consists only of sense-data, it cannot be hungry. Obviously enough, the patches of colour are "as incapable of hunger as a triangle is of playing football."  

But arguing this way, are not we moving in a vicious circle. The feeling of being hungry to which we may be certain, is exclusively my own experience. Therefore attributing the
feeling of hunger to any other thing is as uncertain to me as their physical existence. Therefore we are again at the same place from which we started; the existence of external things is still unproved. Russell admits it and cryptically says: "it is not by argument that we originally come by our belief in an independent and external world." 36 He like his many other contemporary realists, takes recourse to the so-called 'animal instinct'. "We find this belief (in the independent existence of physical world)"; so he says, "ready in ourselves as soon as we reflect; it is what may be called as instinctive belief." 37

After establishing the independent existence of the external world—although admittedly not on sound grounds—it remained for Russell to discuss what kind of relationship is there between the sense-data and the physical world. One thing, in this connection, which was almost certain, was that the sense-data, although connected in some way with its physical counterpart, cannot be said to be exactly same to it, nor even more or less similar. For, the intervening medium causes a great difference to light waves during the time of its travel from the object to the perceiver's nervous system. A circular coin cannot be seen so unless we are directly in front of it. Moreover, our judgement of its being really
circular is, as we have already seen, susceptible of being shown groundless.

What at best, we can say is that the order of our different sense-data, corresponds to the order in the physical world. The observed distance between the two sense-data which we think are of two houses, may really represent the actual distance of two houses. We can ascertain this by other means as well e.g. by walking, by the testimony of other people etc. But what is beyond our capacity, is that we come to know the real nature of the things, through the sense-data they cause. Different people have their own 'private spaces' from which they observe the object which belongs to the public 'physical space' which embraces the observers as well. The difference in perspective makes a lot of difference in the perceiver's cognition of an object. He can only know what is in his private space and never what is in public physical space. Russell says:

"If one object looks blue and another red, we may reasonable presume that there is some corresponding difference between the physical objects; if two objects both look blue, we may presume a corresponding similarity. But we cannot hope to be acquainted directly with the quality in the physical object which makes it blue and red. Science tells us that this quality is a certain sort of wave motions, and this sounds familiar because we think of wave motions in the space we see. But the wave-motions must really be in physical space, with which we have no direct acquaintance; thus the real wave-motions have not that familiarity which we might have supposed them to have. And what holds for colours is closely similar to what holds for other sense-data."
This doctrine of structural correspondence between the world of sense and world of physics was one which Russell abandoned in his subsequent positions of phenomenalism and neutral monism. As he denied the very reality of a physical world beyond sensibilia, the question of correspondence did not arise. He, however, reverted to it in the last phase of his philosophy when he again came to hold the causal view of perception. He, however, retained his emphasis on the relational nature of experience in his phenomenalism. The sense-data still constituted the objects of direct knowledge and they along with hypothetical sensa comprised a physical thing which in its relation to mind constituted a case of perception.