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JAMES AND RUSSELL ON NEUTRAL MONISM

SAEEDAH AHMAD

submitted in fulfilment of the requirements for the
Degree of Doctor of Philosophy

University of Warwick
Department of Philosophy

July 1994

**I Dedicate this thesis to
Saifuddin Ahmad, my father,
and
Noorjahan Begum, my mother**

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ABSTRACT

This thesis evaluates and compares two versions of neutral monism, one developed by William James and the other by Bertrand Russell. Both argued against Cartesianism in favour of a "subjectless given" as the basic stuff which constitutes both mind and matter. My evaluation will demonstrate that James's and Russell's supposedly neutral entities are not neutral as their exponents claim because they fail to satisfy important criteria set for a theory to be genuinely neutral.

There are two fundamental elements within my discussion of the neutral entities. Firstly, I shall demonstrate that although James's initial repudiation of dualistic epistemology of subject and object, knower and known, led him to avoid metaphysical dualism of mental and physical, in Cartesian sense, by committing him to the view that there is one kind of entity called "experience", his final analysis admitted an internal distinction within the supposedly simple neutral entities. I shall call this *covert dualism*.

Accepting James's radical empiricism as an archetype, Russell's early commitment to neutral monism led him to assert three distinctive kinds of entities, sensation (neutral), image (subjective) and unperceived (objective), and was therefore not complete as that of James. In order to bring his theory in line with James, Russell, in his mature version, entirely repudiated the dualistic view of perception which, following Moore, he accepted, to reject idealism. Russell declared percept as the neutral entity, which is both mental and material at once. But by re-introducing epistemological dualism, as James did, Russell admitted that a percept is not simple but complete bundle of compresent qualities and relations. I shall argue that like James' his theory also collapses into *covert dualism*.

Secondly, I shall argue that to produce a genuinely explanatory theory of neutral entities James and Russell exploited science to justify their theories. In course of their analysis they produced various arguments which has been considered as circular. An attempt will be made to show that the apparent circularity of their analysis is really part of a sophisticated programme, now known as *bootstrapping*. The notion of a *bootstrap strategy* has recently been developed in philosophy of science, and suggests a way in which the same evidence can be used to generate both a general and specific hypothesis.

The thesis is divided into eight chapters. Chapters one, two and four are largely exegetical and chronological, and discuss the development of neutral monism especially in James and Russell's philosophy together with the general characteristics of the theory as distinguished from other theories explaining mind and matter. Chapters three, five and six critically analyse James's and Russell's versions respectively to show their theories collapse into *covert dualism*. In chapter seven we argue that the alleged circularities in their theory are non-viscious and their employment of a bootstrap strategy introduced a profound innovation in epistemology.

INTRODUCTION

Aims of the Thesis.

The thesis is a comparative study of William James's and Bertrand Russell's theory of neutral monism. The thesis has four main objectives. My primary aim is to look at the philosophical situation in which Russell found himself, and to see how he reacted to and adapted James's views, which he found interesting and promising. The interest is therefore in the intellectual coherence and the philosophical success of Russell's programme to develop and incorporate James's views into his own philosophical programme. James's influence on Russell was quite complex partly because it occurred at a time when Russell was, for quite independent reasons, radically changing his views on mind and other issues.

This evaluative task is carried out to see the effort of both James and Russell in their disassociating from dualistic epistemological positions of knower and known, subject and object for a more profound metaphysical monism of neutral entities. My second objective is interpretative. In order to expose the simplicity of the theory for its better understanding my aims are twofold. First I will isolate neutral monism from other theories explaining mind and matter in order to show what James and Russell aimed to achieve. One of the points I shall highlight is that neutral monism takes as its task the resolution of the problems which remained unresolved by those other theories. Second I will outline the main characteristics and aims of the theory in order to argue that the exponents of the theory intended to prove that neutral monism is a more logical and economical way of approaching the problem of mind and body. A full exposition of James's and Russell's theory will be provided to evaluate their success in providing a theory of truly neutral entities.

My third objective is concerned with the critical examination of the versions of James's and Russell's theory. I shall therefore argue that both the versions failed to meet the criteria set for a theory to be truly neutral. Instead they collapse into disguised form of dualism. I call this *covert dualism*. [In Chapter 1, section 1.2.3, I have distinguished between Cartesian dualism and covert dualism. In short, if a supposedly neutral entity consisted of elements which were mental or were physical then we have covert dualism. In contrast the Cartesian dualist accepts two distinct

types of substances, mental and physical, as the foundation of two separate ontologies].

Nevertheless, I shall demonstrate that both James and Russell quite successfully avoided psychophysical dualism in Cartesian style. They were neither phenomenalist nor physicalist, as their critics argued, in their explanation of mind and body in terms of neutral entities. I shall list three basic types of phenomenism in order to identify, especially, Russell's early commitment to neutral monism as a type of "quasi-phenomenism".

In order to show that neutral monism is more plausible than physicalism, I shall briefly highlight the main tenets of physicalism and their shortcomings. This will show that the identity hypothesis initiated by Russell does not make neutral monism into physicalism, rather it resolved most of the problems which the physicalist failed.

Since neutral monism is a non-reductive theory, a brief comparison will be made to the modern non-reductive theory proposed by Donald Davidson. The theory is called "anomalous monism". Davidson, in his philosophy of mind, aimed to reconcile the physical basis of mental life. He agreed that each mental event is identical with a physical event but maintained that mental events do not involve the kind of general laws that govern physical phenomena. In considering events as mental we adopt a different perspective, with different principles of organization, from that of the perspective of physical sciences. My demonstration, however, will show that non-reductive materialism is not stable and therefore pushed anomalous monism in an explicit form of dualism.

Finally, I shall try to demonstrate two things. Firstly, I shall show that if we consider James's theory a model, Russell's early commitment to neutral monism left three distinctive kinds of neutral entities in his philosophy. Russell struggled to bring his theory in line with that of James. My analysis will show that in his mature version, Russell accepted a theory of perception which argued that in perception there is no distinction between the knower, the subject, and the known, the object. In this early version Russell thought that he had done with these distinctions, which left, beside sensations, the neutral entities, the images, the subjective entities, and the unperceived, the physical entities. His final version admits of a single kind of entity called a percept, and hence Russell could close the gap between his theory and that of James, by arguing that a neutral entity can be physical and mental, both at once.

Secondly, I shall demonstrate that James and Russell were the early pioneer of the scientific epistemology. Through their scientific knowledge they tried to bring a completeness in their versions of neutral monism. James entered neutral monism through psychology and Russell through physics. Though James was an introspectionist psychologist, he was a forerunner of physiological psychology. The laboratory experiments and the functions of the central nervous system illuminated the mind-body problem both in his psychology and philosophy. Russell gave priority to both physics and physiology in his investigation of mind and matter. Both argued against and criticised Descartes, British empiricism expounded by Locke, Berkeley and Hume, and the transcendental metaphysics of Kant. Both James and Russell tried to bring a radical change and give a satisfactory basis to mind and matter. Their answer was "neutral monism", which if proven scientifically would disperse the dilemma long faced by mind-body theorists. In order to make his thesis more radical James oscillated between introspection and physiology. He drew analogy between the stream of consciousness revealed through introspection and the physiological discovery of the process of central nervous system which runs as a sort of stream. He laid much emphasis on the subjective element and relied on introspection. He also resorted to much hypothesizing. Physiology was used simply to facilitate the understanding of mind as it appeared to introspection. Russell, in his initial development of the thesis, missed the real crunch of James's argument. It is in his later theory he returned to James.

Both James and Russell rely upon different sources of evidence and postulate a variety of representational systems within the theory. They implicitly employ a version of *bootstrap strategy*. This strategy has been only recently identified in the philosophy of science, which suggests a way in which the same evidence can be used to generate both a general hypothesis and a specific hypothesis. I shall render the bootstrapping arguments explicit before showing how James's and Russell's use of it avoided viciously circular arguments.

It is essential to note that this thesis is by no means an attempt to evaluate the bootstrap strategy as practised by the modern mind-body theorists. Since my concern is the historical success of Russell's and James's version of neutral monism I shall confine my discussion to their arguments.

Structure Of The Thesis.

The thesis is in eight chapters. Chapter one deals with the historical background against which the general ontological question of "what there is" has given rise to the very different theories: dualism, materialism, idealism and neutral monism. Among these four principal theories neutral monism developed in the thinking of late nineteenth century and early twentieth century philosophers who revolted against the dualistic interpretation of mind and matter and the subsequent one-sided treatment of this by the materialist and the idealist. Though Mach was the initiator of the theory, it was independently developed and popularised first by James and then by Russell. In order to understand the aims and the basic characteristics of neutral monism an attempt is made to isolate it from major alternative theories along with their inadequacies. A historical exegesis is included to give a background to our understanding of the versions of neutral monism in James and Russell. James's commitment to radical empiricism was enhanced by his reading of Mach's anti-atomistic physics and Darwin's biology. A brief outline will be made to underline the general influence of science in his philosophical development. Since Russell's early commitment to idealism, and his emancipation by Moore from it, led him to the acceptance of a plural universe of neutral entities, a brief chronology of his pre-neutral monistic philosophical beliefs will be included to produce a better insight into his theory.

In the second chapter an effort will be made to sketch the development of James's version of neutral monism. It will particularly high light James's transition from his acceptance of the existence of consciousness as against mechanical explanation to the ultimate rejection of consciousness, "a name of a nonentity, and has no right to a place among first principles". An enquiry will begin with a brief exposition of James's reason for the rejection of dualism, associationinsm and transcendentalism. This will lead us to his argument for the acceptance of the world of pure experience, in which he committed to the view that reality and the field of neutral plural facts are one and the same. Before committing himself to dualism and then to neutral monism, James accepted a view called "phenomenism". His theory of neutral monism is, in fact, the mature version of phenomenism. This will lead us to critically assess his theory of neutral monism in chapter three, where an argument will be made to assert that although James avoided metaphysical dualism of mind and matter, in Cartesian style, his theory collapses into a disguised form of dualism called *covert dualism*.

Chapter Three is a philosophical critique of James's theory of neutral entities. I shall try to show that although he partly answered Hume on the question of causal relations he could not shed the Cartesian legacy. In his analysis the "ego" became the "passing thought" which retrospects the preceding experience and gives meaning to it. He failed to detach himself completely from his psychology and his theory of phenomenism. James's metaphysical aspiration led him to say several times how, as he sees it, his position differed from dualism; but what he said, on close inspection, so far from convincing one that his position was not dualistic, make it more apparent that, covertly, it is. In my critical estimation I shall isolate eight points to reveal how James in his over enthusiastic analysis of experience admitted internal distinctions within the supposedly neutral entities.

The formative phase of Russell's philosophy constitutes the main theme of the chapter four. Russell was familiar with the thesis of neutral monism during 1912¹. In his *The Problems of Philosophy* he made an effort to close the gap between physics and perception. But by adhering to the relational theory of sensation (in which a subject is aware of an object) Russell could only produce a theory which could be called "barely dualistic". In his critique of neutral monism in 1913, especially of James, he held that neutral monism failed for several reasons; the problem with James's account of knowledge was one he gave prominence. It was in 1919 Russell was persuaded of the rightness of James's theory and therefore abandoned dualism in favour of neutral monism. The critics argued that instead of producing a theory of neutral monism Russell committed himself to phenomenalism. I shall however argue that, in between 1914 and 1919, by accepting unperceived entities (sensibilia-- the physical entities in disguise), Russell produced a theory which is at best be called "quasi-phenomenalism". It was in 1921 Russell officially accepted the theory of neutral monism.

In chapter five I shall discuss Russell's theory of neutral entities. As a neutral monist he rejected Brentano's and Meinong's analysis that there are three elements involved in the thought of an object (the act, the content, and the object). Instead Russell abolished the distinction between "sense-data" and "sensations", with the assertion that the subject is a "gratuitous assumption", and not empirically discoverable. He

1. Russell wrote a Review of James's *Essays in Radical Empiricism* which was published in October, 1912. On 28 July 1912 Russell wrote to Lady Ottoline Morrell: "Yesterday I did a review of W. James for *Mind* (a more serious matter than reviewing for the *Nation*)". See, *The Collected Papers of Bertrand Russell*, vol. 6, 1992, p. 298.

accepted sensations as neutral entities but argued that they are not enough to explain mind, which requires "images", and matter, which requires sensibilia. Though he accepted behaviourism in his explanation of the theory Russell retained introspection as a source of knowledge. He committed himself to three types of neutral entities and was not thoroughgoing as that of James, who argued for experiences as the only neutral entities. It was in his later philosophy Russell used a single expression, percept, as a neutral entity. This chapter will focus on the analysis of the neutral entities and how Russell struggled to bring his theory in line with neutral monism. In critically assessing Russell's position I shall demonstrate that "sensation" and "percept" are interchangeable in his philosophy. In further analysis I shall prove that both sensation and percept are covertly dualistic.

Chapter six will consist of three sections. The first section will be of Russell's theory of logical construction, restricted only to his application of the theory in order to explain mind and matter in terms of neutral entities. The analysis will reveal two distinct uses of construction: epistemological, i.e. to explain how physics is knowable, and ontological, i.e., the entities which are constituents are genuine entities and the constructs are "logical fictions". It is the second use of the construction which explains the theory of mind and matter in terms of neutral entities. The theory of matter will follow next. The second section will be a detailed analysis of Russell's theory of mind. This will follow how Russell initiated a change in his theory of perception to close the gap between his version of neutral monism and that of James'. Russell completely abandoned dualistic theory of perception as a result the distinctions between "images" and "sensations" lost their epistemological importance. But, as a consequence of the abandonment of "sense-data", such words as "awareness", "acquaintance" and "experience" had to be re-defined. With the re-interpretation of "the evidence of senses" Russell had to re-introduce the duality in sensation, hence making his theory covertly dualistic. In section three a comparison will be made between Russell's theory of neutral monism and physicalism, especially "anomalous monism" to assert that the identity hypothesis proposed by Russell is of a "rigid" identity of entities and is quite compatible with the thesis of neutral monism and therefore is clearly distinguished from physicalist theory. A further claim will be made that James's analysis of mental may suggest the flexibility and fluidity of psychological laws but is certainly not "anomalous" as is Davidson's explanation of the mental.

In chapter seven an attempt will be made to show that the alleged circularities in James's and Russell's arguments, in explaining their versions of neutral monism, is not fatal as they appeared to be so. The circularity is a part of bootstrapping which has been regarded by scientific realists as a tool for deriving both specific and general views from the same initial evidence. Since the problem of the relation between evidence and hypothesis raises the entire issue of realism, I will distinguish between metaphysical realism and scientific realism in order to show that by following a bootstrap strategy one can avoid circularity in one's arguments and hence render them non-viscious.

In the final chapter I shall summarise the findings of my arguments.

The bibliography will consist of the relevant works first of James and then of Russell. This will follow with the other works by different authors, and will be listed in an alphabetical order.

CHAPTER 1

Neutral Monism: An Intellectual and Chronological Context.

[T]he decomposition of the perception of the world into chaotic "sense-data" is a result of a late state of scientific analysis. We learn to know things and their properties, and some of us learn later on that they are composed of sense-data. No conscious effort is necessary to do this composition by thinking. It has happened to us in childhood unconsciously and automatically.

[Max Born, "Reflections of a Physicist", p. 123].

1.1. Introduction.

1.1.1. The Ontological Question.

The perennial question of whether there is any distinction between mind and matter and, if so, in what relation a human mind stands to a human body culminated in the mind and body problem. It was Descartes, who took this as his problem and tried to give a rational reply basing his arguments both on scientific world view and initial moral and religious teachings. Well-known as Cartesianism, the mind-body dualism was the direct outcome of his basic monistic stance that God is the one and eternal substance.

Though secondary, mind and body are two separate substances created by God, but neither of them are reducible to the other. Matter is characterized as the extended substance in space, by virtue of which it has length, breadth, height and a definite position in space. Mind, as opposed to matter, is distinctively characterized by thought and is devoid of extension, therefore leaving it with no shape, size or location.

This ontological problem has not only provoked metaphysical uncertainty, it also had created epistemological chaos. Metaphysically the problems are concerned with the status of matter and mind in relation to what there is. The epistemological problems are concerned with the plausibility of that prerequisite upon which psychology and physics depends.

Apart from dualism the ontological question concerning "what is there?" has given rise to different theories: materialism, idealism and neutral monism. Of these four principal theories neutral monism developed in the thinking of the 20th century philosophers, who revolted against the dualistic interpretation of mind and matter and the subsequent one-sided treatment of this by materialist and idealist philosophers. The supposed triumph of neutral monism lies in the claim that consciousness is not the name of anything. As James, in his *Essays in Radical Empiricism* says, it is diaphanous and is disappearing altogether from philosophy. Hence the neutral monists thought to gain the upperhand by putting the last nail in the coffin of the Cartesian interpretation of mind and matter.

Since the turn of nineteenth century Anglo-Saxon philosophy had witnessed large changes in the explanation of the external world. The question of the epistemic certainty of the given has been the central concern.

The twentieth century movement in philosophy was directed against the dominant idealism of the last century. The movement carried out a realist reaction against such idealist claims that material object cannot exist independently of mind. In order to preserve the common sense world, i.e. the independent reality of physical objects, the realist, i.e. Moore, Russell, James, attempted to show that in perception we obtain knowledge of external physical objects either directly or by means of "sense-data". First Moore and then Russell -- following Brentano and his pupil Meinong -- argued that the idealists failed to understand the distinction between the act and the object of the act. In becoming a neutral monist Russell followed James and abandoned the realist distinction between the act and the object. He merged the former in the latter.

During the first third of this century an opposite trend has been observed in the development of science particularly in physics. Severe difficulties in making realist interpretations of time and space separately (after Einstein's work on relativity) and similar difficulties in realistically interpreting fundamental particles (Bohr and Heisenberg), saw the re-introduction of idealistic arguments in physics and, in particular, the re-introduction of the active role of consciousness in perceptual acts. The physical reality of a common-sense object, such as a table, was analysed away by saying that what we call a table is in fact *ideal* qualities of hardness, smoothness, brownness etc.

Contrary changes occurred in the field of psychology, when J.B. Watson, in 1912, launched his famous behaviourists movement. Watson denied the existence of introspective mental states such as thoughts, emotions and beliefs. According to behaviourism all actions, whether voluntary or involuntary, are in fact publicly observable and thus there is no such thing as mental event. B.F. Skinner, a radical behaviourist, affirmed this by saying "thinking is simply behaving", hence making psychology a materialist study.

These changes in the field of physics and psychology were exploited by the neutral monists. Among them are Ernst Mach, William James, Bertrand Russell and new realists, like Perry and Holt. They independently carried out an elaborate programme, specifically designed, to combat the crisis resulting from the attempt to reconcile physics and psychology with Cartesianism, and to make the previously metaphysical entities accessible.

1.1.2. The Building Blocks of Psychology and Physics.

In order to evaluate the success of neutral monism I wish to briefly outline the major alternative theories to neutral monism and their difficulties before turning to consider the neutral monists' own account.

1.1.2.1. Dualism.

The first systematic ontological argument was given by Descartes. Obsessed by the criterion of certainty Descartes defined substance as "everything in which there resides immediately, as in a subject, or by means of which there exists anything that we perceive i.e any property, quality or attribute of which we have a real idea is called a *Substance*"¹. Based on such a notion of substance, Descartes divides reality into two distinct realms; mind, known by its essential attribute thought, and matter, known by extension.

Hence Descartes had no problem in explaining physics and psychology by these two distinct substances, irreducible to each other. Even then Descartes failed to give an empirical account of mind and matter. The knowledge of matter and mind is through their attributes, but what are mind and matter apart from their attributes? He further complicated the situation by bringing in the notion of causal interaction between the

1. Descartes, R., *Philosophical Works*, vol. II, p. 53.

two substances. As we know physical laws are enough to explain physics, therefore why do we need psychological laws to explain the movement of sentient objects? For example, two material bodies having similar characteristics can act upon each other when, for instance, a force is applied. Force is a physical phenomenon. Physical phenomena can act on a physical body. One can know how a material object behaves under certain physical conditions. But if physical laws are capable of explaining mental events then why should the mind be regarded as spiritual, i.e. non physical.?

Similarly if psychological laws are enough to explain mental happenings then why are physical laws needed. But modern physics regularly describes events with no extension, namely point interaction with differential equation. These have been considered as physical particles, whereas Cartesian mind is nonmaterial. This point has been exploited by the materialists and, more appropriately physicalists.

Influenced by two Cartesian dicta: (i) the criterion of certainty and (ii) the epistemological question "how do I know...?" - two monist schools tried to give a rational explanation of physics and psychology. They are idealism and materialism.

1.1.2.2. **Materialism.**

The thrust of the materialist argument, concerning mind and body, is based on physical processes. The materialists that mental events can have no meaning on their own and that what we call mental events are actually physical events. This form of materialism is known as physicalism.

Physicalism, popularly known as identity theory, was presented by J.J.C. Smart, D.M. Armstrong and H. Feigl, amongst others. They claim, in general, that whilst there may be connotative difference between mentalistic and physicalistic expressions, empirically they denote one and the same physical phenomenon. To put the argument in its simplest form, the identity theorists claim that mental events are identical with brain events.

When we speak of an identity statement, e.g., "a=b" we usually mean that the "a" is identical with "b" what follow from identity is all the properties of "a" are possessed by "b". Again when we say "Hesperus= Phosphorus" we mean that whatever is Hesperus is also Phosphorus; that is, "a" (the morning star) is identical with "b" (the evening star). It is because both have the same reference and they refer to one and the

same planet. We may substitute planet for Hesperus=Phosphorus, saying "Planet Venus=Planet Venus". Here both the denoting expressions not only refer to the same object but also have the same meaning.

On the basis of such interpretation of identity the materialists tried to give a "reductive" analysis of mind and body by claiming that mental states are in fact physical states of the brain. More precisely, each type of mental state corresponds, and is identical with, some type state of brain or central nervous system. What follows from this is that mentalistic and physicalistic terms do not refer to two different things or events, rather they describe the same things or events. The identity theorists claim that this identity between physical state and mental state is empirical and not logical. Though they describe the same event they are not synonymous.

The question of synonymy is one of the major factors of identity. When we say "a" is identical with "b", we mean "a" with all its properties ($a_1 a_2 a_3 \dots a_n$), if any, is identical with all the properties of "b" ($b_1 b_2 b_3 \dots b_n$). But if any one of the properties in each group is not identical with the other we can say that "a" is similar to "b" and not identical. It is in the essence of any reductionist theory to show that what is reduced is neither less and no more than the latter.

The identity theorists countered the claim of synonymous by saying that the identity between mental and bodily events is not "meaning identity", i.e. an identity between two synonymous general nouns. The identity, they claim, is neither logical nor necessary but rather contingent and empirical.

The main thrust of their argument lies in a scientific world view, i.e. the explanatory power of neurophysiology and physics as the ultimate. One may argue that reduction between two physical process is possible. Let us say that pain, a physical event is identical with the firing of a C-fiber, a brain event. The objection raised is what about the "raw feel" of the pain, i.e. "what it is like to be in pain", to adopt Nagel's² formulation.

The physicalists (especially Smart) tried to answer this by saying that the so called mental concepts such as "feel" or "sensations" are in fact not committed to either mind or body. They are simply "topic-neutral". Such states of "feeling pain", "seeing colour" etc. arise within the organism due to a given stimulus and are simply a typical

2. Nagel, T., "What is it like to be a Bat?".

kind of behaviour. Therefore there is no "inner" mental sensation but simply certain behaviour pattern like peeling, scratching, itching etc.

Regarding contingent identity a more serious programme was launched by Saul Kripke (*Naming and Necessity*). Based on the Leibniz's law of the *identity of indiscernible*, Kripke argues that identity statements are essentially rigid and necessary. He introduced the term "rigid designator" to say that such an expression denotes the same thing in all possible worlds and that the object is a necessary existent. The term "necessary" means that it is true in all possible worlds and could not be false. Kripke contrasts this with "contingent" by which he means that it is true but not necessary.

Let us represent symbolically a particular "pain" sensation and a corresponding "brain state", i.e. the C-fiber stimulation, as P and C respectively. For Kripke pain P is a name; and if something is a pain it is essentially so, therefore it is a rigid designator. Thus, according to Kripke, the identity of pain with the stimulation of C-fiber, if true, must be necessary.

David Lewis, in his paper "Mad Pain and Martian Pain", maintained and defended the thesis that the identity between pain and certain neural state is contingent and therefore such identity is possible between objects. According to Lewis, pain is a matter of contingency because it depends on what causes what. Therefore all our concepts and ordinary names of mental states are "non-rigid" and "contingent".

Against this, Kripke argues that to prove contingency on the basis of "causal role", "amounts to the view that the very pain I now have could have existed without being a mental state at all." (p. 147).

A simple argument proposed against identity theory is that if mental events can be reduced to physical events then why and how can a subject report about his mental occurrence without having the slightest knowledge about physical occurrence of the brain? Such explanation is carried out by another monistic school called idealism.

As far as physical events are concerned materialism, in its different forms, gives highly plausible arguments. But in respect of mind, their difficulty lies in the oversimplification of not giving an account of first person feelings.

1.1.2.3. Idealism.

Idealism, also known as immaterialism, claims that matter has no independent reality. Rather, the claim is that reality is centred in the mind; and that colours, shapes, etc., which were thought to belong to independent material objects are actually the sensible qualities which cannot exist without being perceived. Berkeley gave this immaterialist thesis an epistemological ground. Hence his famous dictum "esse-est-percipii".

Based on this Berkeley argued that what we immediately perceive are sensations and ideas and that the *esse* or essence of physical objects is *percipi* or to be perceived. Therefore physical objects are simply the sensations and ideas of one's perception. Such a claim is made on the grounds that sense experience is basic and indubitable.

But the contention that physical objects are simply sensations and ideas of one's perception would reduce this thesis into sheer solipsism, which holds that nothing exists outside one's own mind. Berkeley was aware of this problem and in order to avoid solipsism, he appealed to a supreme perceiver there by making the existence of a material object consist in the continuous, never-ending, perception of God.

The plausibility of Berkeley's argument is based on theological view about the sense-perception of God. But Berkeley failed to distinguish between two kinds of order in experience. They are (i) the causal order which connects events together, in the external world, in order to explain physical objects or physical changes of certain kinds, and (ii) the causal order which connects different percepts in our minds and leads us to form the notion that they are all perceptions of the same individual thing. But since we do not find such a notion his theory remains implausible.

1.2. Neutral Monism.

1.2.1. The Aims.

Neutral monism has two basic aims which are inter-related. The fundamental aim of the theory is to provide an empirical sub-stratum to underpin physics and psychology. The neutral monist rejects the view that the "stuff" of the neutral monists is a kind of hidden unperceivable *Ding-an sich* or Spencerian Unknowable. This rejection is not new in the history of philosophy. Hume had rejected it long before neutral monism. It is said that Berkeley had a theory of mind similar to the neutral monists. But the

uniqueness of the neutral monists' "stuff" lies in the fact that what is given in perception neither belongs to physics nor to psychology. Hence ontologically they tried to disperse dualism and close the gap between mind and matter. Epistemologically they tried to show that the basic elements which equally belong to physics and to psychology are transparent and one can have access to them.

According to Russell "Science is accustomed to the conception of "data""³. For instance in physics a datum consists of the position of a speck of light on a scale. One may argue that this datum of physics means a physical light on a physical scale. The neutral monists explain the situation in the following way. What we call physical scale and physical light are arrived at by inference from what is given. What is given is a variegated visual field, one part of which is brighter than the other parts. Hence a datum is something associated with one observer. This is because what we call the "same" physical object looks different from different points of view, and therefore presents different datum to different observers. When a number of people look at a table from different points of view, the projective properties of the table will be more or less same for all of them. It is the metrical properties which are different.

From such notions one can arrive at a publicly perceivable object by inference without postulating any kind of unperceivable substance. Hence the entities of the neutral monist are never things which are not potentially, phenomenally present.

Such consideration may suggest that neutral monism is in fact phenomenalism in disguise. At least in some respect both share certain characteristics. First they are both concerned to produce an account of what is phenomenally given. Secondly, they are also concerned with the epistemic foundation, thus identifying human knowledge with experience. But the term experience is somewhat ambiguous, it may refer to ideas, impressions or perceptions. When a neutral monist and phenomenalist refer to experience they mean perception. This point is shared by the sense-data philosophers.⁴ Both neutral monism and phenomenalism regard sense-data to be the building blocks of phenomena.

Despite the common characteristics shared by them, they differ in certain other respects. Phenomenalism explains physics on the basis of appearances presented to the senses.⁵ But physics demands continuity, where continuity is incompatible with

3. "The Philosophical Analysis of Matter" [1925], first published in *Collected Papers*, vol. 9 p. 278

4. Cf. Yolton, *Metaphysical Analysis*, London, 1969, p. 49.

5. Cf., "The Philosophical Analysis of Matter", p. 281.

phenomenalism. For instance, the theory of light is concerned with what happens where there are no sense-organs unlike the phenomenologists who are strictly confined to the senses. Apart from observed occurrences, physics requires the possibility of inferring unobserved occurrences in places where there are no sense-organs. Neutral monism departs from phenomenalism by postulating unobserved occurrences just like observed occurrences except that no observer is aware of them. Such occurrences are inferred from laws, and neither have been nor will be directly verified or falsified.

1.2.2. The Characteristics.

Any theory of neutral monism must consist of three parts:⁶

(i) A theory of neutral stuff must tell us about the nature of neutral entities.

(ii) A theory of matter must tell us what kind of relations which, when they hold between a set of neutral entities, constitute that set as a material object. It should also explain how the material object is constituted out of the neutral stuff by virtue of these relations.

(iii) A theory of mind must tell us what kind of relations are those which, when they hold between a set of neutral entities, constitute that set as a mind or a mental phenomenon. It must show how mental phenomena are constituted by these relations out of the neutral entities.

These three parts constitute the basis of the neutral monist theories. There may be different versions of neutral monism depending on the distinctive answers they provide to these parts.

Keeping in view the difficulties faced by the dualists, materialists and the idealists, neutral monism begins by analysing the notion of substance as "stuff" through particulars. The reason for this is that the traditional notion of a substance, as what exists in its own right or independently raises certain difficulties.⁷ For instance Descartes, like Locke, took substance to be the substrate of what underlies accidents or properties, but did not emphasize its distinction from them so much that it became unknowable. We can only know something by describing it, i.e. giving its properties,

6. Stace, "Russell's Neutral Monism", in *The Philosophy of Bertrand Russell*, p. 354.

7. See, Lacey, *A Dictionary Of Philosophy*, p. 210.

which is impossible if it itself has none. What makes us think that attributes belong to something which is prior to attributes? If substance is a mere inference from attributes then why do we need to emphasize the importance of it? Again, if we accept the traditional notion of substance we fail to understand how substance is related to attribute. Perhaps substance is just correlated attributes? But what relation relates the attributes? etc.

According to the neutral monist the substitution of the concept of "stuff" instead of "substance" increases the understanding of the relation of matter and mind to the stuff of the world. The stuff of the world is described as "simply the collection of particulars" (*Collected Papers*, vol. 9, p. 282). A particular is that which can occur in any kind of fact.

One of the issues which led to neutral monism is the question of permanence. The Cartesian notion of substance was based on the notion of indestructibility, and therefore permanence was thought to be the characteristic of reality. The neutral monists rejected the notion of permanence as a logical necessity. According to them the quasi-permanence of an object is simply an empirical consideration. The data out of which a material object, say a table, is constituted are transient. The table, constituted out of data, is simply an inference. We can explain this in another way. [*Ibid.*, p. 283]. A song which lasts for, say three minutes is constituted out of series of notes, which are brief events. Collectively the notes lasts as long as the song, and the song is not a separate entity. Similarly the singer is not a single person with changing states. Like the song, a singer can be conceived as a series of particulars rather than a single particular.

These data which constitute the song and the singer are neither mental nor material but neutral. As James would say, a datum "tends to get counted twice over... figuring in one context as an object or fields of objects, in another as a state of mind" (*Essays in Radical Empiricism*, p. 10)..

According to the neutral monists these data are the building blocks of psychology and physics. These data are fundamentally identical, but the difference is simply the emphasis given to them by physics or by psychology. Hence a brief visual event may equally belong to the psychology of vision as to astronomy.

1.2.3. Neutrality vs. Covert Dualism.

From the preceding analysis it clear that according to the neutral monists the neutral stuff, or the bits of it which may be called neutral entities considered by themselves are neither mental nor physical. It is by virtue of its external relations that a group of entities will constitute either a mind or a piece of matter. Neutrality is neither an essence nor an attribute of the neutral stuff, which is otherwise composed. For example⁸ out of a given set of dominoes one may make either a square or a rectangle. There is a difference between a square and a rectangle, but the stuff of which each is made is the same, namely the dominoes. The difference lies in the spatial relation between the dominoes in either set.

The neutral stuff would fail to be neutral if it consisted of elements which were mental or physical, i.e. not neutral. The aim of the neutral monist programme is to construct both mental and physical entities through external relations between neutral simples. If the neutral stuff includes both mental and physical qualities or elements then it should be considered dualism in the Cartesian sense, i.e Substance Dualism⁹ or Dualism of Incompatibles¹⁰.

If a simple neutral entity used in construction needs a complex structure composed of elements or qualities and internal relations as a part then it has inner duplicity. We should then consider the construction of the mental or physical entity as Covert. If the covert elements are themselves mental or physical then we have Covert Dualism.

According to the neutral monist there should not be any inner duplicity within the neutral "datum". The subject and the object, the mental and the physical are simply due to temporary purposes or special references. If there is any intrinsic relations or parts within the datum it fails to be neutral and hence collapses into Covert Dualism. [See sections 3.2, 3.4, 5.1, 5.6, 6.6,].

Covert dualism is a distinctive kind of dualism and should not be confused with property dualism. According to property dualism¹¹ there is no substance beyond the physical brain which has a special set of non-physical properties. There are different

8. Cf. Stace, p. 353.

9. Cf. Churchland, P.M., *Matter And consciousness*, pp. 7-10.

10. Cf. Broad, *The Mind And Its place In Nature*, p. 610.

11. Cf. *ibid.*, pp. 10-13.

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versions of property dualism: *epiphenomenalism*, *interactionist property dualism*, *elemental-property dualism*.

The dualism with which I shall accuse Russell and James is a covert manifestation of that which C.D. Broad in his *The Mind* called "Dualism of Compatibles" (p. 609). According to Broad Dualism of Compatibles can take four different forms (p. 642): (a) the possession of mentality may entail that of materiality, but not conversely; (b) the possession of materiality may entail that of mentality, but not conversely; (c) the possession of either may entail that of other; and (d) the possession of one may entail neither the possession nor the absence of the other. Covert dualism can be identified with the fourth alternative (d) of Broad's analysis. [Cf. section 3.3]. Mentality and materiality in the form of elements or qualities can be implicitly introduced as the composite part of the datum in order to provide an illusory basis for the construction of materiality or mentality. As a result the subject-object and the mental-physical distinctions occur *within* the datum not as a result of the construction via external relations.

This is an ontological issue, not epistemological. It is a matter of the construction of a mental and physical entities from a fundamentally, and purely, neutral ontology. The programme is an ontological one.

Of course, both Russell and James required the programme to be epistemologically viable. And in doing so, I will argue, they imported elements into the ontology which were not neutral. This is the origins of the error I identify as Covert Dualism.

The confusion which has arisen in many critiques and commentaries is however, a failure to appreciate the sophistication of the ontological construction. This issue is identified, analysed and addressed in the chapter on "bootstrapping". [Chap. 7.3.3]

1.3. Historical Genesis.

Introduction.

The desire to reject both epistemological and ontological dualism has a long history which at least dates back to the time of Berkeley. Pitcher, in his *Berkeley*, argued that Berkeley himself had a "secret doctrine of the mind" which amounts to neutral monism. It was at the end of the nineteenth century that a systematic discussion was

carried out by Ernst Mach, *Analysis of Sensations*(1886), R. Avenarius, *Critique of Pure Experience*(1888-90), and *The Human Concept of the World*(1891), K. Pearson, *The Grammar of Science*(1892), and J. Petzoldt, *Introduction to the Philosophy of Pure Experience* (Leipzig, 1900-1904, in 2 volumes).

Mach and his followers worked not only to avoid the difficulties of dualism but were also hostile to representative realism and the unperceived causes of things-in-themselves. At the turn of the twentieth century their views were radically carried forward by James, The New Realists and Russell. The twentieth century neutral monists independently agreed with their predecessors. But Mach and his followers were all positivists¹², whereas James and Russell were not.

The word "neutral" was coined by H.M. Sheffer¹³ and was used neither by Mach nor James. The name "Neutral Monism" was first used by Russell to identify the theories of Mach, James and the New Realists in his critique in 1913. Later Russell used the name for his own theory.

Since Mach was the immediate precursor of neutral monism and because it was his theory which inspired the twentieth century neutral monists I will not discuss his immediate nineteenth century contemporaries. But it is worth mentioning that, the notable most amongst his contemporaries, Richard Avenarius, (the founder of empiriocriticism) developed an interesting epistemological thesis. According to this the task of philosophy is to develop a "natural concept of the world" based on "pure experience". He emphasised that such a coherent world view requires a positivistic restriction to that which is directly given by pure perception. Such consideration would lead to the elimination of all metaphysical elements which one, through introjection, imports into experience in the act of knowing. As we discuss Mach we will see that he stressed that science had the purpose of saving mental effort. His theory of "economy of thought" is Mach's main point of contact with Avenarius. This idea is independently developed and set forth by Mach in his book *The Analysis of Sensations*.

12. Cf., Passmore, *A Hundred Years of Philosophy*, p. 109.

13. See, E.B. Holt, *The Concept of Consciousness*, Preface, p. xiv.

1.3.1. Mach.

Mach, the originator of neutral monism, presented his thesis in *The Analysis of Sensations*. R.B. Perry, who called it "Ernst Mach's little book", regarded it as "among the classics of modern realism".¹⁴

Mach, a physicist and a philosopher, believed in the "economy of thought" which became the important tool for his philosophy and physics. In his "The Economical Nature of Physics", 1882, he argued that the aim of science is to furnish precise and economical descriptions of phenomena. The description of the observable facts rests on the claim that the external world can be found out through sense experience, which is the only sound basis for communication. To an indifferent observer the world is revealed as complex and chaotic. But what we encounter, on closer inspection, is that the same colour, the same shape, the same quality belongs to a variety of different objects. These particular colours, shapes etc. are the simple constituents present in one's visual field. Mach called them "elements" which belongs to various classes and are immediately known through the five senses. In his *The Science of Mechanics*, 1883, Mach writes:

Nature is composed of sensations as its elements... Sensations are not signs of things; but on the contrary, a thing is a thought-symbol for a compound sensation of relative fixedness. Properly speaking the world is not composed of "things" as its elements, but of colours, and tones, pressures, spaces, times, in short what we ordinarily call individual sensations. [P. 579].

According to Mach the whole operation is a mere affair of economy. This view became the working hypothesis of his *The Analysis of Sensations*. There he argued that what is "given" is subjectless, because what is accessible by me is also accessible to others who have sensations, for example, when they look at a red apple. These elements, like colours, shapes etc., given in sensations are the basic constituents of the world.

According to Mach, what we call matter and mind bodies and egos are simply complexes constituted out of very basic "evanescent" element, i.e. the visible, the audible, the tangible. [*Ibid.*, p. 5]. The visible is analysed into colours and forms. The complexes are disintegrated into elements, i.e. into their ultimate component parts which are unable to subdivide any further. On the basis of this Mach declared:

14. *Present Philosophical Tendencies*, p. 310.

Things, body, matter, are nothing apart from the combination of the elements,- the colors, sounds, and so forth....[Pp. 6-7].

Mach admitted that relative permanency (*ibid.*, pp. 2-3) is manifested by certain complexes of colours, sounds, textures etc. which are functionally connected in space and time. According to Mach the world that we encounter in our observation is complex and unorganized flux. Careful observation reveals that there are common qualities in different single thing. Objects may differ from one another but they have the same colour, the same texture and so on. There are a variety possible combination of elements between objects which lead us to give "special names". Mach said "absolute permanent such complexes are not" (p. 2).

Mach explained that this "sum-total of permanency, and the preponderance of its importance" as contrasted with the changeable element impel us to "the partly instinctive, partly voluntary and conscious economy of mental presentation and designation... That which is presented in a single image acquires a single designation, a single name" (p. 3). In order to explain this regarding bodies he wrote:

My table is now brightly, now dimly lighted. Its temperature varies. It may be repaired, polished, and replaced part by part. But, for me, it remains the table at which I daily write. [*Ibid.*, p. 2].

Similarly the "ego" or "I", the complex of memories, moods, and feelings, joined to a particular body exhibits itself as relatively permanent. The apparent permanency of the ego is due to its continuity and slowness of its changes. [*Ibid.*, p. 3]

It is the *economy of thought* that led Mach to atomism.¹⁵ According to Mach the complexes disintegrate into elements, i.e. into their "ultimate component parts", and are unable to subdivide any further. This view is interpreted by his critics to mean that Mach was an atomist. L. Laudan in his *Science and Hypothesis* argued that in fact Mach was a leading opponent of atomic and molecular theories in physics, because atoms cannot be grasped by our senses. According to Mach:

Atoms cannot be perceived by the senses; like all substances, they are things of thought. [*The Science of Mechanics*, pp. 588-589].

Hamilton pointed out that Mach's atomism consists:

15. Hamilton, Andy, "Ernst Mach And The Elimination Of Subjectivity", p. 120; also see Alexander, P., *Sensationalism and Scientific Explanation*, p. 7.

(i) in his opposition to, not to say paranoia about, entities construed as things-in-themselves as opposed to mere complexes of sensations; and (ii) in his rejection of the idea that the sensations possess any internal relation to a subject. [P. 121].

The elements are the atoms of sensation and are of a unique, single and neutral nature. They are known to us through sense experience and are therefore depend on our senses. Mach argued that if we consider from one point of view they are simply sensations. It is not possible to distinguish between, say, the red colour rose and the sensation which one has when one looks at the rose. From this Mach concluded that "the world consists only of our sensations" (*The Analysis of Sensations*, p. 12).

These elements can figure in different groups and complexes, which are functionally dependent on one another. Mach said:

[I]t is *only* in the connection and relation in question, *only* in their functional dependence, that the elements are sensations. In another functional relation they are the same time physical objects. [*The Analysis of Sensations*, p. 16]

The passage indicates how Mach was committed to neutral monism. It is the functional relation of the elements which determines whether certain arrangements are psychical phenomena or physical objects. [When we discuss James we shall see that like Mach he also emphasised on functional dependence. to James the distinction between the physical and the mental arise out of special purposes]. As such the elements are neither physical nor mental and therefore neutral. To put it in Mach's words:

[T]he great gulf between physical and psychological research persists only when we acquiesce in our habitual stereotyped conceptions. [*Ibid.*, p. 17].

He argued that a colour can figure as both a physical and a psychological object. A colour, say green, is a physical object when we consider its dependence upon its luminous source, upon other colours, upon temperatures, upon space etc. The same colour, green, is a psychological object when we consider its dependence upon the retina. (See p. 17; cf. Hamilton, *op. cit.*).

If treated in this way the gulf between bodies and sensations, between what is without and what is within, between the material world and the spiritual world is evaporated.

According to Mach various "pseudo-problems" arise out of the relation of bodies to the ego. But bodies and egos are complexes of basic stuff which do not denote different elements.

Mach explained the various complexes of elements by the following letters. Those evanescent elements constituting a physical body are denoted by "ABC..."; the complex known as the body of a subject is denoted by "KLM..."; and the ego composed of volitions, memory images etc. are denoted by "aby...". These letters simply denote different orders which are functional. Basically there is only one sort of elements or stuff as neutral monism prefer to call them. [*The Analysis of Sensations*, pp. 8-9].

Mach in his scientific ventures and the explanation of mind and body in terms of neutral elements (entities) accepted the Cartesian dictum of certainty. Like Hume he strived for an empiricist form of search but believed that one cannot be mistaken about one's own sensations. He diverged altogether from Berkeley, who assumed metaphysical and spiritual causes of sense-data due to his religious upbringing. Mach confined himself to the phenomena and laid emphasis on the immediate data of sensations using them as building blocks in constituting complexes. He denied that sensations, "the given" are subjective and was critical about solipsism. Mach says:

[T]he philosopher who is a solipsist seems to be like the man who gave up turning round because whatever he saw was always in front of him. [*The Analysis of Sensations*, p. 359].

Mach avoided solipsism by an empiricist device, the argument from analogy. [*Ibid.*, pp. 33ff.]. It is through one's own overt behaviour that one can compare the overt behaviour of others and infer that similar sensations are experienced.

From Mach's view it follows that since the world consists only of our sensations every branch of science studies sensations and their relations. The difference between them lies in the direction of investigation. Suppose a particular colour, say, red may be a physical object and also a psychical phenomenon. If the colour red is considered in relation to light sources and other colours, then it is a physical object as studied in physics. If the same is colour considered in relation to the retina and optic nerves etc., then it is a sensation as studied in psychology. Otherwise the sensation "red" is a neutral element which can figure in any scientific investigation; therefore deriving different names. Mach arrived at neutral monism through physics. It is clear that his

attempt to provide a conception of unified science led him to the theory of neutral monism which was then carefully picked up by both James and Russell.

1.3.2. James.¹⁶

Being a psychologist, unlike Mach, James arrived at neutral monism through psychology. He presented his views in eight important essays which are collected in the posthumous book *Essays in Radical Empiricism*.

There are various opinion regarding the influence of Mach on James's development of his theory of neutral monism. Since James does not mention Mach in any of his articles, Russell thinks that James reached his conclusions independently. According to Passmore, James who was looking for a "juicier" philosophy must have learnt much from Mach.¹⁷

James met Mach during the academic year 1882-83. Perry points out that following this meeting James maintained a sympathetic contact with Mach for many years. Moreover both Mach and James attached themselves to the British empirical tradition and were not deterred by academic barriers from importing philosophy into science and science into philosophy.¹⁸ Perry said:

From Mach James had learned something of what he knew about the history of science, and he had readily accepted his view of the biological and economic function of scientific concepts. [*The Thought and Character of William James*, vol. 2, p. 463]¹⁹.

In January 1884 Mach wrote to James to say that he would soon send a copy of *The Analysis of Sensations* and would be glad if a considerable part of it commanded his assent. [Perry, vol. 1, p. 588]. In a letter to Stumpf, in 1886, James wrote "I am thirsty to read it" (Perry, vol. 2, p. 65).

It was in 1904 that James developed his theory of neutral monism in "Does 'Consciousness' Exist?". He sent this to Th. Flournoy who commented in a letter to James:

16. Since I will be devoting two chapters to James, here I will confine myself on Mach's influence on him and the general influence of science in his philosophical development.

17. Passmore, *op. cit.*, p. 109.

18. Perry, *Thought and Character of William James*, vol. 1, p. 587.

19. James depended for the history of physics on Kurd Lasswitz and Mach's *The Science of Mechanics*. See Perry vol. 1, p. 491, footnote.

Is there a real and essential difference between your "pure experience" and the *Empfindung* of Mach, the *phenomene* of Renouvier, etc..? It seems to me not,.... [Perry, vol. 2, p. 389].

Perry observed that the representations of Renouvier were intrinsically bipolar, being both subjective (as representative) and objective (as represented). In his "phenomenism" James had been in agreement.²⁰

Perry further observed that to Mach "sensations" were elements common to both minds and bodies and hence belonged to neither exclusively. He said,

"[b]ut they were far from composing in themselves that field or reality which James found in pure experience." (vol. 2, p. 389).

According to Mach the study of these elements, i.e. sensations, might lead to a science which would embrace both physical and the psychical. To this passage James attached the query, "Can this mean "pure experience"?" Here James also regarded Mach's view "a step in the right direction." (Perry, vol. 2, p. 389).

But James had an opposite response to Mach's theory as well. While describing Mach's theory Perry says:

Thus we find him defining the domain of psychology as the dependence of the sensations or elements on the central nervous system. "Decidedly *not*," remarked James [comment on his copy of Mach's *Analyse der Empfindungen*]-- for this could mean the reduction of psychology, through psychophysics, to physics; while for James psychology had its *own* categories, scientifically as authoritative as those of physics and metaphysically more fundamental. [vol. 2, pp. 389-90].

We shall see later that in the hands of James neutral monism developed as a non-reductionist theory. The neutral entities belonged equally to psychology and physics. The same arrangements of neutral entities can be viewed as an object of physics and a phenomenon of perception. Apart from the arrangements the entities are neutral. If neutral entities belonged to physics and physics explained all other sciences in terms of these entities then the theory would not be counted as neutral. It will become a sort of physicalist theory of which Russell was accused. [See Chapter Six]. This answers

20. I discuss James's thesis of "Phenomenism" in chapter two. There I will show how his interpretation turns out to be covertly dualistic a fault from which James never recovers.

Myers' query as to why like Mach and Russell, James did not attempt to accommodate sensations into an all-embracing framework of physics.²¹

What ever influence of Mach is present there is no doubt about James's originality in developing his thesis of neutral entities. Perry points out that in 1882-1883, the year James got acquainted with Mach, "he was evidently trying to formulate a "phenomenistic" philosophy which might serve as the basis for his psychology." (vol. 2, p. 73). There is no doubt that James laid down the foundation of neutral monism in his *Principles*.²² In his psychology James was somehow forced to assume the dualism of subject and object. But he argued against Hume's psychological atomism, Locke's representational realism, Kant's transcendentalism and Bradley's absolutism to arrive at a more profound metaphysical system which he kept in "reserve".²³

James was aware of the scientific breakthrough of his time. He did not lay emphasis on any particular science through which philosophy is approached. Perry writes about the close philosophical agreement between James the biologist, Mach the physicist and Bergson²⁴ the mathematician. (vol. 1, p. 468, footnote). He further states that James, in his youth, had been under the influence of naturalist school, which substituted the findings of science for those of the traditional metaphysics. While discussing any metaphysical problem he found the writings of this school ready at hand.

James's knowledge of physics was developed especially from Mach's critique of traditional mechanics. Mach's antiatomism was perhaps one of the reasons for James rejection of "pure experience" as atomic.²⁵ He argued against Hume's psychic atomism. Pure experiences are not chopped up in bits, as James says, rather they are externally related and have flow like a stream.

James's biology was in fact Darwinian. Perry writes:

James's conception of the *a priori* factors in human knowledge was an application of the Darwinian notion of spontaneous or accidental variation. [vol. 1, p. 470].

21. Myers, G.E., *William James*, p. 569, note 22.

22. In Chapter Two a brief discussion on this point will be carried out.

23. Chapter Two will mainly deal with James's transition from psychology to metaphysics and his rejection of sensationalism, associationism, transcendentalism and absolutism.

24. In Chapter Three I will briefly discuss Bergson's influence on James.

25. In Chapter Three I shall argue that despite his antiatomistic attitude James viewed "pure experience" as atomic, using such words as "bit", "portion", to describe the neutral entities.

Though James believed in continuity, he did not follow Darwin in this respect. James argued that there is no gap; nature never makes leaps. James in his radical empiricism proposed the notion of a "conjunctive relation". According to this conjunctive relation the world is experienced as continuous, where variety of connection runs through all the experiences that compose it, and are ever-changing.

It was James's biological knowledge that led him to chose the path of empiricism. Perry writes:

[A] scientific theory was for James essentially a hypothesis, owing its cognitive merit not to its intrinsic form but to its ulterior verification in terms of perceptual experience. [vol. 1, p. 468]

Beside Mach and Darwin, James read and frequently mentioned Karl Pearson, W. Ostwald, and H. Poincre. James benefited from them their pragmatic interpretation of their technique. His knowledge of science became the basis of his radical empiricism. There James argued about the empirical adequacy of the neutral entities which explained both mind and matter. His theory became the foothold for the twentieth century neutral monists.

1.3.3. The New Realists.

The new realists owed their theory of neutral monism to Mach and James. At the turn of the twentieth century the movement called new realism arose especially to oppose the idealist doctrine which generally held that whatever existed is mind dependent. It was in 1912, after the publication of *The New Realism*, that the movement came into forefront. The book was jointly produced by six new realists E.B. Holt, W.T. Marvin, W.P. Montague, R.B. Perry, W.B. Pitkin, and E.G. Spaulding.

The aim of the six new realists was to produce a complete philosophy that would play an important role in human thought. Despite their agreement on certain philosophical issues, such as the dependence of philosophy on logic, their defence of the validity of analysis against idealism, their vital agreement that relations are external, and that the thought and object are same, i.e. epistemological monism, they disagreed on certain ontological explanations.

The new realists unanimously proposed epistemological monism and ontological pluralism. Influenced by James and Moore, they agreed that, epistemologically, the

content of consciousness was objective because it consisted of objects in the real and external world. Hence thought and object are numerically the same. Ontologically, apart from selective power, they believed in certain constitutive role of consciousness. Those elements of the object not found in consciousness would give a constitutive power to consciousness.

This became a controversial issue among the six collaborators. They took two principal positions. Montague called them the left and the right wings of New Realism. They are Neutral Monism, developed by Holt and Perry, and Platonic Realism developed by Montague.

Under the influence of Mach, James, and Nunn, both Perry and Holt developed neutral monism, but this was eventually abandoned. Perry's theory is found mostly in *Present Philosophical Tendencies* (1912), and Holt's in *The Concept of Consciousness* (1914).

The New Realist took their start from the theory of consciousness of William James. Both Perry and Holt were impressed by James' idea of "pure experience", which has no inner "duplicity" of such distinctions as "object" and "subject", or "knower" and "known" or "mental" and "physical". The purity of experience is such that it is simply "neutral" or "subjectless". The classification of different arrangements of pure experience into thing and thought are the result of special purposes.

According to James the neutral entities were pure experience. Influenced by developments in mathematics and symbolic logic, Holt and Perry found neutral entities in the mathematical-logical realm of "being". They do not exist in any place. They exist only in the logical sense, as either a class or members of a class. The entities belonging to this realm have no definition and identity, and are therefore neutral. In other words "Being", a neutral stuff, connotes nothing but denotes everything.

Perry in his *Present Philosophical Tendencies* carried out an elaborate discussion on his theory of neutral monism in the chapter "A Realistic Theory of Mind". He began his analysis by pointing out that,

"the content of my mind exhibit *no* generic character. I find the quality "blue", but this I ascribe also to the book which lies before me on the table; I find "hardness", but this I ascribe also to the physical adamant; or I find number, which my neighbour finds also

in his mind. In other words, the elements of the introspective manifold are in themselves neither peculiarly mental nor peculiarly mine; they are *neutral and interchangeable*. [*Present Philosophical Tendencies*, p. 277].

In other words they pre-eminently independent of consciousness. Only with respect to their grouping and interrelations the elements of mental content exhibit any "peculiarity". Perry further argued that the independent object can be related to consciousness or mind, but not be dependent on that relationship for its existence.

In explaining his theory Perry argued that the so-called "relational theory of consciousness" has contributed to the fact that mental content is distinguished not by stuff or elements, but by the way these elements are composed. Perry discussed the criticism made by F.J.E. Woodbridge against James conception of "knowing". According to James when "one thing *means* or *represents* another... it becomes conscious (*ibid.*, p. 278). This is critically assessed by Woodbridge. He, in his "The Nature of Consciousness", argued that this relation can scarcely be *generic* relation of consciousness, because the terms between which it holds are already "experienced".

As to this Perry argued that James's views contribute only a "preliminary induction". Though they "afford unmistakable evidence of a special and important grouping of objects" they "*do not reveal the principle which defines the group*" (*ibid.*, p. 278).

In order to solve the relational problem Perry argued that we can analyse the nature of mental action in terms of general observation. Accordingly he said that mental action is a property of the physical organism. Perry quoted MacDougal where he argued,

"the nervous processes of the spinal cord... consist in the transmission of physical impulses through channels of great complexity from the sensory to... the motor nerves, [which explains] *all physical* processes are accompanied by nervous processes of this chapter" [Pp. 298-299].

Following this Perry declared that "elements become mental content when reacted to in the *specific manner characteristic of the central nervous system*" (p. 199).

Perry also discussed Bergson's theory of mind presented in *Matter and Memory*. Perry argued that Bergson's theory of mind was not thoroughgoing because it is restricted to perception. But he emphasised Bergson's point- "the essentially teleological character of mental action". Bergson argued:

Conscious perception does not compass the whole of matter, since it consists, in as far as it is conscious, in separation, or "discernment" of that which, in matter, *interests our various needs*." [Perry, p. 300].

Perry agreed that the physiological account of the mind can be supplemented by the action of the nervous system which exhibits "the control of interest." He explained that mind, as it appears in nature and society, consists primarily of interested behaviour. Accordingly he said:

[C]ontent of mind must be defined as that portion of the surrounding environment which is taken account of by the organism in serving its interests; the nervous system, physiologically regarded, being the mechanism which is employed. [*Present Philosophical Tendencies*, p. 300].

A Similar view is maintained by Holt. His anti-idealism ruled out panpsychism, i.e. that the objects have the character of consciousness. James argued that consciousness was an external relation between a sentient organism and its object. This view was considered as the doctrine of dualism of mental and physical substance. Holt replaced this dualism with neutral monism. He wrote::

[T]he contents of our minds are not "mental" in their nature, these contents are all neutral entities, are all of such stuff as logical and mathematical manifolds are made of. Complex aggregates are of the substance of their simpler components; not the reverse. [*The Concept of Consciousness*, p. 114]

The entities which constitute mind are independent of consciousness. The same thing could be said about matter:

The elements of physical world are neutral entities-- propositions and terms-- with no residual substance to be called "Matter". [*Ibid.*, p. 131].

Thus according to Holt the members of the two classes, matter and mind, consist of simpler entities. "These entities do not *have* a substance, they are a class." [Holt, p. 135]. The class not only includes mathematical and logical concepts, but also everything of "our familiar old universe". They are all possible and actual, real and unreal objects of thought. All sensations, primary and secondary qualities, terms and propositions form the neutral "timeless and changeless entities and therefore subsists in the all-inclusive universe of being". [*Ibid.*, pp. 135ff].

Holt regarded the physiological response of the nervous system as the true mechanism of understanding mind. According to Holt the body has a mind because the body selectively describes one, as compass describes a circle. He laid emphasis on physiological psychology and said that "the nervous response it is which selects and defines the content of consciousness" (*ibid.*, p. 338). He concluded that "... physiological psychology,... must claim to be the true and authoritative science of the soul."⁴[*The Concept of Consciousness*, p. 338].

We find that both Perry and Holt took radical views in describing mind. Although they began their analysis keeping in view James's philosophy, they disagreed with James on the vital analysis of consciousness. [See Chapter Two. An elaborate discussion is carried out on James's theory of consciousness]. Perry and Holt took extreme behaviourist approach for which Passmore considered the Holt-Perry version of the theory is "an out-radicalising of James's radical empiricism"²⁶.

I have mentioned earlier that both Perry and Holt abandoned neutral monism. Perry admitted that error and other nonveridical experiences were cases of "mis-taking" entities for something other than what they are. Although he abandoned it, he continued to describe his philosophy as "neutralism".

Similarly Holt confessed that his book on neutral monism turned out to be an "absurd hocus-pocus". This is because at the time he did not know the true locus of these timeless entities. Despite his lifelong objectivist-subjectivist oscillations, Holt was committed to a objectivist position. In his last published writing he argued that mind and cognition are not mental but physical. It is a matter of nerves and muscles. He argued that the active self is the physical body, and what we call a self, ego, or knower does not exist.

Russell, in 1913, wrote a critique on neutral monism. There he pointed out several shortcomings in Mach's, James' and the new realists' theory which made it not truly neutral.

26. Passmore, *op. cit.*, p. 263.

1.3.4. Russell.²⁷

Russell was fortunate in his predecessors. Since neutral monism had been subjected to much criticism he was aware of most of the shortcomings of the theory. Long before his acceptance of neutral monism Russell himself was a severe critic of the theory. [See Chapter Four]. Before his adoption of neutral monism, Russell in 1912 undertook an attempt to close the gap between mind and matter. He admitted in *My Philosophical Development*, that he failed because he had accepted matter as it appears in physics which left an "uncomfortable gulf between physics and perception" (p. 78). Russell was aware of James's theory but did not readily agree with him. It is important to highlight some of the major changes in his philosophy which led him to neutral monism in 1921. This will make clear his philosophical position prior to our tracing the development of his neutral monism in chapter four.

When Russell "plunged with the whole-hearted delight into the fantastic world of philosophy" (*ibid.*, p. 29), he came under the influence of Kantian and Hegelian idealism. Believing in the Kantian interpretation of geometry, he wrote his dissertation *The Foundations of Geometry*, which he later thought "somewhat foolish". Accepting the Hegelian dialectic, Russell wrote a paper "On the Relations of Number and Quantity", and regarded it "an unadulterated Hegel". He later reacted saying, "it seems to me now nothing but unmitigated rubbish". [*Ibid.*, p. 32]. In his early philosophical ventures Russell was so obsessed by Hegel's views that he aimed at constructing a complete dialectic of the sciences, which would end up with the proof that all reality was mental.

The turning point came in 1898 when Moore led the way in rejecting idealism. Russell was impressed by Moore's doctrine that facts are in general independent of experience. With little encouragement Russell threw over Hegel and was delighted to believe in "the bizarre multiplicity of the world" (*Portraits from Memory*, p. 40). In his revolt against Hegel he came to think of the universe as "more like a heap of shot than a pot of treacle".

This revolt against Hegel led him to revise his views on relations while working on *The Philosophy of Leibniz*, published in 1900. He discarded "the doctrine of internal relations", which Bradley had distilled out of the philosophy of Hegel, and accepted

27. I will be devoting three chapters to Russell. Here I will produce a chronology of his philosophical beliefs "discarded and retained" (*Portraits from Memory*, p. 40) prior to his acceptance of the theory of neutral monism partly in 1921 and completely in 1948.

"the doctrine of external relations" and pluralism which is bound up with it. According to Russell the doctrine of internal relations held that every relation between two terms expresses intrinsic properties of the two terms and the property of the whole which the two compose. But this doctrine cannot explain "asymmetrical" relations which are essential in most parts of mathematics. Asymmetrical relations are those relations which, if they hold between A and B, do not hold between B and A. For example, if A is earlier than B, then B is not earlier than A. Russell's emancipation from idealism made him rejoice in the new philosophy, a philosophy which admitted externality of relations, plurality of things, the correspondence theory of truth, and the world revealed by observation and not by complicated arguments. He felt it as a great liberation, as if he had "escaped from a hot-house on to a wind-swept headland". [*My Philosophical Development*, p. 48]. Russell entered a full universe, a "Platonic heaven", and believed in a world of universals.

Russell thus prepared a universe of eternal and unchanging entities, conducive for his mathematical logic. In his world, numbers, points of space, general properties, physical objects had an independent existence. It was Moore who pushed him towards Platonic realism and also Russell's desire to believe in the truth of mathematics.

In 1900 he met Peano and became aware of the importance of logical reform for the philosophy of mathematics. With the help of Whitehead he devoted the next twelve years applying the technique of mathematical logic to philosophy, which he thought the correct scientific approach. He gratefully accepted from Whitehead the Principle of Occam's Razor, "the supreme maxim of scientific philosophizing". This gave Russell a more clean-shaven picture of reality. During this period (1900-1913) Russell, jointly with Whitehead, wrote *Principia Mathematica*, in three volumes. In 1902 he finished writing *The Principles of Mathematics*, published in 1903, which became the "immature draft" for his subsequent work. The primary aim of the *Principia* was to show that all pure mathematics follows from purely logical premisses and uses only concepts definable in logical terms.

Russell's success during this period was also enhanced by the outcome of his two important logical doctrines. They are the *Theory of Types* and the *Theory of Descriptions*. It was a contradiction in the theory of class which gave rise to the theory of types. When Frege heard about the discovery his instant reaction was that the whole foundation of mathematics had been undermined. Russell declared not all

classes are members of themselves. The problem is well illustrated by difficulties with the assertion of Epimenides the Cretan, "All Cretans are always liars".

The theory of descriptions, called "a paradigm of philosophy" by F.P. Ramsey, was designed to reveal the underlying logical form of denoting phrases containing descriptions. Here Russell was reacting against Meinongian ontology which argued that we can speak about "the golden mountain", "the round square", in such a way that it is possible to make true propositions of which these are the subjects. Hence they must have some sort of existence Russell reacted to such a bizarre sense of reality by proposing a solution in his article "On Denoting" (*Mind*, 1905) and then developed in his theory of descriptions (*Introduction To Mathematical Philosophy*, 1919). According to Russell the expressions of the form "the so-and-so" do not function as names. Though they are meaningful, they do not refer to any entity which they mean. According to Russell a proper name, such as "Scot", is a simple and complete symbol because it designates an individual directly. Whereas definite descriptions, such as "the author of *Waverley*", is a complex incomplete symbol and not a proper name. It designate an individual directly and has no meaning in isolation. Though they derive their meaning in a particular context with other symbols yet what they are supposed to refer to are not really constituents of propositions. Russell claimed that with the help of his theory statements containing a definite descriptions can be restated in such a way that the same thing is said without the appearance of definite descriptions. He maintained that when the statement is correctly analysed, the description disappears, and hence the thought of naming an object whose existence it is denying does not arise. This work brought into realisation that thought cannot be discussed independently of a language system. Braithwaite regarded it as the essence of the "revolution in philosophy" associated with name of Wittgenstein. "If Wittgenstein was the Robespierre of this revolution, it was Russell who set fire to the Bastille."²⁸

The changes between 1898-1912 puts Russell in a better situation to accept neutral monism. His rejection of idealism and the acceptance of a plural universe with external relations are a step forward to neutral monism. As we shall see later, the neutral monists in general accept a plural universe of neutral entities which constitute both mind and matter. Neutral entities are plural non-mental and therefore have no intrinsic relation. After "rigours of symbolic deduction" and analytic technique, the

28. Braithwaite, R.B., "Bertrand Russell as Philosopher of Science", p. 129.

fundamental method of his philosophy, and mathematics, we observe a clear linguistic turn in Russell's philosophy.

Russell considered the domain of empirical knowledge with his *The Problems of Philosophy* (1912), which he referred as his "shilling shocker"²⁹. After 1900 when Russell was working on the foundations of mathematics he had accepted Moore's dualism an adequate basis for the non-selfcontradictory character of mathematics. In 1912 he remained a dualist, and believed that mind and matter, and universals and particulars, are ultimate. I have regarded his 1912 position as the first phase of his neutral monism. This and the two phases (1914 and 1921-1927) leading to a mature theory of neutral monism will be discussed in chapters four, five and six. Here I will briefly discuss his move and subsequent changes which ultimately culminates into neutral monism.

In 1912, Russell who was concerned about knowledge of physical objects and access to it, therefore distinguished between knowledge by acquaintance (of sense-data) and knowledge by description (of physical objects). Knowledge of physical objects is by inference from knowledge by acquaintance. This explanation left the residue of dualism because he was under the shadow of Meinong and accepted that in sensation there are three elements, namely act, content and objects. Moreover he accepted Moore's distinction between "sensation" and "sense-datum". It was under such influence he wrote a critique on neutral monism in 1913.

To transform the ideas of *The Problems* in 1914 Russell applied two of his supreme methodological principles of scientific philosophising. They are the successive application of "Occam's Razor", that entities are not to be multiplied beyond necessity, and "Logical Construction", according to which wherever possible logical constructions are to be substituted for inferred entities. With such methodological principles, in *Our Knowledge of the External World* (1914), Russell soon got rid of the idea that physical objects are the causes of sense-data. He also accepted the phenomenalist approach for the verifiability of physics. Physical objects are constructs from sense-data, not inferences from them. Against phenomenists he maintained the reality of unperceived events, the sensibilia. He reduces sensibilia into "ideal" elements and defines them in terms of actual elements, i.e. sense-data. Similar views are also expressed in "The Relation of Sense-data to Physics" (1914) and "The Ultimate Constituents of Matter" (1915). But here Russell became less directly

29. See, Broad, C.D., "Some Personal Impressions of Russell as a philosopher", p. 105.

concerned about epistemology. He accepted the metaphysical hypothesis that sensibilia and sense-data had the same metaphysical status and were the ultimate constituents of matter. He justified his claim by the principle of continuity. Russell also maintained the dualism between sense-data and sensations, the latter being the mental particulars as the ultimate constituent of mind.

The actual transformation from dualism to neutral monism came when he laid down the foundation of his version of neutral monism in his *The Philosophy of Logical Atomism*. The fully-fledged theory was produced in 1921 in his *The Analysis of Mind*. Russell attempted to give an account of the mental via neutral stuff, the wholly empirical entities. He accepted James's account that, in perception, there is no distinction into acts of consciousness and their non-mental objects. But his account of the mental required "images", which were wholly subjective, and his account of matter required unsensed "sensibilia", which were wholly physical. This left incompleteness in his version of neutral monism. The fact is he never completely abandoned the dualistic theory of perception. As a result his theory turned out to be dualistic in Cartesian style.

Russell's desperate attempt to save neutral monism from this incompleteness came in 1927 with the publications of *The Analysis of Matter*, and *An Outline of Philosophy*. Influenced by Einstein and Whitehead, Russell was committed to the ontology of events. Here he restated most of his previous arguments. He exploited science in his favour. These works of Russell's are "scientific philosophising" in the field of epistemology. [Braithwaite, p. 130].

It is in his later philosophy, *Human Knowledge* (1948) Russell returned to James. By effecting a change in his theory of perception he said that the dualism in perception between the act and the object had been completely abandoned following the leadership of James. As a result he arrived at a single expression in naming the neutral entities. The terms "sensations" and "images" lost their epistemological importance and became a technical name in the physiological explanations.

In order to attain a theoretical completeness in his version of neutral monism it had been alleged that Russell (also James) fall into a number of circular arguments. This apparent circularity of Russell's analysis is really part of a sophisticated programme, now known as *Bootstrapping*. It was Clark Glymour who initiated this

epistemological breakthrough. By employing the bootstrap strategy, he says, we can ground both our knowledge of the general and of specific facts upon the same evidence. I shall discuss this in chapter seven.

1.4. Conclusion.

The purpose of this chapter was to enhance our understanding of neutral monism together with its characteristics, which distinguishes it from other theories explaining mind and matter. This was followed with a brief discussion of the major alternative theories along with their inadequacies, which neutral monists took as their task to furnish more plausible answers. A historical exegesis is included to give a background to our understanding of the different versions of neutral monism in James and Russell. In the next chapter I will discuss how James embraced neutral monism by rejecting dualism which he had accepted as the working hypothesis for his *The Principles of Psychology*.

Chapter 2

Dualism, Phenomenism, and Neutral Monism: James's Transition from Psychology to Metaphysics, A Theory of Radical Empiricism.

"In all important transactions of life we have to take a leap in the dark.... If we decide to leave the riddles unanswered, that is a choice."

"Doubt itself is a decision of the widest practical reach."

[William James, *The Will To Believe*].

Introduction.

This chapter will be mainly expository. It will trace James's transition from his acceptance of the existence of consciousness as against mechanical explanation to the ultimate rejection of consciousness; "a name of a nonentity, and has no right to a place among first principles." ["Does "Consciousness" Exist?", p. 3]. An enquiry will begin with a brief exposition of James's reason for the rejection of dualism, associationism and transcendentalism. This will lead us to his argument for the acceptance of the world of pure experience, in which he committed to the view that reality and the field of neutral plural facts are one and the same. Before committing himself to dualism and then to neutral monism, James accepted a view called "phenomenism". His theory of neutral monism is, in fact, the mature version of phenomenism. This will lead us in chapter three to assess critically his theory of neutral monism where an argument will be made to assert that although James avoided metaphysical dualism of mind and matter, in Cartesian style, his theory collapses into a disguised form of dualism called *covert dualism*.¹

This chapter will consist of three sections. In the first section I will discuss his theory of consciousness along with its characteristics which James held as a psychologist. The second section is concerned with his repudiation of the dualistic epistemological positions of knower and known, subject and object, inner and outer. The rejection of these dualisms led James to discard consciousness as an entity and therefore to commit himself to metaphysical monism of neutral entities. The final section will consist of James's analysis of neutral entities.

1. See section 1.2.3.

Section A.

2.1. The Place of Consciousness in his Psychology.

Introduction.

James, at heart a metaphysician, began his career as a psychologist. As a psychologist he had a twofold interest. First to repudiate the automaton theory which regards consciousness as a mere "epiphenomenon". This led him to accept Cartesian dualism in its restricted form. Secondly, to establish the thesis that consciousness is "efficacious" and "selective". In consequence his second interest led him to criticize certain metaphysical doctrines such as dualism, associationism and transcendentalism.

Apart from these two basic interests as a psychologist, James had a profound metaphysical interest which he kept in "reserve" (*Principles*, vol. 1, p. 220). That metaphysical interest was his ultimate repudiation of consciousness as an entity in Cartesian style. He was quite familiar with the thesis that "consciousness does not exist" many years before he came to such conclusion. In his *Principle*, he wrote: "The only exception I know of is M.J. Souriau, in his important article in the *Revue Philosophique*, vol. XXII. p. 449. Mr. Souriau's conclusion is "que la conscience n'existe pas" (p. 472)." [*Ibid.*, p. 305]. He regarded the article "important", and partly accepted it. This is one of the reason for his acceptance of Cartesianism in its restricted form. In his *Principle* tacitly laid down the foundation of metaphysical monism which he later called "radical empiricism". One can feel this in his silent clamour in the doctrine of "The Stream of Thought", "The Consciousness of Self" and the subsequent outcry in "The Sense of Sameness". James said:

The only class of thoughts which can with any show of plausibility be said to resemble their objects are sensations. The stuff of which all our other thoughts are composed is symbolic, and a thought attests its pertinency to a topic by simply terminating, sooner or later, in a sensation which resembles the latter.²

In his chapter on "The consciousness of Self" James exploited his knowledge of neurophysiology in explaining what he meant by self. A devout introspectionist

2. *Ibid.*, p. 471.

James explained the so called "Self of selves" in terms of "cephalic motions" the portions of innermost activity of which one is directly aware of. He went on to say:

"it would follow that our entire feeling of spiritual activity, or what commonly passes by that name, is really a feeling of bodily activities whose exact nature is by most men overlooked" (Principles, vol. 1, pp. 301-302).

This ultimately forms the basis of his "ulterior metaphysical inquiry" (ibid., p. 304).

Whatever his "ulterior" motive had been he was constantly torn apart by the parallel tension caused in being both a psychologist and a philosopher. As such, James glided from what can be called a reluctant dualist position to a prospective monism of "open universe" which however he failed to retain because he never reallocated the tricky activity of *selection* other than to consciousness.

Before we embark on the main discussion, it is essential to say few words about the early developments in the field of psychology and its impact on James's work. Psychology, a branch of philosophy until the nineteenth century, was an empirical study of mind. It was greatly influenced by the associationists theories of mind introduced by Hume and consequently developed by David Hartley, James Mill and John Stuart Mill. The associationist theory was founded on Hume's claim that our distinct perceptions are distinct existences, and that the mind never perceives any real connection among distinct existences. These distinct existences or so called ideas, form bundles according to certain laws. The members of the bundles have relations of resemblance and cause and effect between them. These are not real relations and hence no real unity characterizes mind. This view was criticised by Kant, who rejected the associationists' claim that mind could be explained in terms of ideas aroused from experience and systematized according to laws of association. As a result a new wave grasped psychology. By the end of the nineteenth century a proper scientific treatment was given to psychology. The first psychological laboratory was opened by Wundt in Germany in 1879. The method of introspection was introduced by which an individual can be aware of his own mental states and conditions. The associationist theory lost its charm. Its further decline came when the English biologist Darwin produced a theory of evolution on the basis of natural selection, part of which attempted to show how mentality functions in experience.

These two trends influenced James. He became both a "functionalist" and an "introspectionist". In psychology functionalism is an account stating that anything whatsoever can be understood as being no more and no less than precisely that which makes the differences in experience which its presence makes.³ As a functionalist his major concern was what mentality does in experience. In the first chapter of his *Principles* James said,

"the pursuance of future ends and the choice of means for their attainment are thus the mark and criterion of the presence of mentality in a phenomenon." [Vol. 1, p. 8].

As an introspectionist, James proved that consciousness is no mystery. By looking into oneself, one can experience the various activities of mind. In other words one is directly aware of the inward flow of consciousness.

2.2. Rejection of Dualism, Associationism and Transcendentalism.

In the *Principles* James allowed himself the conveniences of dualism for two reasons. First against the mechanical denial of consciousness, James insisted that consciousness though not creative, is active. Consciousness can work upon the data presented to it by selecting what is right in a particular situation. Secondly, as an initial guide line in writing his text on psychology. James knew that it would be a disaster to take a negative view against the common-sense belief in the division of mind and matter, as separate entities. Moreover he was against the automaton theory which reduces men to "pure material machines" where "feeling is a mere collateral product of our nervous process..." ["Are We Automata?", p. 38]. This theory reduces mind to a mere epiphenomenon, i.e. quoting Hodgson James said, "an inert spectator, a sort of "foam, aura, or melody"... whose furtherance would be alike powerless over the occurrences themselves." [*Principles*, vol. 1, p. 129].

The problem with the epiphenomenalism is its treatment of the concept of "causality" as one way traffic. It ignores the fact that if "mind" cannot cause "brain", how can "brain" cause "mind"? This was exploited by James, who argued:

As actions of a certain degree of complexity are brought about by mere mechanism, why not actions of a still greater degree of

3. Urmson, J.O., *The Concise Encyclopaedia of Western Philosophy and Philosophers*, p. 195.

complexity be the result of a more refined mechanism? [*Ibid.*, p. 129].

The only difference between the "conscious" and "unconscious" acts, according to James, is that the former occurs in the cerebral hemispheres, i.e. the nerve centres.

James cashed his belief in Cartesianism in terms of "causal principle", carelessly handled by the materialist. He held that even if our ideas of causal efficacy are inadequate, one cannot deny that ideas and feelings have such efficacy, and influence our behaviour. However naive it may sound, James felt that one must accept the view that in psychological discourse, feelings are causes and their effects must be furtherances and checkings of internal cerebral motions. There is no doubt that the commonsense language is perfectly compatible with the language of physiology. Hence James declared:

[T]he automaton theory... is an unwarrantable impertinence in the present state of psychology. [*Ibid.*, p. 138].

James's dualism, expounded in his *Principle*, is a mixture of Cartesianism and Darwinism. The Cartesian *Cogito ergo sum* appealed to him, yet James's indulgence was restricted only to its active element, hence he rejected the presence of "I", which Ryle ridiculed as the "dogma of the Ghost in the machine"⁴. James used the term "efficacy" to explain the active role of consciousness, i.e. the process of some sort of thinking going on. Undoubtedly one can understand "efficacy" in the light of Cartesianism. The activity is not simply "reflexive" but also "performative", i.e. the element of intention is also present. James resolved the dilemma by accepting Darwin's theory of the origin of species by means of natural selection. James wrote:

Darwin has made us understand so much about animal and vegetable forms, and how in particular the psychologists by the deep insight they have been acquiring into the nervous system and the brain, have to a great extent banished the mystery which used to hang about the action of the mind, and constituted a new psychology which explodes and renders obsolete the old views of mental action-- all based on *a priori* speculation and metaphysics. ["The Brain and the Mind", in Perry *TCWJ*, vol., 2, pp. 28-29].

4. Ryle, G., *The Concept of Mind*.

By accepting Darwinism, James reasoned that consciousness is present, as complex, in developed organisms. Consciousness came about because of its efficacy, which took the form of a selective agency. One might assume that by accepting Cartesianism and Darwinism in order to explain his theory of mind, James was guilty of eclecticism. But this would be a total misjudgment because his theory of consciousness is highly original, and succeeded in removing the mysterious veil that psychic elements are atomic and are bundled together by certain laws which are not real. Instead, James has shown that how one can feel the inner flow of thought, of consciousness, or of subjective life. The "mystery of synthesis" was resolved by the said "felt relation".

In whatever way it is present, whether lowest sphere of sense, or in the highest of intellect, James argued, consciousness always chooses one out of several materials present to it, and tries to emphasize it by suppressing the rest. One may question why consciousness is simply influence rather than control? In this case James called on his neurophysiological knowledge. He could make the mentalist happy by regarding mind as a causal agency. But one cannot deny the changes that occur in consciousness if a part of the brain is destroyed.

James's theory of consciousness was criticised partly because he based his theory simply on popular belief and also perhaps, partly on inadequate scientific evidence. The Cartesian supposition that physical events are caused by mental events goes against a fundamental principle of the physical sciences, namely, that causes of physical changes are other entirely physical events.⁵ Moreover the application of Natural Selection to mental, intellectual, and cultural phenomena is by no means universally accepted and raises well recognized difficulties.

Being a monist at heart, James knew that whatever the reasons for his acceptance of dualism may be, its ultimate acceptance "pending metaphysical reconstructions not yet successfully achieved" [*Principles*, vol. 1, p. 144; "Automata", p. 61].

The most important of his psychological theories was his doctrine of the *stream of thought*. This doctrine not only dissolved the initial duality between the substantial soul and consciousness simply into consciousness; it also implied the rejection of associationism and most importantly formed a basis for the transition to radical empiricism.

5. Cf., Smith and Jones, *The Philosophy of Mind*, 1987, p. 58.

James argued that the substantial soul explains nothing, whereas its successive thoughts are the only intelligible and verifiable things about it. He says "The first fact for us, then, as psychologists, is that thinking of some sort goes on." [*Principles*, vol. 1, p. 224]. James justified his use of the word "thinking", by saying that such a view "gives to consciousness an aspect of streamlike continuity" (*TCWJ*, vol. 1, p. 77), unlike the associationists and the transcendentalists, who believes in psychic atomism, i.e. that mental life is composed of various shapes of separate entities called ideas, which are glued together to form compound ideas. James argued that consciousness is not chopped up in bits, nor can it be described by such words as "chain" or "train".⁶ As such, he rejected the explanations of both Hume and Kant. James regarded thought to be overflowing, and that what is given is complex and not simple units analysable into simple constituents. Hume believed in simple sensations, (which do not exist) that could be made complex by combining atomic sensations or made simple by analysing the complex. Kant, on the other hand, left the unity of so-called simple sensations to the transcendental ego. Against such views James holds that the stream of thought, the empirically given complex, presents the self empirically, and contains among its aspects or phases all those functions and distinctions which were previously thought to require a "soul" or a "transcendental ego".⁷

James maintained that the unity of the stream of consciousness is empirically given. There is no evidential support for the idea that we have the pure atomic ideas of, for example red and green. The fact to be known is the sequence of green-to-red and their contrast. Arguing against purely elementary feelings, James explained that what is given in the stream of consciousness is the feeling of pure red in the first segment. This is followed by a second segment, a feeling of green following the red and is contrasted with it. The stream contains the qualities-of-relations and the qualities of absolute; and hence "involve no new psychic dimension" as suggested by Kant. According to James these qualities remain as feelings and do not "consubstantiate" with the rest of the stream. Kant attempted to reconcile the rationalism of Leibniz and the empiricism of Hume by postulating an active mind whose nature was to impose a structure on experience to make it intelligible to which he attributed the structure to reason, which synthesizes the data of sense. James parodies the transcendentalists situation in this way, "after

6. In Chapter Three I shall argue that James could not avoid but committed himself to atomistic philosophy.

7. *Principles*, pp. 225, 336 ff., and Perry, pp. 77-78.

letting a number of "pure" feelings successively go "bang", bring their *dues ex machina* of an Ego swooping down upon them from his Olympian heights to *make* a cluster of them with his wonderful "relating thought."⁸

Against this, James held that "the first fact for us, then, as psychologists, is that thinking of some sort goes on." [*Principles*, v. 1, p. 224]. One could argue that by giving prominence to "consciousness" as stream-like continuity and the concept of "felt relation", which, according to James the important omission in psychology, he thought has gained a major concession in undermining those theories which break psychic phenomena into atoms (associationism) and which give prominence to the Ego, an agent to relate the atoms (transcendentalism). James's subject-object dualism turned out to be a sort of quasi monism. In the stream the "thought-of-an object" and the "object-thought-of" are two names of a single experience. The particular experience is regarded as subject and object by the new experience which retrospects and appropriates it in the process.

2.2.1. Phenomenism

On this point we may recall that James had an ulterior motive for monistic philosophy, which he suggested even before his psychological commitment. In 1882-1883 James formulated a "*phenomenistic*" philosophy, where "phenomena" is regarded as a neutral name to explain the subject-object distinction. In an unpublished note, James regarded this philosophy as the basis for his psychology, and also reserved the "*hypothesis of phenomenism*" for his monistic pursuit, i.e. radical empiricism.

In an unpublished note James explained his thesis of *phenomenism* in the following way:

As regards the "object" known, some call it a mere locus upon which the mind projects its own affections; some, on the contrary, say the mind is a mere locus into which the objective qualities wander and are known. Some say there is no locus of either sort, nothing but a stream, for which "phenomena" is the neutral name, and which according to one way of viewing it may be called "feeling", according to another way "objective fact". Others again try to discriminate, and call part of the stream "feeling" and the remainder "fact". [TCWJ, vol. 2, p. 73].

8. "On Some Omissions of Introspective Psychology", p. 151.

James half-heartedly accepted this hypothesis of "phenomena" as a neutral name which can be viewed either as "feeling" or as "objective fact". Although this hypothesis has helped him apparently to explain away the existence of the so called "Ego" or "I" in terms of stream like continuity of consciousness, it did not afford him a proper foundation for his psychological discourse. Perry observed:

Instead... of *reducing ultimate distinctions*, as a phenomenistic philosophy undertook to do, he *multiplied provisional distinctions*, in the interest of non-committal scientific description.... James was perpetually being led, despite his profession of dualism and of metaphysical abstinence, to the disclosure of a homogeneous and continuous world." [*Ibid.*, p. 73].

As a result James was muddled between "phenomenism" and "commonsensism". Instead the two tendencies brought much ambiguity in his philosophy. This is obvious when he allocated different merits to the terms "thought" and the "thought's object". According to James, the thought suggests "the omnipresence of cognition (or reference to an object other than the mental state itself), which we ... see to be the mental life's essence." [*Principles*, vol. 1, p. 185]. For example, in the sentence "Columbus discovered America in 1492", the object of the thought is neither Columbus, nor America, nor its discovery. The object of the thought is the entire sentence or in other words "neither more nor less than all that the thought thinks exactly as the thought thinks it, however complicated the matter, and however symbolic the manner of thinking may be."⁹

James thought that by such analysis he had rebutted associationist psychology, which supposes that the "Ego must be added to the bundle", whenever an object of thought contains many elements (one idea standing for each element), "to give unity, and bring the various ideas into relation with each other" (*ibid.*, p. 277). In order to explain the distinction between thought and the object of thought, James appealed to brain-physiology where that unity takes place, giving some concession to the automaton theorists.

9. A point should be made that one of the motive of James's neutral monism was that it is an attempt to answer the question: how can external objects be "in the mind"? James first attempted to answer this in his psychology by suggesting that consciousness has a stream-like continuity. [I am grateful to Professor Susan Haack, who, in a letter, suggested this].

Without further resolving this James undertook his analysis of the notion of "consciousness", which played a significant role not only in his psychology but also in his metaphysics.

2.3 Consciousness.

James was very careful in his analysis of consciousness because he had to tackle, on the one hand, the automaton theorists, who treats consciousness as an epiphenomenon, and on the other hand, the dualist, who postulates a dual element in consciousness. His answer to the epiphenomenalist is that consciousness of some sort exists as an entity and has certain functions to perform. According to James although the relation between mind and brain are somewhat mysterious, mind-object relations are exclusively "cognitive" and "emotional". To the dualist James's reply is that mind knows the object, presented to it, and therefore "inwardly *welcomes or rejects* them, but it has no other dealings with them." [*Ibid.*, p. 216]. Although James rejected the notion of "aware of being aware" he accepted the Cartesian thesis of interactionism. Thus he stated that,

"when it [consciousness] seems to *act* upon them, it only does so through the intermediary of its own body, so that not it but the body is what acts on them, and the brain must first act on the body. The same is true when other things seem to act on it they only act on the body, and through that on its brain." [*Ibid.*, p. 216].

This passage reveals that instead of being critical of the mechanical hypothesis of mind, James appropriated the behaviouristic analysis of mind. He was actually explaining consciousness in terms of bodily processes, because it is the brain that through its body, seems to "welcome or reject" the objects present to mind.

James, as functionalist and an introspectionist, challenged the automaton theorists by attributing five different characteristics to consciousness, which distinguishes it from anything physical. Being a separate entity "everything actually existing consciousness seems to itself at any rate to be a *fighter for ends*, of which many, but for its presence, would not be ends at all. Its power of cognition are mainly subservient to these ends, describing which facts further them and which do not." [*Ibid.*, p. 141]. Here James was more concerned about knowledge which reveals his early acceptance of what he later called pragmatism. Later as a pragmatist

James argued that ideas become true just so far as they help us to get into satisfactorily relate with other parts of experience.

2.3.1. The Characteristics of Consciousness.

James lists five different characteristics of consciousness to show the unity of the mental state, which is not composed of parts or elements. Consciousness is (i) personal, (ii) always changing, (iii) sensibly continuous, (iv) deals with objects independent of itself, and (v) performs selective activities.

(i) By saying that thought is a part of personal consciousness, James was not advocating the Cartesian concept of consciousness. Rather he meant that there is no such thing as a mere thought which is "no one's" thought. To press the point further, in the chapter on "The Consciousness of Self", he distinguished between the two aspects of self. They are the "me" the empirical ego, the self as known, and "I" the pure ego, the self as knower.

The empirical self consists of three constituents, the "material me", the "social me", and the "spiritual me". These constituents serves different purposes and functions in unity, whereas the pure ego symbolises a thought different in different moments. According to James the I which knows different aspects of me,

"cannot itself be an aggregate, neither for psychological purposes need it be considered to be an unchanging metaphysical entity like the Soul, or a principle like the pure Ego, viewed as out of time." [*Principles*, vol. 1, p. 305].

He distinguished the "pure thoughts" from the "passing thoughts", or continuity of states of mind, and said that our idea of a rainbow, for example, do not consist of eight thoughts, seven for the colours and one for the whole object, which will then lead into another thought to grasp the whole thought and then to other thoughts and therefore result into endless regress. According to James there is only one thought of the whole object. The unity itself lies in the stream of consciousness. "*If the passing thought be the directly verifiable existent which no school has hitherto doubted it to be, then that thought is itself the thinker, and psychology need not look beyond*". [Ibid., p. 401]. This characteristic is designed to disprove the Kantian notion of transcendental ego.

(ii) The second characteristic is designed to criticise Locke and the followers of the theory of ideas. "The chain of consciousness is a sequence of *different*." (James quoted this from Shadworth Hodgson's *The Philosophy of Reflection*, see *Principles*, vol. 1, p. 230). He agreed with Hodgson that our minds are engaged in various complex states like "now hearing", "now seeing", "now recalling" etc. James said that instead of reducing the complex to simple ideas, the theory of ideas "seeks to show how this is all the resultant effect of variations in the *combination* of certain simple elements of consciousness that always remain the same. These mental atoms or molecules are what Locke called "simple ideas".

With regard to the changing state of consciousness, James argued that a particular mental state may have a duration but "*no state once gone can recur and be identical with what it was before.*" [*Ibid.*, p. 230]. Following Heraclitus, James argued that Heraclitus was correct in suggesting that the same sensation does not occur twice. The object may be the same, but since psychologically the brain is active and is in a constant process of modification, one cannot have an identical sensation, which would require an unmodified brain complex. Moreover the same things look and sound distinct on different occasions.

(iii) The third characteristics of consciousness is designed to criticise the Humean doctrine that our "thought is composed of separate independent parts". Consciousness is sensibly continuous without gap, parts, division or splits. There may be interruptions or time gaps, in the stream of consciousness, but such breaks have no connection between what happens earlier or followed latter. The continuity of consciousness means two things-- firstly, whatever the time gap, i.e. during sleep, the following consciousness feels as if it is continuous with the consciousness before it. It is simply another part of the same stream of consciousness. Secondly, the feelings of discontinuity or of break are simply "*sudden contrasts in the quality* of the successive segments of the stream of thought." [*Ibid.*, p. 239].

One may argue that a sudden noise may produce a break in the stream of consciousness. To this James, with an analogy replied that the transition between the thought of one object and the thought of another is no more a break in the thought than a joint in a bamboo is a break in the wood. [*Ibid.*, p. 240].

It could be argued that the flow of consciousness may not have the same speed of movement. This is due to the "substantive" state of mind, the resting period filled up with sensorial imaginations, and the "transitive" state of mind, the period of flight consisting of thoughts of relations, sometimes static, sometimes dynamic.

(iv) James tried to disprove the existence of Cartesian "I" as a necessary part of consciousness to explain cognition. He rejected the idea that "I" need to be present for thinking of some sort to go on. There need not be a separate knower, a subject, to perform the activity of knowing.

According to James the subject-object distinction can be understood by attributing the function of knowing to consciousness. He distinguished between two kinds of knowledge. They are "knowledge of acquaintance", through which one can have access to all the elementary natures of the world, and "knowledge about", through which one can have more scope of thinking about their (elementary natures) relation and to know about them. James thus brings an antithesis between "feeling" and "thought", "Through feelings we become acquainted with things, but only by our thoughts do we know about them. Feelings are the germ and starting point of cognition, thoughts the developed tree." [*Principles*, vol., 1, p. 222]. Instead of solving the so called Cartesian problem James multiplied his own problem. He seems to suggest that there are feelings where the process of "thinking" starts. But the thinking to be cognitive a second process is required, i.e. the "thought". This "thought" seems to replace Cartesian "I" and gives real meaning to feelings which are simply "dumb way of acquaintance" (*ibid.*, p. 221).

(v) Selectivity is one of the important characteristics of consciousness. There are various sensations which occur in consciousness and may not be necessary for a particular purpose. Through its selective activity, consciousness accepts some and rejects others "to represent the thing most *truly*, and consider the rest as its appearances." [*Ibid.*, p. 285]. It is through selective activity mind tends to bring harmony, the way an artist selects between different tones of colour. "The mind is at every stage a theatre of simultaneous possibilities", i.e. it compares, selects, suppresses through "reinforcing and inhibiting agency of attention." [*Ibid.*, p. 288]. James held that the five different characteristics should not be thought of as parts of consciousness. Consciousness is a stream and the characteristics are the ways one can describe the synthetic unity.

2.3.2. Compounding of Mental Facts.

We know that James had been very critical about the compounding of simple ideas into various complexes. He criticized Locke for combining the simple elements of consciousness, and Hume for treating them as separate independent parts. He also criticised those who believed in the compounding of mental facts. James thus provided, a physiological explanation as against Hume and Lockes' metaphysical explanation.

"We cannot mix feelings as such, though we may mix the objects we feel, and from *their* mixture get new feelings." [*Ibid.*, p. 157]. James suggested an interesting example where he said that at most we can compare together objects previously presented to us in distinct feelings. But we may find that each object "stubbornly maintaining its separate identity before consciousness, whatever the verdict of the comparison may be." [*Ibid.*, p. 157-58]. The example he gave was that of lemonade, which physically contain both the lemon and the sugar. The taste of the lemonade is such that it cannot be separated into the taste of lemon-sour and sugar-sweet. "These tastes are absent utterly." [*Ibid.*, foot note, p. 158]. Similarly, according to James, consciousness is like that of lemonade, without any divisible parts. But a disinterested observer would not agree to this. There is no doubt that lemonade does unravel the feelings of both sour taste and sweet taste. If lemonade can be divisible into the elementary feelings of sweetness and sourness, then consciousness may also be divisible into elementary sensations quite similar to that of Humean explanation of mind.

In 1895, some changes has been observed in James's change in position¹⁰ but certainly not a thorough change, because in the same footnote (*P.*, I, p. 158), where James said "absent utterly", he added that "the entirely new taste which is present resembles, it is true, both those taste; but... that resemblance cannot always be held to involve partial identity." But his initial rejection of compounding consciousness returned when he accepted the idea of "compound taste". In the essay "The Knowing Of Things Together"¹¹ James said "the sour and sweet in lemonade are extremely unlike the sour and sweet of lemon juice and sugar, singly taken, yet like enough for us to "recognise" the "objects" in the compound taste" (*ibid.*, p. 398). James did not stick to his initial commitment that

10. Myers, *William James*, p. 62.

11. *Collected Essays and Reviews*.

mental states are not a compound of smaller parts, and hence cannot be introspectively chopped up into simpler mental elements. This is also clear from his 1884 essay "What is Emotion?", in which James spoke of "immense numbers of parts modified in each emotion." [P. 172].

With this change of position from the rejection of psychic atomism of *Principles*, to the later acceptance of introspective simpler elements, James entered metaphysics. When we discuss his theory of pure experience this point will become more clear. As a prelude we may mention that James stated that pure experience is made of simple elements of sensible qualities of brownness, of heaviness, or of flatness etc.

2.3.3. The Role Of Consciousness.

The concept of "consciousness" not only played an important role in his psychology, it also occupied a prominent place in his metaphysical discourse. James, a naturalist, accepted Darwinism's emphasis on the function of consciousness as a power in the struggle of the organism with environment. Moreover he resolved the question of Cartesian dualism by bringing attention to the idea of natural selection and not the a priori existence of "I". The theory of natural selection appealed to James in one special respect, that is, that in every aspect of reality some sort of activity is taking place. This offers a picture in which there is a continuous flow in everchanging nature. Change is the fundamental characteristics of nature, but this change is continuous with no gaps in it. This philosophy of natural selection and change led James ultimately to discard consciousness as the "first principle". By reducing consciousness to a secondary status, James returned to the notion of "change", "continuity" and "selectivity" in his radical theory of the world of pure experience.

As a metaphysician, James followed the same method of introspectionism and functionalism which he used for his psychological investigation. In psychology, through the method of introspection, James rejected the Cartesian dualism of mind, arguing that even in introspection one cannot reveal the existence of a so-called "Ego" or "I". In philosophy James argued in favour of the homogeneity between consciousness and a physical object. Experiences are of same nature and what we call subject and object are simply two different arrangements of the same thing.

We have noted how James designed his theory of consciousness to disprove certain philosophical positions, including both materialism and idealism in their monistic form. Through each of five characteristics of consciousness, James tried to give a definite shape to his theory of consciousness. His argument in favour of the continuity of consciousness aimed to establish an "open universe" against the concept of "blocked universe" of the idealistic monists and the absolutists. The idea of "consciousness as a selective agent" was designed to show that consciousness is active and its presence can make a certain difference in the flux of experience. Therefore consciousness is not an epiphenomenon as the materialist thought. Being a positivist and an empiricist and later pragmatist, James waged war against those who ignored the change and continuity in nature.

The question that arises may be put as follows: Has James successfully answered the epiphenomenalists and the dualists? As regards the dualist hypothesis, James had at the beginning made it clear that, since Cartesian dualism and common sense belief regarding mind and matter became synonymous, it was difficult to ignore and reject this only disagreement with Descartes centred on the division of mind into a thinker and the process of thinking. According to James what we call thinker and the thinking are simply two names of the same activity. But his acceptance of the antithesis of "feeling" and "thought" as a theory of cognition put him on the same footing as that of Descartes'.

James's acceptance of dualism in its restricted form was to fulfil his more serious commitment, i.e. to reject the materialist hypothesis of mind as an epiphenomenon. But James fell into a pit of his own digging for the materialists. One may accept that James did not reject the materialist hypothesis, totally in explaining the mind and body distinction. He agreed with the materialist that, "the movements of our tongues and pens, the flashing of our eyes in conversation, are of course events of a material order, and as such their causal antecedents must be exclusively material." [*Principles*, vol. 1, p. 132]. James only denies the mechanical explanation of consciousness. He noted:

[A]ccording to the automaton-theory, each of the feelings mentioned is only the correlate of some nerve-movement whose cause lay wholly in a previous nerve-movement. The first nerve-movement called up the second; whatever feeling was attached to the second consequently found itself following upon the feeling that was attached to the first. If, for example, good news was the consciousness correlated with the first movement, then

joy turned out to be the correlate of consciousness of the second. But all the while the items of the nerve series were the only ones in causal continuity; the items of the conscious series, however inwardly rational their sequence, were simply juxtaposed. [*Ibid.*, p. 133].

Against this James held that it was simply common sense that "felt pain" not only causes outwards tears but also causes inward events of desire, sorrow or compunction. What we call consciousness of good-news directly produces the feeling of joy.

The irony is that James's final description of consciousness turns out to be quite similar to that of materialist description which he had painstakingly rejected. James, impressed about the physiological concept of stimulus and response, described the self in terms of "cephalic" motion:

If we divide all possible physiological acts into *adjustments* and *executions*, the nuclear self would be the adjustments collectively considered; and the less intimate more shifting self, so far as it was active, would be the executions. [*Ibid.*, p. 302].

Despite his failure we should acknowledge that as a psychologist James had a duty to preserve the importance of the role of consciousness in understanding one's attitude towards others and the world at large. But as a metaphysician James had an ulterior monistic motive, that is to repudiate the existence of consciousness.

With this motive in mind James entered the philosophy of neutral plural facts, an empirically given data. It is "given" in the sense that it is subjectless. It is neutral in the sense that the given data is neither mental nor physical but can figure in both groups without being itself either mental or physical.

2.4. The Formative Period.

In 1897, James, in the "Preface" to *The Will to Believe* launched his theory of radical empiricism. There he said:

Were I obliged to give a short name to the attitude in question, I should call it that of *radical empiricism*... I say "empiricism" because it is contented to regard its assured conclusions concerning matters of fact as hypotheses liable to modification in the course of future experience; and I say "radical," because it treats the doctrine of monism itself as an hypothesis...

He who takes for hypothesis the notion that it [pluralism] is the permanent form of the world is what I call a radical empiricist. For him the crudity of experience remains an eternal element thereof. There is no possible point of view from which the world can appear an absolutely single fact. [Pp. vii-ix].

In his 1897-1898 Seminar notes¹² under the heading "Philosophical Problems of Psychology", James had made a quite distinctive sketch of his future theory of neutral monism, at times critical and sometimes accepting doctrines put forward in his psychology. This is because he had to rearrange and also ignore and be critical of some of his established doctrine as a psychologist. His major concern was to repudiate dualism and the theory of consciousness as an entity, which he had accepted to refute the automaton theory of consciousness. In the year 1895-1896, in his Seminar notes on the "Discussion of Theoretic Problems, as Consciousness, Knowledge, the Self, the Relation of Mind and Body etc." James "resolved to adopt the hypothesis of *phenomenism*"¹³ in order to show that mind and matter are in the main homogeneous, with perhaps a little heterogeneity in them. [Cf., *Essays in Radical Empiricism*, p. 263].

Against the dualistic stand in psychology and the reductionist views of the materialists and idealists, James proposed:

[T]here is no stuff anywhere but data. The entire world (objective and subjective) at any actual time is a datum. Only, within that datum there are two parts, the objective and subjective parts, seen retrospectively; and as, within the datum, the one part is to the other, so will the datum itself in its entirety appear as the subjective part in the next datum which will contrast it with the objective part of its own content. [TCWJ, vol. 2, p. 366].

There is no change in the datum apart from its status, i.e. from subjectivity to objectivity. "As the field alters and the older content shrivels, it forms connection in its new subjective value with the new objective content that marginally comes in, *that* was an appearance of *this*, from the earlier point of view; *this* is a predicate, then unknown, of *that*.... and corrected; and so corrected, they are inner, but significant of that larger outer...." [*Ibid.*, p. 366]. James's use of the word "corrected" shows his early acceptance of pragmatism to shape his metaphysical thesis. This is clear when he said,

12. Perry, TCWJ, vol. 2, p. 367 ff.

13. *Ibid.*, p. 365.

"we thus reach the abstract notion of an inner part of the field *meaning* and *knowing* another ... part. We can explain what signifying and knowing mean; and, generalizing the notion, we can say by anticipation that all fields, even the present and the future one, are vehicles of knowledge.... Around every field a wider field lying thus beyond itself...." [*Ibid.*, p. 366].

James's use of the words "anticipation" and "beyond" could be taken to refer to a certain *a priori* existence. But he would not accept such an interpretation, because, in 1897-1898, James explained the "beyond" as the "*part of same continuum*", whereas for common sense dualism it is discontinuous, and separated by the epistemological chasm." [*Ibid.*, p. 370]. How can one get out of solipsism without jumping a chasm? James brings in the concept of "conterminousness" in order to show that there is no "chasm". He explained thus:

Arrived at the table in my field, I say "more"-- viz., that it is your table too, or that molecules in it... and so far as *my* verification goes, I end there getting no further. But the "truth" of my "more" consists in the fact that my "table plus more", which is my terminus, is *conterminous* with you and with the molecules, -- there is no "chasm".... Not only percepts seem conterminous; concepts seem so too,-- mind meet in truths as well as in facts."

These quotations from his pre-radical empiricist position are important because his position later does not substantially change apart from careful reinterpretation of the theory. Here James has laid emphasis not only the functional aspect of the "stuff", but also suggested that within a datum "*there are two parts*", seen "retrospectively". Moreover James had not ruled out of the possibility of basic elements in the datum when he stated that "the occurrence, in the stream, of objects which, *when* they occur, occur with specific noetic fringes developable into termini, is the initial peculiarity of experience..." It seems that every datum has a "peculiarity" which could lead from one datum to the other wherein it terminates. This also suggests that every datum is not only qua-objective but are qua-subjective as well. The objective content is where the act terminates, and the subjective aspects are the sense of "anticipation", the feeling of "beyond", the urge of "more" and the capacity of "selection" which would "point" and "lead" from one experience to the other, correcting in terms of "meaning and knowing". James referred to "specific noetic fringes developable into termini" -- and that "noetic fringe" is the selective activity, which he earlier (in his psychology) bestowed to consciousness. James regarded experience to be "many sided-dimensional continuum", where "selection... of certain interesting lines of relation

would... appear to be the actual subjective condition which permits experience to fall into so many different systems; whilst the objective condition would be the fact that a plurality of relations are there in the content, and may logically and possibly be found and followed out." ["Seminar Notes", 1897-98, in *TCWJ*, vol. 2, p. 369].

James stated that such an analysis "may be traced" in his writing but "such an analysis does not yet throw a ray of light...", in his explanation of the proposed theory. [*Ibid.*].

To accept a pre-condition is not necessarily harmful for a metaphysician. For Spinoza, for example "God or nature" was an *a priori* single substance which explained reality. For some there are necessary conditions, for instance Kant maintained that the forms whereby sensations are received are Space and Time and they are in the mind *a priori*, that is independently of any sense experience. He called them "pure forms of intuition". Even the absolutists or dualists like Descartes would argue in favour of certain *a priori* conditions in order to explain mind and matter. But for a neutral monist the empirically given data cannot possess any *a priori* element in its constitution. "Experience" is taken to be a neutral stuff for both mind and matter may be regarded as their antecedent. There is nothing wrong in such an interpretation. The mistake would arise only when we say that there are certain conditions which entails the antecedent for such and such consequent. For a neutral monist the "stuff" which explains both mind and matter cannot possess any sort of determinants or pre-conditions in its nature.

James's 1897 "Seminar Notes" suggest that he was in favour of certain elements in "pure experience". Since experience is a many-sided continuum, it can fall into many different systems. To James "selectivity" is the subjective condition which would "permit" experience to be in different systems. This is because James was more concerned about meaning and knowledge. For experience to be in different systems it needs to relate itself with other experiences. But James's analysis shows that this it does with the presence of objective condition as a part of pure experience, where more than one relation forms its content. It is the subjective condition in experience which helps a particular experience to "select" in which particular system to fall, and once decided the objective condition will be directed through a particular relation, among "plurality of relations".

It is clear from this discussion that prior to the subject-object distinction, the purity of experience cannot be likened with Lockean *tabula rasa*. According to James,

"if we cling to pure experience, it is in part experience of *activity*... a kind of experienced transition, a part of the content.... It involves a sense of *direction*." [TCWJ, vol. 2, p. 384].

The above discussion reveals James concern and apprehension to introduce his theory of pure experience. In his "Seminar Notes" James wrote:

I wonder if my notion of pure experiences will all the other categories formed by additive relations among them may not be as fertile a principle in ontology as association has been in psychology. [*Ibid.*, p. 384].

In his pre-radical empiricist position, James was not a neutral monist at all. He was certainly a covert dualist, admitting both mental and physical elements in the structure of "experience" (see section 1.2.3). Our next aim is to see how James fares as a radical empiricist. He had two important things in mind. First to re-define consciousness by allocating diminishing responsibility, and secondly, to dilute the subject-object distinction in the field of pure experience in order to show that dualism is not the essence of experience, but rather a way of interpretation.

Section B.

2.5. Rejection of the Dualistic Epistemological positions of Inner and Outer, Knower and Known, Subject and Object and Commitment to a Metaphysical Monism of Pure Experience.

Introduction.

Although in his Psychology James oscillated between dualism and materialism in his interpretation of the theory of consciousness he was critical about both the theories. He followed Hume in rejecting "I" which the rationalist philosophers accepted as the basis of unity of thought. James committed himself to an empirical method (TCWJ, vol 2, p. 73) in which subject and object distinctions were explained in terms of experience. As a result James introduced a world where

"sensations" and "sensible objects" and then described them as homogeneous and continuous thus reducing the gap created by Descartes and his followers.

James's initial pre-occupation with psychology, and his rejection of automaton theory, led him to give a prominent place to consciousness. By providing an empirical basis to consciousness James rejected the materialists claim that consciousness is an "epiphenomenon". Instead he described consciousness a stream and functionally "efficacious" and "selective".

But James was muddled and put himself in an difficult position while discussing the unity of thought. According to James, introspection do not reveal any psychical or physiological consciousness. In consequence he rejected transcendentalists, especially Kant, saying that the stream of consciousness contain the qualities of relation and the qualities of absolute, in forming a true synthesis. What is revealed to introspection is some form of bodily process, i.e. physiological occurrences. With this admission James not only argued for materialism, but went a step further by suggesting that the unity of thought lies in the brain. By providing a different *deus ex machina* James argued:

Whilst we think, our brain changes, and ... like the aurora borealis, its whole internal equilibrium shifts with every pulse of change. [*Principles*, vol. 1, pp. 275-6].

He threw himself into such a paradox and without resolving it any further entered the domain of metaphysics.

James applied the same methodology, the empirical method, as the basis of his metaphysical discussion. He provided a "descriptive metaphysics"¹⁴ to dissolve the initial dualism of his psychology.

14. It differs from traditional metaphysics which establishes necessary truths about the nature of existence by *a priori* argument. Whereas descriptive metaphysician attempts to modify many of our familiar concepts, like "individual", "cause", "subject" and "object", and assumptions in order to construct a kind of logic of reality.

2.6. The World Of "Pure Experience"

2.6.1. The Concept "Pure"

The primary concern of James, as a metaphysician, was to get away from the dualistic hypothesis which dominated his *Principles*, and to introduce a term which would generate an aura of neutrality as a prelude to metaphysics. James preferred "pure experience" as a term chosen for its "neutrality, concreteness, convenience and inclusiveness"¹⁵ and which is intrinsically neither objective nor subjective, but functionally can operate in both the fields for being neutral. As James said:

By the adjective "pure" prefixed to the word "experience", I mean to denote a form of being which is as yet neutral or ambiguous, and prior to the object and the subject distinction. I mean to show that the attribution either of mental or physical being to an experience is due to nothing in the immediate stuff of which the experience is composed -- for the same stuff will serve for either attribution -- but rather two contrasted groups of associates with either of which ... our reflection ... tends to connect it. ... Functioning in the whole context of other experiences in one way, an experience figures as a mental fact. Functioning in another way, it figures as a physical object. In itself it is actually neither, but virtually both.¹⁶

Reality as such is plural and varietal, where pure experience forms a single neutral basis to explain this plurality and variety. James said:

[A]lthough for fluency's sake I myself spoke early in this article of a stuff of pure experience, I have now to say that there is no *general* stuff of which experience at large is made. There are as many stuffs as there are "natures" in the things experienced. If you ask what one bit of experience is made of, the answer is always the same: It is made of that, of just what appears, of space, of intensity, of flatness, brownness, heaviness, or what not. ["Does "Consciousness" Exist?", pp. 14-15].

"Experience" is a generic term or a collective name for all these sensible natures. James realized that people would object to such an interpretation because this implies that beside red, hard heavy thing there can be "a red, hard or heavy thought" (*ibid.*, p. 15). James's reply to such objection is that things and thoughts do have some categories in common, for they are in time and have parts and may

15. Seminar notes, 1904, see Perry, *TCWJ.*, p. 386.

16. Perry, p. 385.

be simple or complex and can be compared, added and subtracted and arranged in serial order. [*Ibid.*] As a nominalist with respect to universals, James argued that the adjective "hotness" belonged both to the idea of fire and also in fire, but "Mental fire is what won't burn real sticks; mental water is what won't necessarily (though of course it may) put out even a mental fire". [*Ibid.*, p. 17].

These pure experiences are the building blocks in terms of which reality gets its shape and meaning. The experience in its initial state is pure, i.e. there is no element or elements internally present, where the subject and object distinction is merely extraneous to it. "Subjectivity and objectivity are affairs not of what an experience is aboriginally made of, but of its classification. Classifications depend on our temporary purposes."¹⁷ In order to press home the pristine nature of experience, James argued that experiences do not come to us "aboriginally stamped", rather "the baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as one great blooming, buzzing confusion;..." [*Principles*, vol. 1, p. 488]. Pure experience is something which not only furnishes the material for our later reflection with its conceptual categories, but can also be experienced in its pure form.

Only new-born babes, or men in semicoma from sleep, drugs, illness, or blows, may be assumed to have an experience pure in the literal sense of a *that* which is not yet any definite *what*, tho ready to be all sorts of what; full both of oneness and of manyness, but in respects that don't appear; changing throughout, yet so confusedly that its passes interpenetrate and no points, either of distinction or of identity, can be caught. Pure experience in this state is but another name for feeling or sensation. ... Its purity is only a relative term, meaning the proportional amount of unverbilized sensation which it still embodies. ["The Thing and Its Relations", p. 46].

The above passages from his *Principles and Essays in Radical Empiricism* clearly shows his adherence to Hume. James did not deny this. Rather he confirmed that "it is essentially ... a philosophy of plural facts, like that of Hume and his descendants But it differs from the humian type of empiricism in one particular which makes me add the epithet radical." ["A World of Pure Experience", p. 22]. The term "pure" does not suggest that experience is "empty", otherwise how could James explain the characteristics of brownness and heaviness which the initial blooming, buzzing experiences possess. To "bloom" is

17. "The Place of Affectional Facts", *ERE*, p. 71.

to "come into", i.e. prior to "blossom". To James, a pure experience is as it occurs prior to being analysed or conceptualized. He argued:

The instant field of the present is at all times what I call the "pure" experience. It is only virtually or potentially either object or subject as yet. For the time being, it is plain, unqualified actuality or existence, a simple *that*. In this *naïf* immediacy it is of course *valid*; it is *there*, we *act* upon it; and the doubling of it in retrospection into a state of mind and a reality intended thereby, is just one of the acts. ["Does "Consciousness" Exist?", p. 13].

The sensible qualities of heaviness, flatness, hardness etc. forms the content of the stream of pure experience. What James denies is that within the immediacy of an experience there is room for mind-body or subject-object distinctions. These distinctions are, according to James, the retrospective activity of the subsequent experience.

2.6.2. The Notion Of "Subject" and "Object". "Mental" and "Physical".¹⁸

The doctrine of pure experience does not deny that minds and bodies exist. What it denies is that the difference between them is ultimate. James provided a non-reductive analysis of mind and matter in terms of pure experience:

A given undivided portion of pure experience, taken in one context of associates, play the part of the knower, of a state of mind, of "consciousness"; while in a different context the same undivided bit of experience plays the part of a thing known, of an objective "content". In a word, in one group it figures as thought, in another group as a thing. And, since it can figure in both groups simultaneously we have every right to speak of it as subjective and objective both at once." [*Ibid.*, p. 7].

The term "subject" and "object" are relational terms and they cannot be regarded as thoroughly distinctive and unanalysable. "As "subjective" we say that the experience represents; as "objective" it is represented. What represents and what is represented is ... numerically the same". [*Ibid.*, p. 13]. An experience in its state of purity has no self splitting of it into consciousness and what the consciousness is about. What we call its "subjectivity" and "objectivity" are simply functional attributes realized by a new retrospective experience when a

18. Cf. Russell's interpretation of the notion of "subjectivity" and "objectivity" (5.1.1.).

particular experience is "taken" in two different contexts. This seems to be a sort of artificial classifications James makes, dependant on our "temporary purposes".

It is not that perceptual experiences have subjectivity and objectivity but this equally belongs to the non-perceptual experiences. This, James argued, "will probably be due to the intrusion into his mind of *percepts*, that third group of associates with which the non-perceptual experiences have relations, and which, as a whole, they "represent", standing to them as thoughts to things" (*ibid.*, p. 10).

James likens this "subject" and "object" distinction to "mental" and "physical" distinction. A real, objective pen is *that*, a bit of experience, and our consciousness or perception of the pen is the same *that* or a bit of experience. To put it in James's own words:

"When we call an experience "conscious", that does not mean that it is suffused throughout with a peculiar modality of being ("psychic" being) as stained glass may be suffused with light, but rather that it stands in certain determinate relations to other portions of experience extraneous to itself. These form one peculiar "context" for it; while, taken in another context of experiences, we class it as a fact in the physical world. This "pen", for example, is, in the first instance, a bald *that*, a datum, fact, phenomenon, content, or whatever other neutral or ambiguous name you may prefer to apply." ["How Two Minds Can Know One Thing", p. 61].

In order to classify a bit of pure experience as "physical pen" or "mental pen", James stated that it must assume a "function". In that case a pen will be called physical if it, the pure experience, has a stable feature, holds ink, and obeys the guidance of one's hand. But will be mental or "percept of a pen in my mind" if it, the same bit of pure experience, is unstable, coming and going with the movement of the eye and the body, can or cannot hold ink as one fancies. Here James seems to make a distinction between fantasy, hallucination and perception. This distinction arises because James followed both Descartes and Brentano in his characterisation of the mental. Descartes explained the mental in terms of consciousness, where the object of consciousness is immediately present to us, whereas Brentano characterized the mental in terms of "intentionality", or in other words "aboutness". According to him mental states are "about" things or state of affairs and is such that things may not exist and the states of affairs may not obtain, but the mental has them as its content. This view James regarded as "a great mystery" where "peculiar presence in absence" is explained in terms of the

theory of "intentional inexistence"¹⁹. James seemed to be sufficiently impressed because he does not embark on any criticism. Taking the example "the tigers now in India" James said that "at the very least, people would say that what we mean by knowing the tigers is mentally *pointing* towards them as we sit here." [P. 73]. Accordingly James explains that "to know an object is... to lead to it through a context" (p. 74), whether ideal or real. It is perhaps for these reasons James suggested that mental fire may not burn sticks and mental water may not even put out mental fire.

Before the functional analysis the bit of experience is an undifferentiated *that* which consequently assumes a function of being a physical pen and the percept of the pen. The crux is that one can point to the pen as a physical object, or be aware of the pen as a particular mental state, but no one can point to the "bald *that*". This not only suggests a practical difficulty but also suggests that a theoretical construct of pure experience can be contrasted with the pen or with our percept of the pen.²⁰

The other important difference is the question of extension. For Descartes and his followers the term "extension" is only attributable to things and not to thought. James explained that as physical object a pen has an extension, similarly the mental picture of the pen must have all the extension of the physical pen.

The difference between objective and subjective extension is one of relation to a context solely. In the mind the various extents maintain no necessarily stubborn order relatively to each other, while in the physical world they bound each other stably, and together, make a great enveloping Unit which we believe in and call real Space. ["Does 'Consciousness' Exist?", p. 16].

As "outer" or "physical", experiences maintain their distances to retain unity, but as "inner", i.e. "the complete inner life in which the mind plays freely with its material". In mind there is less order experiences are loose in which unity is lost.²¹ It is the relation of the extensions which differentiates the physical world and the mental world and not the presence or absence of extension.

19. "The Knowing of Things Together", in *The Works of William James, Essays in philosophy*, Harvard University Press, Cambridge, Massachusetts, 1978, p. 73.

20. Cf., Myers, G.E., *William James*, Yale University Press, 1986, p. 310.

21. The looseness of mental characteristic does not entail that mental is anomalous, as Davidson had argued. The difference between Davidson and James is that for James the mental laws are not rigid as those of physical laws. But Davidson argued that there are no laws for the mental, and

Regarding the other qualities James says that there are reasons for us to call a fire hot, and water wet, and yet refuse to regard our mental state of these objects as either wet or hot. James explained:

The reason is this, that, as the general chaos of all our experiences gets sifted, we find that there are some fires that will always burn sticks and always put out fires; while there are other fires and waters that will not act at all.... having identically the same natures, fail to manifest them in the "energetic" way. ["Does "Consciousness" Exist?", p. 17].

Beside a "real" world James created a parallel world in which perceptual experiences form the nucleus to which,

"we add a lot of conceptual experiences to them, making these strong also in imagination, and building out the remoter parts of the physical world by their means; and around this core of reality the world of laxly connected fancies and mere rhapsodical objects floats like a bank of clouds. In the clouds, all sorts of rules are violated which in the core are kept. Extensions there can be indefinitely located; motion there obeys no Newton's laws." [*Ibid.*, p. 17-18].

James, thus argued for perceptual experiences to explain conceptual experiences and vice versa in order to explain the world we experience. As a result he initiated circular arguments. Graham Bird, in his *William James*, pointed out the potential circularity in James' philosophy. Bird said that in seeking an account of the meaning of some terms we have to consider other "conceptions". Such an account leads in explaining the meaning of one term by reference to the meaning of others and thus resulting in circularity. One can avoid circularity by appealing to primitive intentions which are supposed to antedate the conventions of a public natural language. Instead of appealing to primitive intentions James appeals only to other "conceptions", making his arguments circular.²² I will argue that the alleged circularity is part of a sophisticated method now known as *Boot-strapping*. This I will discuss in Chapter Seven.

since there are no laws there cannot be a nomological relation between the mental and the physical. [See Chapter Six for detail discussion on the anomalousness of the mental.]

22. pp. 31-32.

The analysis of "subject" and "object", "mental" and "physical" is important in James's philosophy because he discarded the traditional notion of "consciousness" as an entity.

For twenty years past I have mistrusted "consciousness" as an entity; for seven or eight years past I have suggested its non-existence to my students, and tried to give them its pragmatic equivalent in realities of experience. ["Does "Consciousness" Exist?", p. 4].

2.6.3. The Term "Consciousness" derives a New Connotation.

Although James denied consciousness he did not deny that "thoughts" exist. The term "consciousness" gets a new connotation in James's philosophy. It stands for a function and "that function is *knowing*". "Consciousness" is supposed necessary to explain the fact that things not only are, but get reported, are known." [*Ibid.*, p. 4]. For James consciousness is simply a relation and not an "epistemological" necessity to explain the doctrine of pure experience. He distinguished consciousness from the traditional notion of "souls" which were

"detachable, had separate destinies; things could happen to them. To consciousness as such nothing can happen, for, timeless itself, it is only a witness of happenings in time, in which it plays no part. It is, ... the logical correlative of "content" in an Experience of which the peculiarity is that *fact comes to light* in it, that *awareness of content* takes place. Consciousness as such is entirely impersonal-- "self". " [*Ibid.*, p. 4].

The passage reveals that although consciousness plays no part in explaining the mental, it exists as a "witness". Therefore it does exist as an entity, a mere "epiphenomenon". This is certainly a contradiction James entangled himself. How can there be such entity called consciousness and at the same time exist as a witness?

James argued that "knowing" is a sort of relation into which "pure experience" may enter. Then he seemed to say that the relation of knowing is not something external to pure experience because "the relation itself is a part of pure experience." [*Ibid.*, p. 4]. This seems to suggest that relation is present intrinsically to the nature of pure experience, where "one of its "terms" becomes the subject or bearer of the knowledge, the knower, the other becomes the object known." [*Ibid.*].

James was critical of those, especially G.E. Moore and Paul Natorp, who supposed that we can have an immediate consciousness of consciousness itself. Moore argued:

When we try to introspect the sensation of blue, all we can see is the blue: the other element is as if it were diaphanous. Yet it *can* be distinguished if we look attentively enough, and if we know that there is something to look for. ["Does "Consciousness" Exist?", pp. 5-6].

Similarly, Natorp held that the existence of consciousness

"can be brought out by analysis, but can neither be defined nor deduced from anything but itself" (*ibid.*, p. 6).

Such an analysis, James argued, suggested that an experience is of dual nature, i.e. it has inner constitution, "if you abstract the content, the consciousness will remain revealed to its own eye" (*ibid.*, p. 6). James provided an example to explain this situation. Here experience can be likened with paint of which the world pictures were made. Paint has a menstrum, i.e. oil and size, and a mass of content in the form of pigment. The mass and the pigment can be physically separated, i.e. we get the mass by letting the pigment settle and the pigment by pouring off the oil. The separation is done by subtracting one from the other. Hence analogously via mental subtraction one can separate the two factors of experience.

James held that this was a wrong way of interpreting experience which has no dual inner constitution. "*Experience I believe, has no such inner duplicity; and the separation of it into consciousness and content comes, not by way of subtraction, but by way of addition.*" [*Ibid.*, p. 7]. Taking the paint example James illustrated in the following way:

In a pot in a paint-shop, along with other paint, it serves in its entirety as so much saleable matter. Spread on a canvas, with other paints around it, it represents, on the contrary, a feature in a picture and performs a spiritual function. [*Ibid.*, p. 8].

Similarly a portion of experience taken in one context of associates plays the part of the knower, a mental state, and the same portion of experience in different context plays the part of a thing known. Here the duality is still preserved but "instead of being mysterious and elusive, it becomes verifiable and concrete" (*ibid.*).

2.6.4. The Role of Experiences.

One may be puzzled, James suggested, by how a bit of identical experience can be in two places. But this puzzle can be understood if one sees how one identical point can be on two lines. This is possible if a point be situated at their intersection. In the same way one can explain the "pure experience", say of the room, situated in the intersection of two processes, associated to two groups, counted twice, "although it [the "pure experience"] would remain all the time a numerically single thing". [*Ibid.*, p. 8]. James explained how a pure experience can figure in several fields without any split. This can happen both in perceptual field as well as non-perceptual field.

2.6.4.1. Perceptual Experiences.

In perceptual field "numerical single" experience can have many relations in different contexts. To take the room-experience, for example, James argued that it can simultaneously enter into two processes as a single *that*. The two processes can be identified as ones "personal biography" and also "the history of the house". In one's personal biography the *that* is the last term of a train of sensations and emotions ending in a present, and the first term of a series of similar "inner" operations ending in the future. The same very *that* is the *terminous ad quem* of a lot of previous physical operations, such as furnishing, and the *terminous a quo* of different future ones. As a room the experience occupied that spot for many years, but as one's field of consciousness it may never have existed until now. As a room, attention will go on to discover endless new details in it, but as one mental state few new ones will emerge under attention's eye. "In the real world, fire will consume it. In your mind, you can let fire play over it without effect." [*Ibid.*, p. 9].

2.6.4.2. Non-Perceptual Experiences.

The distinctions between subjectivity and objectivity do not solely belong to the field of perceptual experiences but rather that they equally belong to the non-perceptual experiences. In the conceptual field a bit of experience can figure in one context as the "thought-of-an-object" and in another context as an "object-thought-of", i.e. as subjective the experience "represents" (standing to them as thoughts to things); as objective it is "represented" (standing to them as things to thought).

James attempted to make his theory of concepts plausible and to bring it on a par with his theory of percepts. This made him deviate from his true radical empiricist position. Because, to put it in James's own words,

"to be radical an empiricism must neither admit into its constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced" ("A World of Pure Experience", p. 22).

James argued that the "conceptual manifolds", or "memories", or "fancies" were also in their initial intention mere bits of pure experience, a simple that, and have a world of their own in which they lead to as subject and terminate in as an objective fact quite similar to that of percepts. This world is "a world merely "thought-of" and *not directly felt or seen*." ["Does "Consciousness" Exist?", p. 9; italics are mine]. In the "thought-of" world the experiences come as quasi-chaos, similar to that of the world of percepts, and soon gets ordered. Like perceptual experiences, the non-perceptual ones associates themselves with different groups of associates by experienced relations, where "one forms the inner history of a person, while the others acts as an impersonal "objective" world, either spatial and temporal, or else merely logical or mathematical, or otherwise "ideal".' [*Ibid.*, p. 10]. This world like the world of pure experience, as we shall see later, is not a "closed" or "blocked universe" but an "open" one where new experiences, James argued, "grafts" in. Due to the intrusion of "percepts" in ones mind a third group of associates builds up with which the non-perceptual experiences have relations. This third group is called "knowing" percepts, which are "through-and-through subjective". What James said next was a direct blow to his "pure experience" thesis, i.e. the "knowing" percepts are "wholly constituted of stuff called

consciousness, using this term now for a kind of entity, after the fashion which I am seeking to refute." [*Ibid.*, p. 10].

In order to establish the "ideal" world that James even rejected Taine's so called thought-of-world as inner and weak in comparison to perceptual world, and said that "our world of thought would be the only world, and would enjoy complete reality in our belief. This actually happens in our dreams, and in our day-dreams so long as percepts do not interrupt them." [*Ibid.*, p. 12]. This could be illustrated by the room example in the same way. The room thought-of has many thought of couplings associated with many thought-of things. In one's personal history the room occupies a single date, but in the houses history it forms a permanent ingredient. Among the couplings some are curiously stubborn, others show the fluidity, i.e. may come and go as one please. Where the relation is of stubbornness the collection of experiences form a system of external realities, in which the room exists as "real" and the other is a "stream of internal thinking", i.e. as a "mental Image" it floats. By "stubborn relation" and "fluid relation" James meant physical laws, which are deterministic, and psychological laws, which are indeterministic. The mental is not anomalous as Davidson argues but is not rigid as the physical.²³ According to James the room not only plays its part in the inner world which has "external reality", there is also the system of "ideal reality" in which the room plays its part²⁴. Hence James suggests reality *ad infinitum*.

Whatever the reality, whether "ideal", "logical", "mathematical", "physical", or "mental", the "pure experience" is the only neutral stuff of which every thing is composed; what we call subjectivity and objectivity are classifications that depend on our "temporary purposes".

23. See Chapter Six, "A Comparison with Anomalous Monism".

24. Cf., "Does 'Consciousness' Exist?", p. 12.

Section C.

2.7. The Theory of Neutral Entities.

Introduction.

James provided a phenomenological interpretation of reality which is the outcome of his earlier commitment to the psychology of the stream of consciousness. He depicted reality as a pattern (unlike Russell who argued that mental and physical are constructions) where "pure experiences", the "empirical given" in "perception" and "feeling" provide flesh to the bare bones of reality.

2.8. Radical Empiricism.

2.8.1. "Experience": A Neutral Name.

James's foremost task was to clarify the notion of "experience" from its traditional usage which refers to the psychic events of consciousness. Russell, in his critique of James's theory, observed that his use of the word "experience" referred "to the lingering taint of an idealistic ancestry."²⁵ In accepting James's thesis Russell, in 1921, declared "sensations" as neutral entities. The use of the word "sensation" had been criticised by Alan Dorward in his "Critical Notices of Bertrand Russell, *The Analysis of Mind*", 1922. Generally the word "sensation" always means something connected with consciousness. But Russell might say that the things which he called sensation is the same thing which other people call sensation. The mistake they commit only when they regard the thing as mental. Therefore he has the right to retain the word while freeing it from its false associations. This may not be an adequate reply. Dorward points out:

When they call a thing a sensation, [the people] mean to imply that it is mental; and if they were convinced that they were mistaken in supposing it to be mental, they would probably say, not "Well, you have now convinced me that sensation are not mental," but "I now see that what I thought to be mental is really not so, and I was therefore mistaken in calling it a sensation". [P. 92].

25. *The Collected Papers of Bertrand Russell*, vol. 7, p. 20.

James's reply would have been similar to that of Dorward in Russell's use of the term "sensation". Both Russell and James chose these words for the apparent neutrality they show. I think that James preferred the term "experience" because the term "feeling" is a characteristic of mind which shows a peculiar mental function. But the term "experience" not only refers to the function of mind but also has an explicit reference to its relation to objects. Similarly Russell's use of the term "sensation" is mainly because it expresses the complex "act-acquainted-with-object". This is the definition he gave in his "The Nature of Sense-data", where he regarded sensation to be synonymous with perception.

For James, experience is not a subjective phenomenon but an empirically given neutral phenomenon, which describes mind and matter. A pure experience, which is neither subjective nor objective, consists of "neutrals, indifferents, undecideds, posits, data, facts." [TCWJ, vol 2, p. 405].

2.8.2. The Concept "Radical".

James's next aim was to show that his philosophy radically differed from those of the intellectualists and the sensationalists. The intellectualists begin their analysis of the nature of the world by postulating synthetic *a priori* premises without any real appeal to empirical premises. In their order of logic, wholes are prior to parts, and transcendental egos and absolutes are taken to stand as agents of unification of parts. The classical empiricism, though rightly emphasizes the part, the element, the individual, tends to uphold nature as discrete and atomic. For empiricists like Hume and J.S. Mill "substantive psychoses, sensations and their copies and derivatives, juxtaposed like dominoes in a game," (*Principles*, vol. 1, p. 245) are really separate and have no connection. These empiricists had a tendency to do away with connections as co-ordinate parts of experience. They insist most on disjunctions and hence reduce the flow of experience to mere "loose and separate" atomic units.

James, who began with the basic claim of the empiricist, that parts are prior and the whole is of the second order, insists that relations, in the conjunctive and disjunctive forms, are co-ordinate parts of experience. This is the reason for his adding the term "radical" to his form of empiricism. James brought in the concept of "felt relation", which is the major omission of psychology and which the metaphysician ignored as the essential element in forming our knowledge of

reality. Radical empiricism neither excludes nor includes any element that is not directly experienced. James argued:

For such a philosophy, *the relations that connect experiences must themselves be experienced relations, and any kind of relation experienced must be accounted as "real" as anything else in the system.* ["A World of Pure Experience", p. 22].

2.8.3. The Notion Of "Conjunctive Relations"

James argued that our universe of experience is not something ordered *a priori*, but to a large extent chaotic. It is chaotic in the sense that the world is experienced as continuous, related, where a variety of connections run through all the experiences that compose it, and are ever-changing. In other words the world of pure experience is a "quasi-chaos" (*ibid.*, p. 32), where unity and disconnection are real.

In his descriptive analysis of the logic of reality James called "radical empiricism" a mosaic philosophy, in which the pieces are held together not by their bedding but are "clung together by their edges, the transitions experienced between them forming their cement." [*Ibid.*, p. 42]. Like the stream of consciousness, the separateness of experiences in the stream remain separate and are "felt" where the "substantive states" (the resting period) and "transitive states" (the period of flight) run into each other continuously. This is the view which the Intellectualists and the Sensationalists failed to understand. It is, in radical empiricism, the "conjunctive relation", i.e. to say "a feeling of *and*, a feeling of *if*, a feeling of *but*, and a feeling of *by*, quite as readily we say a feeling of *blue* or feeling of *cold*," in all its form gets recognized." [*Principles*, vol. 1, pp. 245-46].

The conjunctive experience has been discredited by both the empiricists and the rationalists. The empiricist, like Hume, left experience permanently disjointed, and the rationalists, like Kant and Spinoza, explained the "looseness" by their absolutes, or transcendental ego, or other fictitious agencies of union. James held that the relation was present in the stream of consciousness and hence required no artificial bonding. "Radical empiricism ... does full justice to conjunctive relations." ["A World of Pure Experience", p. 23]. James explained, Firstly, if the experiences are taken at their face-value, i.e. to feel just as they are without confusing it with abstract talk about it involving words that lead one to invent secondary conceptions, there conjunctions and disjunctions are accounted as real.

Secondly, in case of treating things separately, when they are given as continuously joined, we ought to perform the converse act by invoking higher principles of "*disunion*" to make experienced "*disjunctions*" more truly real.

James further explained the "continuity-experience" and "discontinuity-experience" in the following way. In order to explain the experience of continuity James brought in the concept of "*the co-conscious transition*" by which one experience passes into another when both belong to the same self. Within the personal histories of each individual, subject and object, interest and purpose are continuous. Since personal histories change in time, the "change" is immediately experienced as continuous transition as opposed to discontinuous transition. In one's personal history one may feel the later moment of one's experience succeeds an earlier one forming two moments. But such transition from the one to the other is "continuous".

Discontinuity-experience is also a definite sort of experience. Discontinuity is felt when the transition takes place between at least two individuals. This is because what I call my experience and your experience can be externally with each other but mine cannot pass into yours or yours into mine. In such transition, James held:

I have to get on and off again, to pass from a thing lived to another thing only conceived, and the break is positively experienced and noted. ["A World of Pure Experience", p. 25].

Although the functions emphasised by both the experiences are same, the sameness is ascertained after the break has been felt. The experience of sameness can be understood by James's treatment of thought and thing in terms of cognitive relation. In order to facilitate our understanding of this, I shall discuss his theory of knowledge.

2.9. The Theory of Knowledge.

2.9.1. Introduction.

"The *relation of knowing* is the most mysterious thing in the world." [*Principles*, vol. 1, p. 216].

James aimed to dissolve duality in the stream of experience which arises from the ambiguity involved in the psychological explanation of cognition. "*The psychologist's attitude towards cognition.... is a thoroughgoing dualism.*" [*Ibid.*, p. 218]. James revolted against the idea that there are two irreducible elements in the process of knowing. The dualism of mind and body gives rise to such a mysterious situation and claimed that the relation between the knower and the known is such that

"neither gets out of itself or into the other, neither in any way *is* the other, neither *makes* the other. They just stand face to face in a common world, and one simply knows, or is known unto, its counterpart." [*Ibid.*, p. 218].

There is no doubt that in his *Principles*, beside metaphysical dualism, James had also accepted epistemological dualism. We have earlier seen that, for James, "feelings" are knowledge of acquaintance. Such words like "I", "there", "ecco", "voila", simply start off the cognitive process but which are not cognitive in themselves. It is the "thought", the knowledge about, where the full cognition takes place. James declared that "the "thoughts," ... are the conceptions and judgments." [*Ibid.*, p. 222]. Later when we discuss Russell we will find that like James he also laid much emphasis upon these epistemological distinctions but in a significantly different way. Russell's aim was to provide a firm basis for empirical knowledge. He held that the sense-data, knowledge by acquaintance, where no error takes place, are the basis of knowledge. Sense-data are knowledge by themselves. He made a distinction between a sensation and a sense-datum and argued for a relational theory of sensation. Russell argued that sensation is a relational occurrence in which a subject is "aware" of an object. But as a neutral monist, following James, he discarded this view (See Chapter Four and Five) and became less interested in epistemology²⁶ and sceptical about its importance in

26. Stace, "Russell's Neutral Monism", in Schilpp, 1944, p. 358. Stace thinks that Russell has become more "empirical".

ontological doctrine. For James, the "feelings", unlike Russell's sense-data, to which one is acquainted are not knowledge. Thoughts are the proper medium of knowledge. These distinctions are not pressed hard by James and will become clear as we progress. But there is no doubt that for him dualistic epistemology became the footings of his metaphysical theory.²⁷

The process of "meaning and knowing", the foremost function of consciousness, not only played a distinctive role in James's psychology but became the essential groundwork for two of his most important theses, "radical empiricism" and "pragmatism". The essence of these two theses lies in the concept of "relations" of ideas as elements in experience to future experiences which are their meaning. For James truth lies in the correspondence between ideas and objects. It is essential to mention that the relation of mind to its object was discussed by Royce in his *The Religious Aspect of Philosophy* (1885) which impressed James. In a letter to Renouvier, James illustrated Royce's argument and said:

[T]o me the argument seems irresistible, so long as we take the relation of really *intending* an object, *au serieux*. [TCWJ, vol. 1, p. 705].

James was not enthusiastic about Royce's theory in its entirety. We know Royce was an idealist and James was a venomous critique of idealism. James claimed that for Royce there should be a "power" outside of both the thought and the object so that the thought can represent, either rightly or wrongly, the object which it stands for. James depicts Royce's thesis thus:

In short, it makes everything, so far as anything has relation to truth or error; and since both our thoughts and the things we think of have such relation, this Absolute Thought which is involved in the idea of their relation, may also be called the ground of their being. [*Ibid.*, p. 705].

27. James seems to disagree. In a letter to Strong, in Oct. 2, 1907, James says, "that in my essays on 'Radical Empiricism' ... you can find sentences that squint towards idealism, I have no doubt,.... But the problem there was metaphysical, not epistemological; it was an analysis of the *nature* of what is experienced, not of the meaning of knowing, and whatever epistemology I have brought in was by the way illustrative, not fundamental. In those articles I was groping and fumbling anyhow, and doubtless guilty of much confusion. But when *expressly* writing about 'knowledge' and 'truth' as in *Pragmatism*, I have always *intended* ... to be realistic, and to be called an idealist(as by Montague, and others) makes me feel queer." See Perry, v. II, pp. 549-550.

For James the relation lies in the stream of consciousness where thinking of some sort goes on. It is in the stream the comparison and the contrast between the thought and the object present to it takes place. In naturalistic psychology there is no reason to look "beyond" because the consciousness is the sole verifier of its objects. Perry reported that in fact James had confessed that he was "unable to overthrow Royce's argument" though he regarded the argument inconclusive.²⁸

As a radical empiricist his foremost task was to prove that there is no duality of substances in the sphere of phenomena. This is possible by sticking to "experience", the neutral entity, which has no inner duplicity and hence saves him from an artificial conception of the relations between knower and known.

2.9.2. "Knowledge of acquaintance" and "Knowledge-about"

In order to explain his theory of cognition James follows John Grote²⁹ in his distinction of two kinds of knowledge. They are *knowledge of acquaintance* and *knowledge about*, of which the French and German distinctions are *connaître* and *savoir*, and *kennen* and *wissen* respectively. Beside his *Principles*, James discussed his theory of knowledge in two articles reprinted in *The Meaning of Truth*. They are "The Function of Cognition", (which James in his letter to Strong in 1907 regarded "the *fons et origio* of all my pragmatism" (TCWJ, vol. 2, p. 548), is said to constitute an answer to Royce (TCWJ, vol. 1, p. 800), and "The Tigers In India".

In both these articles James aimed to undertake the burden of resolving the problem of knowledge by showing that

"the difference between those that are mere "acquaintance," and those that are "knowledge-about"... is reducible almost entirely to the absence or presence of psychic fringes or overtones. Knowledge *about* a thing is knowledge of its relations. Acquaintance with it is limitation to the bare impression which it makes" (*Principles*, vol. 1, p. 259).

We have earlier seen that, according to James, the knowledge of acquaintance are the "blooming" "buzzing" sensations with which babies or semi-conscious people

28. See Perry, "The Battle of the Absolute", in TCWJ, p. 799 ff. An elaborate discussion is carried out by Perry. A similar discussion is carried out in Reck, A.J., "Epistemology In William James's *Principles Of Psychology*", Tulane Studies in Philosophy, vol. 22, 1973, pp. 85-86.

29. *Exploratio Philosophica*, London, 1865.

are acquainted. Through this a first encounter is made with the external world which simply however does not give them knowledge about anything. The above quotation confirms this further by stating that the distinction between the presence and absence is the distinction between knowledge of acquaintance and knowledge about respectively. Before we treat his two articles it is important to see how James handled the theory of knowledge in his *Principles*.

In his *Principles* (vol. 1), James opened his discussion on two kinds of knowledge in the chapter of "Conception", by stating that these two knowledges are due to "*the principle of constancy in the mind's meanings*" (p. 459). He explained that "the sense of sameness", the "keel and backbone of our thinking", is the basis of our conceptual knowledge. Since the principle of sameness belongs to the structure of mind and not to the universe, James said:

"the mind can always intend, and know when it intends, to think of the Same" (p. 459).³⁰

James defined conception as "*the function by which we thus identify a numerically distinct and permanent subject of discourse*" (p. 461). He rules out any ambiguity in the word "conception" and says that it neither denotes the mental states nor anything signified by the mental state. It simply denotes "the relation between the two, namely, the function of the mental state in signifying just that particular thing" (p. 461).

Conceptions belong to the flux of experience and remain eternally unchangeable although the mental state may change and its meaning be different at different times. James illustrated this in the following way: a piece of paper may be white a moment ago, may now change into black. But this does not lead us to change the conception of white into the conception of black. The conception of blackness and whiteness remains in the mind bearing different meanings. James declared:

Thus, amid the flux of opinions and of physical things, the world of conceptions, or things intended to be thought about, stands stiff and immutable, like Plato's Realm of Ideas. [P. 462].

He distinguished concepts and percepts in the following way:

30. This interpretation is mainly responsible for the treatment of James's view as phenomenological. See for instance, Richard Stevens, *James and Husserl: The Foundation of Meaning*.

The great difference between percepts and concepts is that percepts are continuous and concepts are discrete. [*Some Problems of Philosophy*, p. 48]

We may recall that James was so enthusiastic to make his ontological theory epistemologically viable that on such an interpretation he based his theory of non-perceptual experiences. James regarded concepts as parts of pure experience which act as an impersonal "objective" world, either logical mathematical or ideal. This admission of concepts into the realm of pure experience brought a contradiction into his radical empiricism. The contradiction lies in the fact that on the one hand he was criticising Humean atomic sensations and on the other hand admitting the distinct discontinuous atomic concepts in the flux which is continuous. [Cf., Myers, *op. cit.*, p. 314]. James was quite aware of this difficulty and in his *Some Problems Of Philosophy* tried to treat both percepts and concepts as "consubstantial", by which he means that they are made of the same kind of stuff, and when handled together they melt into each other. The importance of concepts and percepts is such that James said:

The world of common-sense "thing"; the world of material tasks to be done; the mathematical world of pure forms; the world of ethical propositions; the world of logic, of music, etc., all abstracted and generalized from which they have as it were flowered out, return and merge themselves again in the particulars of our present and future perception. By those *whats* we apperceive all our *thises*. Percepts and concepts interpenetrate and melt together, impregnate and fertilize each other. Neither, taken alone, knows reality in its completeness. We need them both, as we need both our legs to walk with. (pp. 52-53).

Whatever fluidity may be present in concepts and percepts they both contribute to the making of neutral plural facts which explains things and thoughts as being of the same nature. As we have earlier mentioned, like Russell, James did not keep the distinctions of knowledge. The "knowledge of acquaintance" and "knowledge about" remain interchangeable in his doctrine. James regarded cognition as a function of consciousness. Although not all but some "feelings" (knowledge by acquaintance) are cognitive with out any self-transcendence implied in their being pieces of knowledge. In "The Function Of Cognition" he argued that feeling may be a dumb and helpless thing which neither names, classifies, locates or dates, but from cognitive point of view it is "no psychical zero" rather is "most positively and definitely qualified inner fact" (*The Meaning of Truth*, p. 10). To James

"knowledge of acquaintance" is in fact "knowledge about". This is reflected in the following passage:

A feeling feels as a gun shoots. If there be nothing to be felt or hit, they discharge themselves *ins blaue hinein*. If, however, something starts up opposite them, they no longer simply shoot or feel, they hit and know. [*Ibid.*, p. 17].

If knowledge by acquaintance is knowledge about, then we face difficulty in explaining the concept of "transition" which is essential for his theory. In knowledge by acquaintance there is no movement from one experience to another. This is because if a bit of experience is cognitive in itself then there is no need for any new experience to retrospect and appropriate it in order to give a definite meaning. Transition can only take place if a bit of experience is not cognisant in itself and requires other experiences to be fulfilled and meaningful. This also suggests that, like concepts which are discrete in James's description, the percepts are also discrete. James's position seems to collapse into the Humean doctrine of atomic sensations.

These feelings, or percepts, or sensible things or matters of acquaintance, James argued:

... are the mother earth, the anchorage, the stable rock, the first and last limits, the *terminus a quo* and the *terminus ad quem* of the mind.... They end discussion; they destroy the false conceit of knowledge; and without them we are all at sea with other's meaning. [*Ibid.*, p. 39].

James's main aim, prior to his metaphysical theory of radical empiricism, was to eliminate the "epistemological gulf" so that the truth-relations fall inside of the continuities of concrete experience. This is reflected in both the articles in *The Meaning Of Truth*. We can know things in two ways - immediately or intuitively (knowledge of acquaintance) and conceptually or representatively (knowledge about). In representative knowledge the outer chain of physical or mental forms the connection between thought and thing. Here to know an object means to lead it through a context which the world supplies. In immediate knowledge the thing-stuff and thought-stuff are of same nature. Unlike the representative knowledge there are no intermediaries to separate the thought and thing. James explained it in the following way:

But if our own private vision of the paper be considered in abstraction from every other event, as if it constituted by itself the universe, ... then the paper seen and the seeing of it are only two names for one indivisible fact which, properly named, is *the datum, the phenomenon, or the experience.... To know immediately, then or intuitively, is for mental content and object to be identical.* This is a very different definition from that which we gave of representative knowledge; but neither definition involves those mysterious notions of self-transcendancy and presence in absence which are such essential parts of the ideas of knowledge, both philosophers and of common men. [*The Meaning of Truth*, pp. 48-50].

By claiming that mental content and object are identical James discarded the initial epistemological dualism outlined on his *Principles*. There is no doubt that James had not succeeded in filling the epistemological chasm which therefore leads his argument to oscillate between the two forms of knowledge. This will become more apparent as we examine discussion on cognitive relation.

2.9.3. The Cognitive Relation.

James argued that the treatment of thought and thing, the subject and the object as absolutely discontinuous led various school of thought to explain the gap in various ways. The representative theorists explained the situation by putting a mental "representation", "image" or content as an intermediary to fill the chasm. Common-sense theories believed in this gap but which can be cleared by the mind's self-transcending leap. The transcendentalist brought in an absolute knower to explain the cognitive relation.

Radical empiricism explains the cognitive relation by claiming that "in the very bosom of the finite experience, every conjunction required to make the relation intelligible is given in full. Either the knower and the known are:

- (1) the self-same piece of experience taken twice over in different contexts; or they are
- (2) two pieces of *actual* experience belonging to the same subject, with definite tracts of conjunctive transitional experience between them; or
- (3) the known is a *possible* experience either of that subject or another, to which the said conjunctive transitions *would* lead, if sufficiently prolonged. ["A World of Pure Experience", p. 27]

The first type can be explained in terms of knowledge of acquaintance or perception. As we have earlier seen this is a direct way of knowing things without

any intermediary process. In the immediacy of the instant field of the present there is no splitting up of experience into subjective, that which represent, and objective, that which is represented. What subjective and what is objective are numerically the same experience taken in two differing contexts which is being retrospected by a new experience. This however suggests that a single bit of experience cannot be known truly without the so called "passing thought" which completes the process of knowing by adding a fresh content to it. James says:

To be "conscious" means not simply to be, but to be reported, known, to have awareness of one's being added to that being; and this is just what happens when the appropriative experience supervenes. The pen-experience in its original immediacy is not aware of itself, it simply *is*, and the second experience is required for what we call awareness of it to occur.³¹

This passage contradicts James's claim that percepts are not psychological zero. James at the same time also regarded such "feelings" or "percepts" as the "dumb knowledges-of-acquaintance".

Types two and three are the simplest sort of conceptual knowledge or knowledge about. James illustrated these two types of knowing with the example of "Memorial Hall". He held that it may be that one's mind may have a clear or dull image of the hall but which makes no difference in its cognitive function, "what it may, its knowing office" (here James referred to consciousness as an entity).³² One may be able to suggest that the image means something; or may fail to point or lead others towards the Harvard Delta; or even if led by others may be uncertain and fail to compare it with the idea in one's mind; or may find very little resemblance. Such resemblance is merely coincidental because all things in the world resemble each other without being cognitive. On the other hand, one may lead others to the hall, however imperfect the idea in one's mind was, and tell its present history. This suggests that one's idea has terminated into the vivid perception of the Memorial Hall. This is what James meant by saying that the ideas has passed to the percept by conjunctive experience of sameness and fulfilled intention. In such felt transitions, to put it in James's words:

31. "How Two Minds Can Know One Thing", p. 65.

32. "A World of Pure Experience", p. 28.

lies all that the knowing of a percept by an idea can possibly contain or signify.... Knowledge of sensible realities thus comes to life inside the tissue of experience. It is made; and made by relations that unroll themselves in time. Whenever certain inter intermediaries are given ... they develop towards their terminus, there is experience from point to point of one direction followed, and finally of one process fulfilled, the result is that their starting-point thereby becomes a knower and their terminus an object meant or known. ["A World of Pure Experience", p. 29].

A cursory reading of the passage reveals several contradictory claims by James hence undermining his theory which is supposed to be radically different from the other empiricists. One obvious problem is his description that experience runs from "point to point" further proving that "experiences" are like Humes "sensations". James also claimed that knowledge of sensible realities are "made". Does he mean to say that experiences are compounded together so that a definite meaning is given? If so, then his critique of Locke, regarding the compounding of simple ideas into various complexes falls apart. The other most important point which the passage reveals is that the experience "develop towards their terminus". This seem to suggest that a single experience is conscious in itself to be able to terminate to its fulfilled end. The idea of the desired object is already implicit in an experience and becomes explicit when it reaches its desired end. This is further confirmed in the following quotation:

Whenever such is the sequence of our experiences we may freely say that we had the terminal object "in mind" from the outset...[*Ibid.*, p. 29].

James argued that the essentials of the cognitive relation consists in intermediary experiences, both actual and possible, of continuously developing progress and of fulfilment. In such process the percept not only verifies the concept but also proves its function of knowing that percept to be true. James knew that his readers will not accept such an interpretation. The interpretation reveals that mere intermediaries simply separate the knower from the known. To make his claim plausible James upheld Lotze's view of substances that to act like one is to be one. James argued that unions by continuous transition are the only ones we know. Moreover, to be experienced as continuous is to be really continuous in the world where experience and reality come to the same thing. In both intuitive and representative knowledge there is no epistemological chasm. But the notion of

intermediary experience raises two questions. They are: (a) substitution and, (b) objective reference. I will begin with the former.

2.9.3.1. Substitution

James explained:

[A] n experience that knows another can figure as its *representative*, not in any quasi-miraculous "epistemological" sense, but in the definite practical sense of being its *substitute* in various operations, sometimes physical and sometimes mental, which leads us to its associates and results. ["A World of Pure Experience", p. 31].

He was impressed by Taine's use of the term "substitution" as a cardinal logical function. James regard substitution as important for the world of pure experience which is present to us as quasi-chaos. He said:

In such a world transitions and arrivals (or terminations) are the only events that happen, tho they happen by so many sorts of path. The only function that one experience can perform is to lead into another experience; and the only fulfilment we can speak of is the reaching of a certain experienced end. When one experience leads to (or can lead to) the same end as another, they agree in function. [*Ibid.*, p. 32].

Since experiences are all alike and have many-sided continuum the transition can take place through different sorts of paths. There may be different sorts of paths, but the path which leads to fulfilled end is called a functional substitute for another. James held that most thought-paths are substitutes for nothing actual because they end outside the real world, i.e. in wayward fancies, utopias, fictions or mistakes. [*Ibid.*, p. 32]. This is another reason why James regarded the world of experience as quasi-chaos.

2.9.3.2. Objective reference

We know James claimed that the transition from one experience to another takes place through various different paths. It is only through a particular path that we reach a fulfilled end. Such a claim obviously brings in the paradox of self-transcendancy in knowledge. Why do we substitute one particular path and not others? James was aware of this difficulty, which he met by distinguishing two

kinds of knowing. They are (i), knowing as verified and completed and (ii), knowing as in transit and on its way.

In order to understand these two kinds of knowing let us return to the Memorial Hall example. When our ideas of the Hall actually terminate in the percept of the Hall we became truly cognitive of "that", the hall. Here we become the actual knower of the Memorial Hall. But until established by the end of the process we were virtual knowers of the Memorial Hall. James argued that greater part of all our knowledge "never is completed or nailed down". That does not mean that they are not true. There are ideas we may hold which are unterminated perceptually, but which could be verified if the trouble is taken. Regarding such ideas James said:

To continue thinking unchallenged is, ninety-nine times out of a hundred, our practical substitute for knowing in the completed sense. [Ibid., p. 34].

James claims that since experiences always run by cognitive transition there is no necessity of objective reference. This objective reference is an incident of the fact that so much of our experience comes as an insufficient and consists of process and transition. Both our fields of experience and of view are fringed by a "more" which develops and supersedes as life proceeds. The transcendentalists may argue that radical empiricists are making contradictory demands first by accepting knowledge to consist in external relations, and then saying that nine-tenths of the time they are virtually there. Such demands suggest that the experiences are self transcendent and true in advance. Against such a charge James would find it difficult to defend himself. He could reply to his critic by applying the so-called pragmatic method and simply stating that it orients us in turning of our expectations and practical tendencies into the right path, i.e. to lead us into the objects nearest neighbourhood. For instance, your anger is a thing which my thought will never perceptually terminate, but it is my concept of the anger that will lead to their very brink. James argued, "on pragmatist principles ... a dispute over self-transcendency is a pure logomachy". [Ibid., p. 36]. We know that in the world of pure experience transitions and arrivals are the only events that happen. But in its state of purity an experience is always an unqualified actuality, a simple "that" and only virtually classifiable as an objective fact or as someone's opinion about the fact. Similarly, knowing is not static but a continuous process like that

of pure experience. Hence the notion of knowledge which is in transition is brought into alignment with the notion of pure experience.

2.9.4. James On Berkeleyan Idealism.

James tried to defend that his theory of pure experience should not be mixed up with Berkeleyan idealism. It has more affinities with natural realism. Ideas, as Berkeley described them, are discrete and are not in transition. Such notion results into solipsism. In his philosophy only God can create a universe, even of discourse.

James argued that radical empiricism has a positive way of handling the situation. To say that our minds meet in some common objects is the basis that your mind exists. To explain the situation in a better way he brings in the concept called "conterminous". James views can be understood from the following two quotations taken from his "A World of Pure Experience":

1.

In that perceptual part of *my* universe which I call *your* body, your mind and my mind meet and may be called *conterminous*. Your mind actuates that body and mine sees it; my thoughts pass into it as into their harmonious cognitive fulfilment; your emotions and volitions pass into their effects. [p. 38]

2.

If you alter an object in your world, put out a candle, for example, when I am present, *my* candle *ipso facto* goes out. It is only as altering my objects that I guess you to exist. If your object do not coalesce with my objects, if they be not identically where mine are, they must be proved to be positively somewhere else. But no other location can be assigned for them, so their place must be what it seems to be, the same. [p. 39]

2.9.5. Conclusion.

The aim of this chapter was to analyse James's theory of neutral entities. These entities are the central feature of his philosophy of pure experience. As against the "blocked universe" he regard his universe an "open universe". This is because the universe is continually growing in quantity by new experiences, which graft themselves upon the older mass. In such a world the unity cannot be fully experienced, hence the world is form of a pluralism.

Chapter 3

**PHILOSOPHICAL CRITIQUE OF JAMES'S THEORY OF NEUTRAL
MONISM.**

What, on pragmatist terms, does "nature itself" signify? To my mind it signifies the non-artificial; the artificial having certain definite aesthetic characteristics which I dislike, and can only apperceive in others as matters of personal taste, -- to me bad taste. All neat schematisms with permanent and absolute distinctions, classifications with absolute pretensions, systems with pigeon-holes, etc., have this character. All "classic," clean, cut, and dried, "noble," fixed, "eternal," *Weltanschauungen* seem to me to violate the character with which life concretely comes and the expression which it bears of being, or at least of involving, a muddle and a struggle, with an "ever not quite" to all our formulas, and novelty and possibility forever leaking in. [James, W., Notes, 1903]¹

3.1. Introduction.

James a committed empiricist, who "believed empiricism to be the only *open-minded* and *candid* philosophy"², waged war against the Cartesian dualism of mind and matter, on the one hand, and the Humean notion of atomic sensations, on the other. In so doing he claimed that phenomena are not of a dual nature, but rather that reality is simply a pattern composed of neutral entities called "pure experience".

They are chaotic. This chaos is not absolute but relative. James called the phenomena a "quasi chaos" because the phenomena is not complete and closed, rather there is novelty where new experiences constantly "grafts in". The dualities of "thoughts" and "things", or the "mental" and "physical", or "subjectivity" and "objectivity" are not the attributes of a pure experience. They are simply different orders of reality. The duality which we assume arises due to our interests and temporary purposes. In other words they are the result of subsequent classifications into mental and physical. The phenomena is uniform and is homogeneous in character. The relation which relates experiences is not something independent, but rather is a part of pure experience. It is a two term relation, wherein one of its terms becomes the subject or bearer of the knowledge, the knower, the other becomes the object known. Whatever the context

1. Perry, *The Thought and Character of William James*, .., vol. 2, p. 700. Now on I will call it TCWJ.

2. *Ibid.*, p. 703.

there is continuity and every term is related externally and does not have an intrinsic relation as the absolutists have argued. James thus summarised:

... the word "consciousness" is the susceptibility possessed by the parts of experience to be reported or known;

This susceptibility is explained by the fact that certain experiences can lead to others by means of distinctly characterized intermediary experiences, in such a fashion that some play the role of known things, the others that of knowing subjects;

These two roles can be identified perfectly without departing from the web of experience itself and without invoking anything transcendent; (*"La Notion de Conscience"*, p. 271).

For James, phenomena is not discrete, rather it is a "concatenated" universe where disjunctions and conjunctions are real. In such a universe transitions and arrivals are the only events that happen. He regarded his empiricism as a mosaic philosophy where the pieces cling together by their edges. The transitions experienced between them forms their cement. For these reasons he termed his thesis "radical". There is also another reason why he called his theory radical. He introduced scientific realism and accepted scientific epistemology to make his theory more plausible. According to James the experiences in their physical arrangements are curiously stubborn, but in their mental arrangements they are fluid, i.e., may come and go as one please. This is what led James to say:

In the real world, the fire will consume it [the house]. In your mind, you can let fire play over it without effect. [*"Does 'Consciousness' Exist?"*, p. 9].

Accepting how objects are determined in the physical world James tried to explain the objects of the mental world in similar fashion. As a consequence he used circular arguments. [See 2.6.2.]. In chapter seven I shall argue that such arguments are not fatally circular and therefore non-viscious.

From the preceding discussion and the earlier exposition in chapter two we can summarise James's theory of neutral plural facts in the following way:

- (i) There is not a unique, single experience; experiences are innumerable;
- (ii) Experiences are pure with no inner duplicity;
- (iii) Experiences are not atomic, as Hume suggested, but are related in such a way that it gives them a stream-like continuity;

- (iv) These innumerable experiences are homogeneous in nature. One "bit" of experience can be subjective and objective simultaneously, i.e. at the same time;
- (v) The relation which relates the two "bits" of experiences are conjunctive relations, i.e. experienced relations;
- (vi) In radical empiricism there is no hidden Ding-an-sich.

I have summarised the main points of James's thesis in order to show that the supposedly neutral entities in his philosophy is not neutral as James claimed. I discuss this issue next.

3.2. Neutral Monism: A Clear Case Of Covert Dualism

In chapter one I tried to expose James's theory of radical empiricism along with the subsequent development of his thought from reluctant psychophysical dualism to metaphysical monism of neutral entities. It was argued that James accepted part of the Cartesian explanation of mind in order to dispose of the sterile notion of consciousness as an epiphenomenon as described by the automaton theorists. James a physiologist and a psychologist was impressed by the function of nervous system, and his analysis of the theory of the sensory and the motor activity of the nervous system led James to regard "sensation" as physiological process. As he said:

"[T]he function of the nervous system is to bring each part into harmonious co-operation with every other. The afferent nerves, when excited by some physical irritant,... conveys the excitement to the nervous centres. The commotion set up by the centres does not stop there, but discharges itself,... through the efferent nerves into muscles and glands, exciting movements of the limbs and viscera, or acts of secretion,... These acts of response have usually the common character of being of service." [*The Principles of Psychology*, vol. 1, p. 12].

He was convinced that consciousness is not a spiritual activity but is really a "feeling of bodily activities" Such biological interpretation lead him to explain consciousness in terms of "cephalic movements".

James later had a different interpretation for the notion of consciousness. He asked: "Does consciousness exist?" His candid reply was "no". What exists is a sort of activity which functions in a peculiar way and hence is called consciousness. There is no such thing as "I", a permanent subject of discourse as Descartes and his followers believed. What is left behind is a "mere echo", the "faint rumor" of the disappearing "soul" which we call consciousness. Now consciousness simply stands for a function

and that function is "knowing". James thought that Cartesian notion of consciousness "vanished" from his philosophy once and for all. John Dewey, in his remarkable essay "The Vanishing Subject in The Psychology of James" (pp. 589-599), said that the biological interpretation of consciousness by James clearly shows that "the 'subject' of dualistic epistemology disappears and its place is taken by an empirical and behavioural self." [p. 596]. Dewey interpreted James's theory as a form of behaviourism because James relied on the physiological interpretation of brain and central nervous system. My argument is that James's reliance on physiological theory is simply analogical. I will shortly discuss this.

James's metaphysical aspiration led him outline on several occasions how, in his opinion, his position differed from dualism; however on close inspection, *far from convincing one that his position is not dualistic, these statements make it more apparent that, covertly, it is.*

There is a sort of dualism present in James's philosophy. A.O. Lovejoy, in his *The Revolt Against Dualism*, argued:

While we may "take" an individual thing or event in two relations or context, we do not thereby make it possible for it at once to have and not have the *same* relation to a given other term, or to cause and not cause the same effect. The final outcome of James's reasoning on the matter is thus a complete relapse into the dualism from which he set out to escape.³

The above passage indicates that by dualism Lovejoy meant Cartesian dualism. Since an event B cannot be the cause of both C (a physical event) and M (a mental event), for instance, at the same time, therefore C and M must have separate causes. This suggested that since this cannot be explained James has lapsed into a dualism which explains that there are two different substances to explain mind and matter, similar to that of Descartes.

I differ to agree with Lovejoy. For James dualism is that of a relation. For instance, a man, P, has at some particular time, a certain relation to his neighbour X. He also, at that time has a relation to his student Y. Both the relations are simultaneous. The dualism James lapses into is of this sort. Here we can say that P, constituted out of series of experiences has a relation with both X and Y, similar to two straight lines both intersecting at a point. According to James P has a relation to X which is a part

3. The Open Court Publishing Company La Salle, Illinois, 1955, p. 59.

of a sequence. Similarly it is part of a sequence of Y. James did not deny that this sort of dualism is preserved in his theory. Dualism "is an affair of relations ... and can always be particularised and defined". ["Does "consciousness" Exist?"]. This is reflected in the following example:

To her offspring a tigress is tender, but cruel to every other living thing - both cruel and tender, therefore, at once. ["The Place of Affectional Facts", p. 70].

My reaction is that the sort of dualism James spoke is a kind of *covert dualism*. I have argued this in section 1.2.3. In short if a neutral entity used in construction needs a complex structure composed of elements or qualities and internal relations as a part then it has inner duplicity. We should then consider the construction the construction of the mental or physical entity as Covert. If the covert elements are themselves mental or physical then we have Covert Dualism. Covert dualist implicitly introduce both physical and mental elements within the neutral entities. These elements form the inherent structure of the individual neutral entity. They are so arranged that the subject object distinction follow implicitly without any interference of external causes. In my analysis of James's theory of neutral monism I will argue this point and show that he is a covert dualist and not as Lovejoy argued a Cartesian dualist.

I have already claimed that James, in his formative period of neutral monism was a covert dualist. In his theory of "phenomenism" he implicitly introduced the dualism by suggesting internal elements within a single experience. The theory of radical empiricism is the mature version of phenomenism. Though he emphasised the "pristine" character of experiences, his attentive analysis showed that in fact they have parts. The following passage demonstrates this:

Experience, from the very first, presents us with concentered objects, vaguely continuous with the rest of the world which envelops them in space and time, and potentially divisible into inward elements and parts. [*The Principles*, vol. 1, p. 487].

Although his mature theory was triumphant on Cartesian dualism, he failed to stick the strict programme of neutral monism. Instead James collapsed to his earlier version called "phenomenism". There he admitted that the "experience" has internal elements. He made no gloss, rather admitted that experiences has "selective" power and "tendencies" which leads them from one experience to another in their fulfilled end, no matter whatever their "knowing office" (here James hinted on the term "consciousness" as a separate entity) may be. Moreover on several occasion James

stated that relations are part of pure experience. This suggest that apart from externally relating different experiences internally the elements of each experience are organized and structured.

There is no doubt that James succeeded in closing the gap between mind and matter, which Descartes and his followers left asunder. Descartes believed that two different substances are the constituent of mind and matter. Mind has two distinct activities to perform. Apart from the thinking process there is a permanent subject called "I" which is the actual knower. Such interpretation is responsible for epistemological dualism where a distinction is made between the knower and the known, between the subject and the object. James denounced such distinctions which make the relation of knowing the most "mysterious" thing in the world. He believed that experience, as an empirically given, can explain both mind and matter. The mystery of cognitive process is dissolved in the stream of conscious flow. One can feel ones feelings flowing inward and outward and can be aware of them immediately without any mediator, such as an "Ego".

James could not defend his ambitious theory. In his over enthusiastic analysis of experience, he brought in dualism in rather disguised form. This is why I called his theory covertly dualistic. This will become more clear as I set my reasons as to how James's theory lapses into dualism.

In this chapter I will analyse his theory of pure experience in general. This will lead me to point out especially as to why James theory collapses into dualism. For the purpose of my discussion I have isolated eight points. The discussion of them will reveal how James fell into the trap of dualism. The points of my discussions are as follows:

- 3.2.1. Experiences are not neutral as James claimed.
- 3.2.2. James failed to give proper reasons for why experiences at their initial stage are pure.
- 3.2.3. James brought in neuropsychological imagery to explain the continuity of experience.
- 3.2.4. His theory of relations only partly answered Hume.
- 3.2.5. Extrinsic analysis of an unwarranted experience--, mental and physical, is not applied to sequences but to points,
- 3.2.6. The functional explanation of experiences remain inadequate
- 3.2.7. Experiences are heterogeneous and not homogeneous as James claimed.

3.2.8. Experiences have intrinsic elements. His theory of knowledge by acquaintance further, inadvertently, supports this.

3.2.1. The Concept "Neutral": Two Approaches.

Approach: 1.

It is quite difficult to define the term "neutral". When, for instance, it is said that the car is in the neutral gear it means that the car if started would neither move forward nor backward but would remain stationary. Again, when it is said that Switzerland maintains a neutral foreign policy at the time of war, it usually means that she does not assist either of two (or more) belligerent states and thus stands aloof. In philosophy, when James used the term "neutral" to explain his plural facts he means that the plural facts neither side with materialism (which holds that everything in the world is made up of matter) nor with mentalism (which holds that reality can only be explained in terms of mind). Let us for the sake of convenience call the plural facts, i.e. "pure experience" "neither subjective nor objective". It is in this sense that pure experience is supposed to be neutral.

In order to prove that pure experience is not subjective, (unlike that of Humean notion of "ideas", and also his claim that the idea of necessity, essential to the concept of causation is derived from the felt force of our habitual associations of "perceptions of mind") James names his thesis "radical empiricism" and declared that this type of empiricism must neither admit into its constituents any element that is not directly experienced, nor exclude from them any element that is directly experienced. This claim clearly suggests that the experiences must be "directly experienced" in order to be truly radical. Now the question naturally arises: Directly experienced by what? The instant reply will be, "by an experiencing being which can at least feel", since the term "feel" is always associated with the term "subject". And since pure experience relies on the subject to be radical, we can therefore unhesitatingly say that it sides with the subject. Thus pure experience cannot be neutral, the way James claims.

To this James would reply that apart from one's own experiences there are experiences, such as the other peoples experiences and those experiences which have not been experienced. The term "experience" is not a neutral term, rather it is subjective. Experience cannot be something out there, it is such that in order to be known it is to be experienced.

Again, according to James pure experience is another name for "feeling or sensation" ("The Thing and Its Relations", p. 46). He held that only "new-born babes" and men in semi-coma from sleep, drugs and illness may have pure experience in the literal sense of a *"that"* which is yet to become a definite *"what"*. If sensation is the pure experience then it is possible for normal human beings to have experience in the sense of so-called "pure". "Sensation" (*a that*) before becoming a definite "perception" (*a what*), i.e. meaningful, is pure experience. But sensation is purely subjective, it belongs to the being who can have sensation. Sensation cannot be "out there", because what could be "out there" is the object of sensation, for instance a tea cup. Hence pure experience is, in a sense, subjective and not neutral.

But I am not arguing that James has in fact promoted a thesis which could be called a form of mentalism. He simply faced a terminological difficulty by referring the neutral facts to be "experience". If experience would have been simply mental, and confined to the person concerned, than sharing experience would have been difficult. According to James experiences are conterminous. This suggests that for which a father and mother feels similar pang at the illness of their child. By "similar" I mean that the pain is not numerically identical. The feeling of pain may be there, but one cannot feel the "raw feel" experienced by different individuals. Whatever it may be, one cannot doubt that there are certain experiences which are private to the individual concern and hence cannot be shared, and therefore cannot be claimed to be neutral.

Approach: 2.

In its epistemological use some ambiguity is attached to the concept of neutrality.⁴ There are two meanings which we may attach to the concept. They are, (i) neutral in a specified respect or reference, and (ii) neutral in the metaphysical or ontological sense.

In the first sense to regard anything neutral means In a specified respect or reference. According to Dewey in this sense the term "neutral" simply means that a certain things are neutral only with respect to the distinction of mental and material. In other words, one cannot carry the discussion further without proper specification, i.e. proper distinctions should be marked out by the terms "mental" and "material". Dewey wrote:

4. Dewey, J., "The Concept Of The Neutral In Recent Epistemology", pp. 161-163. In my second approach I will mostly follow Dewey, since his account seems quite convincing.

[B]efore discussing whether a certain term, say "experience," has subjectivistic or objectivistic implications, we might have to consider whether, taken without specific qualifications, it was not rather a neutral term, a term to be used "without prejudice". [p. 161].

This meaning of the term neutral is called the logical.

In the second sense, a term may be neutral metaphysically or ontologically. This suggests that a particular "stuff" is intrinsically neutral. In this case it is unnecessary to pin-point any specific reference in which the stuff is taken as neutral. As Dewey said:

[An] attempt is made to discover and describe a particular kind of material or stuff which may be called neutral exactly as a certain stuff may be called lead or wood. [p. 161].

Let us see in which sense James considered the term neutral. Since James's thesis is metaphysical thesis of neutral stuff we will take it that he regarded his concept of neutral in proper metaphysical sense. But certain ambiguity is found in his analysis of "experience".⁵ At times he seemed to identify pure experience with experience of a peculiar stuff. This is reflected in his claim that experience is pure because "it is made of *that*" which is not a *what*. By "that" he meant that an experience is made of space, of intensity, of flatness, brownness, heaviness, etc. These are the qualities which form the content of the pure experience. So in its form of purity an experience is not "empty", i.e. unstructured.

James also argued that, in its immediacy experience is pure and "unqualified actuality" which is yet "undifferentiated" into thing and thought. In its unqualified state it can only virtually be *classifiable* as an objective fact or as somebody's opinion about fact. [*Essays in Radical Empiricism*, pp. 13, 71]. Here the distinction of experience is made in reference to fact and opinion. The experience is neutral in reference to it.

Accordingly, it is evident that for James neutrality is not a matter of a peculiar stuff, rather it is to do with a classification made for a specific purpose or need. If there is a need a distinction is made, otherwise the distinction is not relevant. As Dewey said:

5. Cf., *Ibid.*, p. 162.

This position seems to me as sound as appeal to the hypothetical experience of the new born babe is trivial or misleading. Such "purity" as the latter possesses is something to outgrow as rapidly as the baby in fact does outgrow it. [p. 163].

This reflects that experience is not "pure" as James claimed.

3.2.2. The Concept "Pure"

In James's philosophy the concept "pure" is used to characterize the pristine nature of experience. It is on the basis of purity that he claimed that experiences are neutral prior to the subject and the object distinction. In its maiden journey an experience is simply *that*, empty but not impotent. Full of potentiality lies within the so called purity of experience. This is why James called it "blooming, buzzing confusion". But potentiality cannot belong to emptiness. There must be something which has the possibility to become, in James's term, *what*. Everybody knows the famous saying, "Ex nihilo nihil fit", which means nothing comes out of nothing. So James added that purity is a relative term. It does not mean complete emptiness, rather it means a "proportional amount of un verbalized sensation" the experience still "embodies". That is why James said:

The first sensation which an infant gets is for him the Universe.... The infant encounters an object in which (though it be given in a pure sensation) all the "categories of the understanding" are contained.... Here the young knower meets and greets his world. [The Principles, vol. 2, p. 8].

James's analysis also suggests that experience in its pure form is simply empty. Who can have such an experience? James held that only new born babies and men in semi-coma, from drug or illness are supposed to have experience in its true sense of pure. This is simply an hypothetical assumption he makes. Since one cannot communicate with the new borns or men in coma the fact seems to remain hypothetical. But doubt has been cast on the evidence that drug involved subject have "pure experiences". A.J. Ayer wrote of such an experience. Ayer was suffering from acute pneumonia when he had an "astonishing experience" which occurred in June 1988 when, the doctor reported, his heart beat stopped for four minutes.⁶ Ayer reported:

6. Hahn, Lewis Edwin, ed., *The Philosophy Of A.J. Ayer*, 1992, p. 43. Ayer has recorded his experience in two articles appeared in the London Sunday Telegraph for 28 August 1988 with the title "What I Saw When I Was Dead..." and the London Spectator for 15 October under the heading "Postscript to a Post-mortem". [pp. 43-44] Physiologically even if the heart stops for few minutes the brain do not stop functioning immediately.

The only memory that I have of an experience, closely encompassing my death, is very vivid. I was confronted by a red light, exceedingly bright, and also very painful even when I turned away from it. I was aware that this light was responsible for the government of the universe. Among its ministers were two creatures who had been put in charge of space. These ministers periodically inspected space and had recently carried out such an inspection. They had, however, failed to do their work properly, with the result that space, like a badly fitting jigsaw puzzle, was slightly out of joint. [*The Philosophy of A.J. Ayer*, p. 46].

The above passage throws light on host of problems, such as, personal identity, life after death, mind-body relation etc. Our concern here is simply that if people in a coma can have experience in the "literal" sense of the pure in James's analysis then Ayer's personal observation would falsify such a claim. Perhaps James as a doctor was aware of such a queer situation and that is why he emphasised the *relative purity* of pure experience.

Our discussion shows that experiences do have unverbilized sensations in their constitution. Only in an epistemic encounter these sensations tend to become meaningful.

3.2.3. Neurophysiological Imagery.

In Chapter Two and also in this chapter [3.2] I have mentioned that James has likened consciousness of self with "cephalic movements". In this section I will deal with how his knowledge of the central nervous system led him to analyse a "bit" of experience and its relation to other bits of experiences. A brief discussion about the central nervous system will give us a better insight into the matter.

The central nervous system, which is made up of the brain and spinal cord, is the body's control centre. It co-ordinates all its actions. Nervous systems are made up of special cells called neurones. A neurone contains certain basic parts. Each neurone has a nucleus, cytoplasm, and a cell membrane. The structure of the neurones are such that they are able to carry messages to and from the brain to different parts of the body. In order to enable them to carry messages from one neurone to the other, they have long thin fibres, called nerve fibres, stretching out of the cell body. The longest fibre is called axon and the shorter fibres are called dendrites. The dendrites

receive a message from the neighbouring neurone and pass it to the cell body and then along the axon. The axon then pass it on to another neurone.

There are millions of neurones which make up the central nervous system. When activated, the neurones co-ordinate the messages by taking them to the brain and then sending them back to the periphery of the body in a stream like continuity. For instance if I prick my finger I will feel pain, but the knowledge of the pain sensation will only be felt after the signal has been carried to the brain and the motor impulse sent back to the muscles. In other words the pain is only known as retrospectively, although in its instant action it was simply a prick.

This analysis of neurones, perhaps, impressed James. In his theory of "phenomenism", James admitted that an experience has parts similar to the parts, I suppose, each neurone have, which makes its structure. Similarly an experience has two distinctive parts, the objective and the subjective. James said that within the datum, "the one part is to the other, so will the datum itself in its entirety appear as the subjective part in the next datum which will contrast it with the objective part of its own content" (already quoted in Chapter Two). In this way the message from one experience will pass to the next and the next until we reach "the abstract notion of an inner part of the field *meaning* and *knowing* another... part". James held that the subject-object distinction is a matter of retrospection. It is when an experience becomes truly cognitive of *that*. At the initial stage a bit of experience was simply a *that* (a prick), and only in retrospection does it become a *what* (a pain).

There is another point which is important for explaining experiences and also the function of neurones. James was perhaps also impressed by the concept called "synapse". Neurones with their nerve fibres are not completely joined to the neighbouring neurones. Between each pair of neurones there is a small gap. These gaps are called synapse. Every axon of the neurones have hundreds of tiny vesicles. These each contain a chemical, called transmitter substance. When an impulse comes along the axon, it makes these vesicles empty their contents into the gap between the two neurones. The transmitter substance quickly spreads out across the tiny gap, attaches to the membrane of the relay neurone and triggers an impulse in the relay neurone. In this way the impulse is carried from one neurone to the other hence *cementing* the path way as it goes along. The location of the neurones are such that they could communicate through various path ways. From various paths it selects a particular path which would lead to a particular response, the most important of which

is that synapse ensure that nervous impulses only travel in one *direction*. We shall see that experiences have similar selective tendencies which make them to travel into a particular direction.

James at the beginning of his "A World of Pure Experience" regarded the philosophy of pure experience as a "mosaic philosophy". In the end of the essay he rejected the terminology because, James argued, in mosaics the pieces are held together by their bedding. He said that it is only the transcendentalists and the absolutists who prefer a neat and clean "bedding" type of philosophy for their purposes. James regarded this as a philosophy of "bad taste". In order to avoid the so called "mosaic philosophy", he described that the pieces are clung together by their edges. This description suggests that there are small gaps in between the pieces (experiences) quite similar to those of neurones. According to James, the continuous transitions when experienced between the pieces forms their "cement". The other important aspect of an experience is that they are not simply continuous but have "tendencies" to move from one direction to another through a specified path. This means that experiences have a sense of *direction*, as synapse ensures for the nerve impulses, which leads them to their fulfilled ends. This will become clear from the following quotation where James said:

[S]election... of certain lines of relation would... appear to be the actual subjective condition which permits experience to fall into so many different systems; whilst the objective condition would be the fact that a plurality of relations are there in the content, and may logically and possibly found and followed out. ["Seminar Notes", 1897-98, see Perry, *TCWJ*, vol. 2, p. 369].

This physiological knowledge about the nervous system has given James a better knowledge about the continuity, movement and conjunctive relation.

3.2.4. The conjunctive and the disjunctive relations.

In order to explain his theory of conjunctive relations James coined a phrase "feeling of relation", borrowed from Spencer. Spencer in his *Principles of Psychology* said that considered subjectively a relation

"itself [is] a kind of feeling - the momentary feeling accompanying the transition from one conspicuous feeling to another conspicuous feeling."⁷

For James relations are not something foreign in the stream of experiences. *Relations are parts of experiences*. Relations are "feelings", like experiences are "feelings". Although James accepted the Spencerian phrase, he rejected the idea that relations are limited to likeness, unlikeness, coexistence in space and sequence in time. According to James:

[R]elations are numberless, and no existing language is capable of doing justice to all their shades. ["On Some omissions of Introspective Psychology", p. 146]..

This prompted him to accept the notion of external relation in favour of the internal relations. His theory of conjunctive and disjunctive relations led him to discard the notion of relation held by Bradley and Hume's world of mere atomism with no real relations.

3.2.4.1. Relations Are External.

Bradley in his *Appearance and Reality* argued that the very notion of relation is self-contradictory and that this inconsistency alone can condemn "the great mass of phenomena," since space, time, causation, the self, all imply relations.

James held that the logic of realism urges relation to be external. Described by Russell as "the most important of all critics of Monism"⁸, James regarded Bradley's absolute as a "metaphysical monster" (*A Pluralistic Universe*, p. 46]. According to him, as absolute the world has no history, because the doctrine on which the absolutists lay most emphasis is the absolute's "timeless" character. On the other hand, for pluralists, time remains as real as anything, and nothing in the universe is great or static or eternal enough not to have some history. James was in fact influenced by Bergson, who maintained that "real time" is experienced as duration and apprehended by intuition, not through separate operations of instinct and the intellect. Although influenced, James had the originality to interpret the notion of real time in terms of felt relations. This is beautifully expressed by Perry. He wrote:

7. This is quoted from James's essay "On Some Omissions of Introspective Psychology", in *The Works Of William James, Essays in Psychology*, p. 145.

8. See, Passmore J., *A Hundred Years Of Philosophy*, p. 262.

Bergson,... took as his point of departure the logico-mathematical way of thinking, which, in neglecting *real time*, missed, he believed, the very essence of things. James did not,... begin with experimental psychology, but rather with British empiricism, which, in neglecting *felt relations*, also missed the essence of things. In other words, while for Bergson the crucial truth was temporal passage, for James time was only one of many cases of that transitivity or continuity which was *his* crucial truth. Both thinkers found the key to metaphysics in a certain aspect of conscious experience, namely, its continuity. [TCWJ, vol. 2, pp. 601-2].

Hence against absolutism James said:

Pluralism, in exorcising the absolute, exorcises the great de-realizer of the only life we are at home in, and thus redeems the nature of reality from essential foreignness. [A *Pluralistic Universe*, pp. 49-50].

James held that the absolute is useless for deductive purposes, because one cannot enter the phenomenal world with the notion of it in ones grasp, and name beforehand any detail which one is likely to meet there. The absolute, as an hypothesis, only functions retrospectively only, not prospectively. The *a priori* statements, unlike the empirical statements of science, do not give information about characteristics of objects in the world but merely show the various conclusions that can be derived from a given set of axioms. For instance, Berkeley's conclusions are *a priori* deductions from the premise "To be is to be perceived". Whereas, James argued:

Radical empiricism and pluralism stand out for the legitimacy of the notion of *some*: each part of the world is in some ways connected, in some other ways not connected with its other parts, and the ways can be discriminated, for many of them are obvious, and their differences are obvious to view. [A *Pluralistic Universe*, p. 79].

James admitted that Bergson had made him bold enough to repudiate intellectualists logic. In a letter to Strong, he wrote:

"Have you read Bergson's *Evolution creatrice*?.... he has killed the beast Intellectualism dead! And he has put the opposition to its categories in the right *place* to be defended-- in the *intervals*, namely, the "conjunctive" places, in which life actually goes on...." [TCWJ, vol 2, p. 604].

James, being a steadfast realist, rejected the realist distinction between the act and the object of the act, which was thought to dispose off idealism. In his *Radical Empiricism*, James argued that one cannot distinguish between act and object. Russell

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later conceded to James in his *The Analysis of Mind*. According to James, one who accepted radical empiricism will be saved from an artificial conception of the "relations between knower and known". One who regarded "pure experience" to be the only stuff of the world will realize that in the very bosom of the finite experience, every conjunction required to make the relation intelligible is given in full.

This radical acceptance of conjunctive and disjunctive relations further helped him to discard Hume's notion of psychic atomism. There is no doubt that James conceded that his philosophy of plural facts is "like that of Hume and his descendants". But admitted that it differed from the Humean type of empiricism which made him add the epithet "radical". This led him to depart from Hume's main thesis that,

"all our distinct perceptions are distinct existences... the mind never perceives any real connection among distinct existences." [*Treatise*, "Appendix", p. 636].

According to James, in experience both disjunctions and conjunctions are present. But Hume in accepting disjunction has omitted conjunction which, according to James, is true in the same sense.

3.2.4.2. Has James rebutted Hume?

The opinion varies. To some he has⁹, and to some only partly¹⁰. My opinion is that James has only partly answered Hume.

James's theory of the stream of consciousness is an excellent example as to how relations are felt immediately within the "*substantive parts*" (resting places) and the "*transitive parts*" (the places of flight) of the stream of thought. [See Chapter Two]. In his "A World Of Pure Experience", James with similar deftness has shown how conjunctive relations occur when only having a vague image of the "Memorial Hall" leads us to the vivid sense-perception of the Hall. The feeling of experience is such that any gap, if present, seems to be cemented in the process of transition. Of course James agreed that disjunctions are as real as conjunctions.

9. Sing-Nam Ten, in his essay titled "Has James Answered Hume?", said that James has answered Hume's question "squarely once and for all". See, pp. 159-167.

10. Smith, John E., in his essay on "Radical Empiricism" agreed that conjunctive and disjunctive relations are present in experience, but there are terms which cannot be related directly. Hence we have to introduce a mediating term. See, his *Themes in American Philosophy*, 1970, pp. 26-41.

The experience of continuity is found in the passage of one experience into another within the history of the same self.¹¹ For example one can set a particular goal for oneself and can map out the steps through which one can achieve and feel the instant satisfaction of reaching the goal. In such a process one is immediately aware of a continuous series of ideas and feelings distinctively flowing from each other and passing into each other in an orderly sequence. This is because one is "co-conscious" about his interior flow.

Disjunctions or breaks are felt when one tries to experience the feelings of others into which one fails to pass as one can into one's own feelings. For instance two persons, Salome and Sahir, may enjoy a football match with same enthusiasm and spirit. Salome can feel the enjoyment passing through her own self, but she doesn't feel the similar experience going through Sahir's mind. This is because her experiences do not pass to Sahir's the way they pass (and are felt) into her own. At best, Salome can make judgements by Sahir's gestures, movements, and other verbal and non-verbal signs and knows and is directly aware that Sahir is also having similar experiences, although not identical. In other words she conceptualizes the whole of Sahir's experiences through her own experiences. This break or disjunction is felt when one passes from one's own experience of continuity and sameness.¹² This is how James has answered Hume.

Smith argued that relations *are* found in experience, but some are *a priori* and cannot be derived from the flux of pure experience "without appeal to a synthetic or constructive activity on the part of the one who knows". This is because "the stream of experience is neither self-organizing nor self-interpreting."¹³ Seigfried disagreed with Smith and said that to regard experience as neither self-organizing and nor self-interpreting "encapsulates a basic misunderstanding"¹⁴. Seigfried said, the stream of experience cannot be reduced to organizer and organized. This is because in the immediacy of the instant field of experience there is no duality of thing and thought. He held that

11. See, Smith, p. 35.

12. Cf., *Ibid.*

13. *Ibid.*, pp. 37, 40.

14. Seigfried, C.H., "The Structure of Experience for William James", in *Charles Peirce Soc. Transactions*, vol. 12, 1976, p. 331.

"there is no *a priori* structures, but rather the interpretive effort which articulates experienced relations arises from a subsequent reflection on a unitary experience." [p. 332]."

The passage suggests that according to Seigfried experiences are "unreconstructed", borrowing a term from Perry. He claimed that James was right in claiming that only in retrospection can we determine the subject-object distinctions, which is not present in its initial stage. We know that James followed Shadworth Hodgson in claiming that two sub-feelings are required to be cognitive of an experience.

The question now arises: Why in retrospection and not in introspection can one have the immediate knowledge? We know that James used the method of introspection not only in his psychology but also in his metaphysics. Perhaps to avoid psychologism and to keep metaphysics a complete distinctive discourse, James preferred the term "retrospection". It should be noted that retrospection means looking back and introspection means to look within one's own self. As Price puts it, "even if it is always "retro", the point is that it is "intro"."¹⁵ It is to look back into one's own past experience and in so doing one needs to look *in* to look back. Therefore every experience which gets retrospected had to be introspected.

There is another point which we may recall, according to James, is "the relation itself is a part of pure experience". The intrinsic relations are required because experiences should not be thought of as a totally empty concept. Rather they are "potentially divisible into inward elements and parts". Every experience has "unverbalized sensations" which need to be organized and interpreted. Since the basic structure is present in every experience, although "vaguely", the subjective and the objective conditions are so related that they can "select" and organize, and tend to move from one datum to the other wherein it terminates. James of course would argue that "tendencies exist" but they are "*psychical zero*". At the same time he said that they are "often so vague that we are unable to name them at all" (*Principles*, vol. 2, p. 254). If the tendencies are psychical zero then how can they exist in "vague" form? Some sort of *a priori* vague tendencies are present in the structure of experience as the foundation of future possibility. An experience only then gets verbalized or actualized in a proper experienced situation. In its immediacy it is possibly *that* ready to be actually *what*.

15. Price, H.H., "Some Objections to Behaviourism", p. 79.

From this discussion it is clear that experience do have parts which are intrinsically related. It is through introspection an experience gets retrospected to be truly cognitive of *that*. That is, in a proper epistemic situation, the un verbalized sensations become meaningful. This will become clearer when I discuss how his theory of knowledge inadvertently confirmed this position.

3.2.5. The transition of experiences from one to the other run not in sequences but in points.

According to James the only function an experience can perform is to lead to another experience. This is because the only fulfilment we understand is the reaching of a certain "experienced end". Since the world of experiences are present to us as a quasi-chaos, an experience must have the *tendencies* and sense of *direction* to move from one to the next by many possible paths. The paths which terminates and results "are highly advantageous paths to follow" ("A World of Pure Experience", p. 32). These paths are the "functional substitute" for another. The movement is carried out in point to point because of various paths. It seems that the experience needs to be in the right path so it selects from various experiences which way to move. It is only then that they agree in function when one experience leads to the same end as another.

If the movement is in sequence there is an order of succession, i.e. coming after or next. Here the set of things belong to each other on some principle of order, which is *a priori*. In other words sequence means series without gaps. James rejected such an analysis in which experience needs to follow a prestablished path to reach a goal. There is no particular order and experiences are in some chaos. They only get ordered or classified for specific purposes. This is another reason why James has rejected the mosaic philosophy where mosaics are held together by their bedding.

A point is single and particular. Every experience is unique in its form and has the peculiarity of getting distinguished into subject-object. The individuality of experiences is such that they are distinctively attached to each other by their edges. The minimal gap present due to arrangements are cemented in an experienced transition. As James said:

Whenever certain intermediaries are given, such that, as they develop towards their terminus, there is experience from point to point of one direction followed, and finally of one process fulfilled, the result is that *their starting-point thereby becomes a knower and*

their terminus an object meant or known. [Ibid., p. 29. James's italics, and my underline].

The passage reveals that in an analysis of an experience, what we call knower and known, or mental and physical, is applied to points and not to sequences. This further suggests that each experience has some sort of inherent structure which guides them through a highly advantageous path.

We may further argue that experiences are atomic. Following Mach, James, accepting the anti-atomistic thesis of physics, rejected the atomism of Hume. [See Chapters 1 and 2]. James, both in his psychology and metaphysics, argued that "consciousness" or "experience" is not "chopped up in bits" and is not "loose or separate", as if it had no manner of connection. [*Principles*, vol. 1, p. 239; "A World of Pure Experience", p. 23]. Despite anti-atomism James used such word as a "bit of experience" ("Does "Consciousness" Exist?", p. 7). John Wild, in his *The Radical Empiricism of William James*, questioned that describing experience as "a bit", "a unit", or as "so many little absolutes",- "is this not falling into that abstract atomism ... which he attacked so vigorously in the *Principles*, and still rejects [*Essays in Radical Empiricism*]" (p. 367).

James's acceptance of atomism further supports the above discussion that the transition from experiences from one to the other run in points.

3.2.6. The functional explanation of experiences remain inadequate.

In order to dispose of dualism James provided a functional analysis of experience. There are not two kinds of experience, but its function may be of two different kinds. As we have earlier seen, James provided an interesting example where the function of paint can be explained without bringing any dualism. The paint in a pot could be a saleable matter, or could represent a feature in a picture and perform a spiritual function.

The notion of "function" gives rise to the question: Why an experience functions in one particular way and not other? In order to show that consciousness does not exist James argued that what we call consciousness is simply a sort of function, and not a

so called entity, as Descartes suggested. Woodbridge¹⁶ rightly pointed out that we have been "tricked" by allowing ourselves to be influenced by forms of speech in our acceptance and rejection of consciousness. There are at least two questions that could be asked about consciousness. They are: What is consciousness? What is it to be conscious? These two questions are generally identical. The linguistic analysis is such that one responds to the first one by saying that consciousness is a stuff. The second one alludes to its function. This disjunction between the two questions appealed to James. As Woodbridge wrote:

James's challenge brought some calm to many of us in spite of the fact that it made "consciousness" a *function* of the *stuff* of "experience". [p. 561].

The problems of consciousness, according to Woodbridge, are many, but most important of them is the problem of knowledge. It is not a problem of cognitive relation but of discovering and analysing the factors which control the elaboration of what we are conscious of into systematic and communicable expositions. Therefore the disjunction "stuff or function" is misleading. Woodbridge said:

For consciousness is seeing, hearing, and the rest, and seeing and hearing-- and the rest appropriately-- are sight seen and sounds heard, and in what sense these are functions of anything is hard for me to discover They are materials of knowledge. [p. 567].

The above passage reveals a phenomenalist interpretation according to which the appearances presented to the senses are the ultimate foundations of all our knowledge. But James tried to translate consciousness into cognitive relations. He admitted that the attitude of the psychologists towards cognition has produced the idea that there are two irreducible elements in the process of knowing. They are knower and the known. But if analysed properly the knower and the known become the two functions, in two different contexts, of the undivided experience. This brings us to the initial question as to what makes an experience function in two different ways in two contexts.

James in his *Principles* regarded attention to be the "reproduction of the sensation from within,..." (vol. 1, p. 477). We have seen that in his pre-radical position he referred to the term "anticipation" by which we can explain what "signifying" and "knowing" mean. By anticipating both present and future experiences we can know what is about to happen. Some sort of "dim image" must be present which our

16. Woodbridge, F.J.E., "The Problem of Consciousness Again", in *The Journal Of Philosophy*, vol. XXXIII, No. 21, 1936, pp. 561-568.

attention discriminates before any function to occur. For this reason James stated that the knowledge of sensible realities come to life *within* the tissue of experience. Thus he argued the "terminal object" or the later vivid sense perception of the initial dull image " is what we had "in mind" from the outset" ("A World of Pure Experience", p. 29).

This is also clear from his example of "Memorial Hall". In order to reach Memorial Hall one might have a "very dim image of the hall" though it makes no difference in its cognitive function, "be it what it may, its knowing office". It will be truly cognitive when the vague idea "has passed by conjunctive experiences of sameness and *fulfilled intention*". It suggests that in the content of an experience the terminal object in its dim form is present from the beginning. This is why every experience tends to function in one particular way and not in another. James in the guise of functional distinctions of experiences had actually produced metaphysical distinctions.

3.2.7. Experiences are heterogeneous and not homogeneous as James claims.

James categorically stated that what we call "things" and "thoughts" are not at all fundamentally heterogeneous. They are made of one and the same stuff. The distinction between them is not in the nature of primal stuff but only its arrangement. In other words an experience is both "subjective and objective at once".

The term "homogeneous" means "consisting of parts all of the same kind". The term "heterogeneous" means "composed of diverse elements". If James was thinking that a bit of experience is homogeneous and not heterogeneous he was certainly referring to the internal structure of the experience, now object and now subject. When James said that "experience, I believe, has no such inner duplicity", he was in fact pointing that an experience is constituted out of homogeneous elements. If James conceded that an experience is heterogeneous then that would mean that the experience is composed of more than one elements. Whatever the situation may be there is no doubt that an experience does have parts but they are of the same nature.

On the principle of homogeneity James argued that the plurality of experiences are of same nature, and "experience" is the neutral name given to the sensible totals. Now the question arises: Is James's thesis of pure experience plural in the weaker sense or stronger sense? I would call it weaker if each bit of experience resemble and in fact identical with every other bits of experience in its constitution; where the principle of

homogeneity will count as one of the conditions. I would call it stronger if each experience differs from the other experiences in its constitution, although retains internal homogeneity to the individual experience concerned. By internal homogeneity I mean that structurally an experience is similarly constituted.

Now, in one of the passages I have earlier quoted in chapter two James mentioned that there is only one primal stuff of which everything is composed and that stuff is pure experience. In other passages he claims that "there is no *general* stuff of which experiences at large is made". This means that each and every experience is not made of one kind of thing. In the next sentence James said that "there are as many stuffs as there are *natures*" in the things experienced." Experience is only a collective name for all these sensible natures. From the above consideration we can easily deduce that there must be different stuffs and "experience" is simply a collective name; a name just named on the principle of homogeneity. This will be also clear when we discuss what James means by the phrase "the given".

When James regarded experience as "the given" he simply did not refer to the phenomenal qualities or sense qualia. His concept of "the given" is wider in scope¹⁷ than from the sense data philosophers and phenomenologists. In James's philosophy "the given" includes both universals and particulars. Beside the patches of colour, odours, tastes etc. the given also includes the entirety of physical objects¹⁸. Since two persons can perceive the same object the construction of physical objects does not arise.¹⁹ This is further confirmed by Perry, who noted that James did not try to identify the thing with the sum of its appearances because

"he recognized a general philosophical demand that the thing should have some sort of significance beyond the multiplicity of bare data."
[TCWJ, vol. 1, p. 498].

17. See, Madden, H.E., and Chakravarti, C., "James's 'Pure Experience' versus Ayer's 'Weak Phenomenalism'", in *Transactions of the Charles S. Pierce Society*, vol. 12, 1976, p. 8.

18. Here James differed from Russell. For Russell physical objects are constructions out of sense-data and therefore knowledge by description.

19. Cf., Madden, and Chakravarti, p. 8. This also discloses the fact that James was not a phenomenalist as Ayer, in his "Radical Empiricism" [in *The Origins of Pragmatism*, 1968], suggested (see pp. 216, 224-42, 219-93). Ayer argued that James's strong phenomenism was a failure, but thought that the weak version of phenomenism "gives him [James] most of what he wanted [from the doctrine of pure experience]" (p. 293; cf., Madden and Chakravarti, p. 4). For a phenomenalist what we are directly acquainted with are sense-data and not physical objects. For James there was no need of constructing physical objects. Madden and Chakravarti had deftly shown that James's thesis of radical empiricism was not a phenomenism. Perry in his *Present Philosophical Tendencies* also regarded James a phenomenalist. [p. 365].

This shows that James's theory is plural in the stronger sense of the term because each experience does not possess the same elements. Some experiences are entirely physical since they represent the entirety of physical objects. Similarly there must be certain experiences which are entirely subjective. For instance the experience of pain felt by me is entirely private to me and can only conceptually be known by others. This means that there are two types of experiences, those representing subjective and private, and those representing physical and public experiences.

According to James, a bit of experience can be both subjective and objective at once. In this case it means that an experience is a *qua* thing and *qua* thought. But James claimed that there is no internal duality in the constitution of an experience. If this is so then how can an experience of a physical object, say a chair, having stable characteristics be also entirely mental, having an unstable and fluid character at the same time? It is possible that at time t_1 the elements in an experience can be exposed to physical laws and at time t_2 to psychological laws. But if an experience is mental and physical at the same time this means that parts of its elements act as physical and part as mental. James admitted that physical and psychical are heterogeneous elements which are fused together. He said:

[T]hey are so *little heterogeneous* that if we adopt the common-sense point of view, if we disregard all explanatory inventions-- molecules and ether waves,... which at bottom are metaphysical entities... then ... this *sensible reality and the sensation which we have of it are absolutely identical one with the other at the time the sensation occurs*. ["La Notion de Conscience", p. 2263. Italics are mine].

This admission reveals a few important things. First that physical and mental are heterogeneous. Secondly, experiences are not metaphysical entities like those of molecules and ether waves. But James admits that experience has both stable and fluid characteristics which are the peculiarities of the molecules and ether waves. If experiences are not metaphysical are they psychical? Or does he mean by metaphysical simply physical? Thirdly, sensible reality, a physical object, sensation, and mental representations of the object, are identical. According to James my percept of the Memorial Hall and the Hall as a physical object are numerically the same. At the same time he admits that

"apart from colour-blindness and such possibilities we see the Hall in different perspectives." ["A World of Pure Experience", p. 40].

If we have different perspectives from different places then how is it possible that the percept of the Hall, which varies according to the laws of perspective, and the physical Hall in its entirety be identical at the same time? This is only possible when the experience has two equal parts, one representing the entire physical object and one the entire mental image of it.

James also said that when two or more people view the Hall at the same time, then,

"whatever differing contents our minds eventually fill a place with, the place itself is a numerically identical content of the two minds,..." [*Ibid.*, p. 41].

If we see the Hall from two different places at the same time, we will see the Hall in different perspectives. More over the place will also be of a different perspective. As a result my perspective of the place where the Hall is situated will be different from the perspective of the place of others. How then can the place be the numerically identical content of two minds?

Since experience has parts, the subjective content and the objective content are so organized that what we call physical or psychical are numerically the same. It is in this sense that an experience in its entirety represents matter and in its entirety represents mind

3.2.8. Experiences have intrinsic elements-- his theory of knowledge by acquaintance further inadvertently supports this.

I have already discussed in chapter two that James's main aim prior to his metaphysical theory of radical empiricism was to eliminate the epistemological gulf created by the dualist theorists. Following John Grote in his distinction of two kinds of knowledge-- "knowledge by acquaintance" and "knowledge about"-- James tried to show that the truth-relations fall inside the continuities of concrete experience. By this he thought he had achieved two things. They are (i), experiences are not discrete as Hume thought and that they are continuously related to each other, and (ii), the cognitive relations are such that the epistemological chasm disappears. It is only in retrospection that an experience becomes meaningful because at its first instance there is no subject-object distinction. The distinction is generated only when the subjective part in the next datum contrasts with the objective part of its own content.

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I have also said in chapter two that James initially claimed that knowledge by acquaintance such as feelings are "dumb" and "helpless" because they can neither name or classify. In other words, acquaintance with a thing is the limitation to the bare impression which it makes. Therefore there is no cognition. Whereas an acquaintance with an experience does not provide knowledge. In order to have knowledge an experience has to be retrospected by other experiences in the stream of experiences. It is in "knowledge about", where the transition takes place from one experience to another, that we have cognition. The initial term becomes the knower and the point of terminus becomes the object known. At the same time James admits that knowledge by acquaintance is not "psychical zero" and that knowledge by acquaintance and knowledge about are reducible to each other. From a cognitive point of view, a feeling is "most positively and definitely qualified inner fact".

I have earlier mentioned that this explanation results in two difficulties which in fact James tried to resolve. First if feelings are cognitive by themselves then the so called transition cannot take place, because the transition occurs only in knowledge about. It is only through transition from one experience to another James explained the concept of "continuity" and "felt relation". This suggests that there is no stream-like continuity in the experiences and that each experience is discrete. In other words, it further proves, experiences are similar to Humean atomic sensations. Secondly, If a bit of experience is cognitive in itself then the question of appropriation and retrospection does not occur. It is only in retrospection the subject-object distinctions occur. James had argued that a bit of experience can be both knower and the known, the mental and physical at the same time. This suggests that the distinctions occur "within the datum" where "the one part is to other". The following passage will further enlighten us as what James means:

A feeling feels as a gun shoots. If there be nothing to be felt or hit, they discharge themselves ins blaue hinein. If, however, something starts up opposite they no longer simply shoot or feel, they hit and know. [The Meaning of Truth, p. 17].

There is no doubt that experiences have parts. If one part is to the other then the two parts are distinctively different from each other. One part represents matter the other mind. James holds that "relations" are parts of experience. As its parts, they organize and arrange the different elements present in experience. In the part, representing matter, the elements are stably related to each other. The elements in the other part

are fluid and unstable. This is what James called mind. Therefore a bit of experience is both mental and physical at once.²⁰

3.3. James and Spinoza.

The question now arises: If an experience is capable of representing mind and matter and has relations as its parts, then why is it necessary to have innumerable experiences of a similar kind? One of the plausible reason may be his critique of Spinoza's so called idealistic monism.

Spinoza's monistic theory can be identified with a type of monism called "substantial monism". According to this theory the apparent multiplicity of substances is really a manifestation of only a single substance in different states or different points of view. Spinoza in his *Ethics*, defined "God" and "Nature" in synonymous terms. According to him, God is not a personal, creative agent, separate from the universe that he creates. God is being absolutely infinite, that is, a substance consisting of infinite attributes only, two of which are known by the human intellect. They are "extension" and "thought". To put it in Spinoza's words:

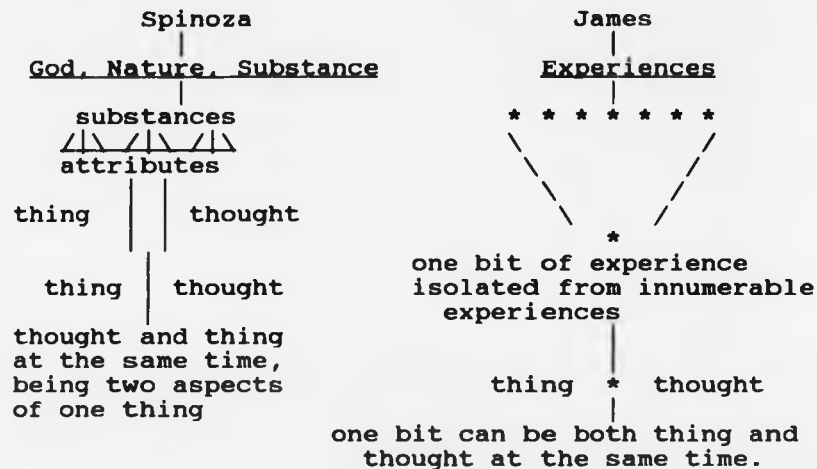
The mind and body, are one and the same individual, which is conceived now under the attribute of thoughts, and now under the attribute of extension.²¹

In other words "thoughts" and "extensions" are the two aspects of the same thing, now a thing and now a thought.

But James is critical of this account. Though he speaks of one stuff, the experience, it is the collective name of innumerable experiences. Where each experience can be simultaneously a "thing" and a "thought". We can represent both the views in the following schema:

20. I shall return to this discussion in Chapter Six to show that Russell also followed James in admitting that a neutral event admits of both physical and psychical elements, thus leaving it covertly dualistic.

21. Boyle, A., trans., *Spinoza's Ethics And On The Correction Of The Understanding*, p. 58. Italics are mine.



What James disliked about Spinoza's theory is that the substance which he speaks of is all thinking or mind oriented. But James's experience is, as he claims, neutral. Again Spinoza deduced the multiplicity from single stuff, whereas James explained multiplicity by plural facts. But Spinoza explained that a single substance has attributes belonging to both mind and matter. To James one bit of experience is both mental and physical when related to other experiences. It is not difficult for the stuff to be thought and thing at once. How can, for James, one single bit of experience be thought and thing at once and now? It is not difficult either for James. For an experience to be cognitive it does not always require a second experience because feelings are not psychical zero. By accepting dualistic epistemology James accepted metaphysical elements (mental and physical) within the structure of pure experience. It is not difficult for an experience to be both mental and physical at once.

I should not say that James's theory is at bottom pure Spinozism. For Spinoza the relations between mentality and materiality shows that the possession of either may entail that of the other.²² The fact is James could not totally disassociate himself from Spinozism. He tried in vain by bringing in a plurality of experiences. In the "open universe" where the new experiences are constantly "leaking in", James collapsed in a

22. Cf., C.D. Broad, *The Mind And Its Place In Nature*, p. 642.

disguised form of dualism. Unlike that of Spinoza, for James it would be that the possession of mentality or materiality may entail neither the possession nor the absence of the other. An experience can belong to mind in a particular arrangement. In another arrangement it can exclusively belong to matter. Since an experience can figure in both the groups James, in his over enthusiastic analysis of experience, tried to prove that a single experience, if need be, can be both mental and physical at the same time. There is no need to accept two kinds of distinct substances to explain the physical and the psychical distinction in Cartesian style.

3.4. Conclusion.

James failed in his effort to dispose of dualism. He could not fill the epistemological chasm without admitting mental elements together with the physical ones. His neutral experiences were a mixture of subjective and objective ingredients. Moreover the experiences were left as discrete as Humean atomic sensations. Although he only partly answered Hume with regard to experienced relations, he could not make relations external to experiences. A bit of experience became a "qua" thing and a "qua" thought. As a result he brought in dualism in a disguised form, which I call covert dualism.

CHAPTER 4.

**Russell's Early Commitment to Neutral Monism:
A Passage From Dualism to Phenomenalism.**

... if we cannot be sure of the independent existence of objects, we cannot be sure of the independent existence of other people's bodies, and therefore still less of other people's minds,.... Thus if we cannot be sure of the independent existence of objects, we shall be left alone in a desert- it may be that the whole outer world is nothing but a dream, and that we alone exist.

[Russell, "The Existence of Matter", in *The Problems of Philosophy* (1912)]

4.1. Introduction.

This chapter traces the development of neutral monism in Russell's philosophy before his true commitment to the theory. Between 1912 and 1921 Russell shifted from outright dualism to a half-hearted phenomenalism and finally to neutral monism. My purpose is to explore how and why such a shift took place in his philosophy. Before going into detail I will mention the most relevant works of Russell and the chief shifts detectable in these works. They are as follows:

1912, *The Problems of Philosophy*: Russell was concerned about the knowledge of the physical objects and how it is possible to have access to them, and therefore distinguished between knowledge by acquaintance (of sense-data) and knowledge by description (of physical objects). Knowledge of physical objects was by inference from knowledge by acquaintance.

1913¹, "Neutral Monism": Russell, accepting Moore's analysis of perceptual experience, believed in the distinction between act and object of the act and hence did not accept James's account of knowledge in his attempt to get rid of consciousness, the mental. He thought neutral monism failed for several reasons; the problems with James's account of knowledge was one reason Russell gave prominence.

1914, *Our Knowledge of the External World*: (The period of logical atomism extended upto 1921.) Phenomenalist approach for the verifiability of physics. Physical objects are constructs from sense-data, not inferences from them, so knowledge of physics is made easier to explain. Against phenomenologists he maintained the reality of unperceived events, the sensibilia. He reduced sensibilia into "ideal" elements and defined them in terms of actual elements, i.e. sense-data.

1. I have dated the essay 1913 because it appears that Russell wrote this in May, 1913 and later published in the *Monist* in 1914. The source of information is *The Collected Papers of Bertrand Russell*, vol. 7, pp. xxiv and xxvi.

1914, "The Relation of Sense-data to Physics": Less directly concerned about epistemology. Russell accepted the metaphysical hypothesis that sensibilia and sense-data had the same metaphysical status and were the ultimate constituents of matter. He justified his claim by the *principle of continuity*.

1915, "The Ultimate Constituents of Matter": Retained a similar position as 1914. Russell maintained the dualism between sense-data and sensations, the mental particulars as the ultimate constituent of mind.

1921, *The Analysis of Mind*: Russell attempted to give an account of mental via neutral stuff, the wholly empirical entities. He accepted James's account that, in perception, there is no distinction between acts of consciousness and their non-mental objects. But his account of the mental required "images", which are wholly subjective, and his account of matter required unsensed "sensibilia", which are wholly physical.

1927, *The Analysis of Matter*, and *An Outline of Philosophy*: The influence of Einstein and Whitehead led Russell to become committed to the ontology of events. Both of these books also reveal his desperate attempt to save neutral monism by restating most of his previous arguments. He exploited science in his favour. These works of Russell's are "scientific philosophising" in the field of epistemology.²

1940, *An Inquiry into Meaning and Truth*: Russell's interest shifted to language, truth and verification, which he, of course, mentioned in many of his earlier works. He became interested in the definition of "meaning" and in the relation of language to fact. His views on egocentric particulars, i.e. the indexicals, takes a turn different from that which he had first put forward against the neutral monists in 1913.

1948, *Human Knowledge Its Scope and Limits*: Russell declared that all the data of physics are also data of psychology, but not vice versa. Russell no longer called the data neutral. He presented a variety of inductive principles in order to justify inferences to unknown events from known events.

Russell very aptly wielded Occam's razor to develop his theory. While detecting the chief shifts in these works I have come across three important phases of Russell's philosophy culminating in neutral monism. They are dualism, (1912-1913), phenomenalism, (1914-1919), and neutral monism, (1921-1927). I will discuss the first two phases in this chapter. The last phase, i.e. his commitment to neutral monism, will be discussed in chapters five and six. This chapter will consist of three sections.

2. Op.cit., Braithwaite, p. 130.

Section A.

4.2. DUALISM.

Introduction.

Russell's main motive in his *The Problems of Philosophy*, 1912, was to explain how we have knowledge of the physical objects and epistemological access to them. In so doing he made a bifurcation between mind and matter, not in a Cartesian style³, but in a style which could be called "barely dualistic". As we proceed, it will be clear that Russell's concerns were primarily epistemological and that this explains the differences between his type of dualism and Descartes.

4.2.1. DESCARTES' DUALISM.

Dualism is a theory according to which mind and matter are two independent sorts of thing, neither type being reducible to the other. Such a dichotomy is mostly initiated by theologians and metaphysicians. Descartes, influenced by medieval theology and the then advancement of science, left a dualistic legacy. Descartes set forth his influential and provoking metaphysical doctrine in his *Meditations on the First Philosophy* and *A Discourse on Method*.

In his thesis Descartes dealt with two issues: (1), the nature of mind and matter and (2), the nature of the self and its relation to one's body. These issues are closely related to each other.

According to Descartes there are two substances, mind and matter, which exist entirely independent of the other. One is mental or spiritual substance and the other is physical or material substance. "Mind stuff" and "matter stuff" differ in their nature, and the difference between the two could be characterized by their varied attributes. The distinctive attribute of physical substance is extension, and therefore it has its own shape, size, a position in space and parts. The mental substance, on the other hand, is distinctively characterized by thought and devoid of extension. It has no shape, size or location and therefore the question of divisibility does not arise. But this independence of the two substances is relative, because both depend on God.

3. I differ with Anthony Quinton who says that Russell in his *The Problems of Philosophy* set forth "qualified Cartesian Dualism" ("Russell's Philosophy of Mind", p. 80).

which is an independent being, the absolute substance. Regarding spiritual substance, Descartes held that since the whole nature of it is to think, then mind is a thing which thinks, which doubts, affirms, wills, understands, feels and imagines. Moreover, although mind is intimately conjoined to the body, they function independently of each other; and even if separated they will function uninterruptedly. Death may destroy the body but the mind will survive and continue to exist and function. But Descartes was compelled to introduce the concept of interactionism in order to distinguish what is mind from what is body. Unlike the mind, one can see and touch the body as the proof of its existence. For instance, one can see a sore in a particular area of the body, but one cannot locate the feeling of pain unless it is said where this occurs. Although mind and body are distinct Descartes tried, through interactionism to prove the existence of one by indirect reference to the other. For example, he remarked:

But there is nothing that this nature teaches me more expressly or more sensibly than that I have a body, which is ill disposed when I feel pain, which needs to eat and drink when I have feelings of hunger or thirst, etc. And therefore I must in no way doubt that there is some truth in all this. [*Discourse on Method And the Meditations*, p. 159].

Here he tried to prove the existence of the body. In a similar fashion he showed how mind exists. For Descartes, the interaction between mind and body takes place in the pineal gland of the brain. In his *The Passions of the Soul*, he explains that although the soul is joined to the entire body, its principle seat is in the pineal gland which exists in the middle of the brain. From here the soul communicates through all the remainder of the body by means of the animal spirits. Regarding how the soul and the body act on one another, Descartes says, the communication with the body takes place the moment animal spirit comes into contact with the soul and hence activates nerves, muscles, which connect all the parts of the body. In return, the body reacts with the slightest movement of the gland by the soul and pushes the spirits towards the pores of the brain by means of which it brings about movement in the organs of the body.⁴

This theory of Descartes received adverse criticism from various philosophical schools. Here I am concerned with how Russell reacted and partially accepted his views.

4. Cf. Eaton, Ralph M., ed. *Descartes Selections*, pp. 374, 375.

4.2.2. Russell's Reaction to Descartes.

Russell in 1894 in a Cambridge essay⁵ claimed that Descartes's argument that imagination, by which material things are conceived, can convince one of their existence, "gives no ground whatever for believing in a material world as distinct from the spiritual: there is no reason why extension should not been referred to the perceiving subject alone." ["Paper On Descartes", p. 153]. In the next paragraph Russell argued:

Descartes's entire rejection of sense as a source of knowledge makes his subsequent dualism even more surprising. He points out the possibility of deception by the senses, in dreams for instance, and when pains are felt in amputated limbs: from these he ought to have concluded that we have no right to affirm a world of extended objects, but he fails to take the final step and considers only the secondary qualities as due to the imagination. [Ibid.]

Russell's theory of neutral monism did not result from a sudden change of mind but from a long period of contemplation. The constitutive phase began when he attempted to reduce the gap between mind and matter but failed for various reasons which I shall discuss shortly. Though less successful one should not undervalue Russell's effort, which I think left his 1912 position to be *barely dualistic*. Commentators, especially Stace, Ayer and Quinton⁶ regarded Russell in 1912 as a psycho-physical dualist.

As against this, I will argue that Russell was not a dualist in Cartesian style, rather that he oscillates between Descartes' thesis of intuitive self consciousness and Hume's thesis of no knowledge of self. This is because, as I have mentioned earlier, his main concern was to explain how one can have access to physical objects in order to have knowledge of them. He uses the word "know" in two different senses. In one of the senses it could be used in opposition to error, the sense applies to ones beliefs and convictions. The other sense of "know" applies to the knowledge of things. Russell explained the distinction between propositional knowledge and non-propositional knowledge in order to develop his technical distinction of knowledge by acquaintance versus knowledge by description, parallel to that of the French distinction, "connaitre" and "savoir" or the German, "kennen" and "wissen" respectively. Thus

5. "Paper on Descartes" (unpublished), written in 1894 for Ward's course on the history of philosophy. Now published in *The Collected Papers of Bertrand Russell*, vol. 1.

6. See, Stace, W.T., "Russell's Neutral Monism", pp. 353-384. Also Ayer, A.J., *Russell and Moore: The Analytic Heritage*, and Quinton, *op.cit.*

Russell distinguished between things known immediately without an inference, and those known through inference.

4.2.3. Dualism in Russell (1912-1913).

It was in 1912 that Russell made an unsuccessful attempt to narrow the gulf between mind and matter. Accordingly he picked up the term "sense-datum" and its relation to physical objects from the writing of G.E. Moore. [See "Preface", *The Problems of Philosophy*]. Russell thought that "sense-datum", apparently a neutral term in comparison to "ideas", "sensations" and "impressions", would solve our knowledge of physical objects and how it is possible to have access to them.

Russell maintained that one can never have acquaintance with objects, even very near to one's sight, as tables, chairs, shoes etc. They are known only by description. What one is acquainted with are the "sense-data" which constitute the appearance of the table or the chair or the shoe. This is "knowledge by acquaintance", as Russell explained:

Thus in the presence of my table I am acquainted with the sense-data that make up the appearance of my table its colour, shape, hardness, smoothness, etc.; all these are things of which I am immediately conscious when I am seeing and touching my table.... Thus the sense-data which make up the appearance of my table are things with which I have acquaintance, things immediately known to me just as they are. [*Ibid.*, p. 25].

According to Russell, the knowledge of the table was the kind which one should call "knowledge by description", i.e. inference from knowledge by acquaintance. But he argued we do have direct access to the sense-data which make up the appearance of the physical object.

As regards to this the question arises: what is the "sense-datum" and what is its status in Russell's philosophy of 1912? The answer to these questions are important because this will illuminate on Russell's dichotomy of mind and matter and his understanding of dualism as being distinct from that of Descartes.

Russell regarded "sense-data" to be the name of things

"... that are immediately known in sensation: such things as colours, sounds, smells, hardness, roughness, and so on." [P. 4].

A certain ambiguity arises by regarding "colour", for instance, as sense-data. What one is actually aware of in sensation is a particular patch of colour, say green. The term colour is a general term which includes all types and shades of colour to form a whole class. The colour green is an attribute common to many subjects, e.g. grass, leaf etc. I take it that it is particular colour patches, etc. which Russell meant by sense-data. For after his discussion of sense-data he continued:

In addition to our acquaintance with particular existing things, we also have acquaintance with what we shall call *universals*, that is to say general ideas, such as whiteness, diversity, brotherhood, and so on. [P. 28].

Sense-data are the particular existing things with which one has acquaintance. He used "sensation" differently from sense-datum, saying that

"... the colour is that *of* which we are immediately aware, and the awareness itself is the sensation." [P. 4].

Russell also distinguished sense-data from physical objects. The physical object, which is physical, is constructed out of sense-data, and therefore is purely inferential. He thus made a triple distinction between: the act of being aware, that is the sensation; an appearance of the table, i.e. sense-datum; and the physical object, e.g. table. In making such a triple distinction Russell had, in fact, accepted Meinong's view that in sensation there are three elements. They are the act, the content, and the object. Later we will see how he eliminated these distinctions in order to accept the theory of neutral monism. [See 5.2.; 5.2.1.].

From the above consideration we can isolate sense-data as distinct from sensation and physical object. This leaves us to investigate the status of sense-data, which are "signs of the existence of something independent of us and our perceptions" (*The Problems*, p. 13). But this independence is partial because sense-data depend upon two causes, namely, physical object and the eye, nerves and brain of the person who sees it. As Russell puts it:

[S]ense-data are to be regarded as resulting from an interaction between the physical object and ourselves. (*Ibid.*, p. 48).

By describing them thus, the promissory tone of neutrality departs leaving the status of sense-data to a somewhat ambivalent position. I say this because it was in 1912 that Russell first attempted to close the gap between physics and perception. [*My Philosophical Development*, p. 78]. The ambivalent position of sense-data is due to Russell's over-ambitious epistemological plans. The transparency of sense-datum depends on the real presence of an observer otherwise the absence of an observer would mean the ideal presence of sense-datum, which Russell avoided for a good reason. He had rejected the Berkleyan idealism and did not want to fall into a similar trap.

Sense-data seem to be something intermediate between physical objects and sensations. Hence, two very important questions at once arise: namely, (i) what is a physical object, if not sense-data? (ii) Does the appeal to sensations, distinct from sense-datum and the physical object suggest the existence of a separate entity? Consequently the answer to these questions will reveal how his dualism differs from that of Descartes'.

I will begin with the first question. According to Russell we do not have direct access to a physical object, but only to its appearance, i.e. sense-data. He contends that if physical objects exist, apart from sense-data, then the agglomeration of all physical objects is called "matter" (cf., *The Problems*, p. 4) a name given to something which is opposed to "mind" and is to be thought of as occupying space and is devoid of thought or consciousness.

The sense-data which make up the appearance of the physical object are in fact private to each separate person. At any given moment each individual has set of sense-data through his different senses. For instance the visual data can be gathered through the sights we see, the audible data from the sounds we hear etc. These data are correlated with the various data of other senses which forms the private world of each individual. [See 6.2.1.]. Each individual thus has different sense-data. But two individuals can have sense-data with very little difference. For this there must be something neutral to different observers which gives rise to similar, but not identical, sense-data in order to characterise that particular thing, say, the table. Russell called these "public neutral objects", which are in some sense, known to many different people, and of which sense-data are appearances. These public neutral objects are physical objects which causes sensations. Russell wrote,

"although different people may see the table slightly differently, still they all see more or less similar things when they look at the table, and the variations in what they see follow the laws of perspective and reflection of light, so that it is easy to arrive at a permanent object underlying all the different people's sense-data" (*The Problems*, p. 9).

One thing peculiar about the quoted passage is that Russell on many occasions categorically mentioned that we cannot see a table; what we see are appearances of the table, and the table itself is an inferential knowledge. But the above passage suggests that we can actually see the table, and this is contradictory to the notion that the table is an inferential knowledge, i.e. via sense-data. He went on to say:

I bought my table from the former occupant of my room; I could not buy *his* sense-data, which died when he went away, but I could and did buy the confident expectation of more or less similar sense-data... which makes us suppose that over and above the sense-data there is a permanent public object which underlies or caused the sense-data of various people at various time. [*Ibid.*, p. 9].

In order to strengthen his argument Russell stated that if a cat, for instance, appears at one moment in one room and in another moment in the next room, it is no mistake to suppose that the cat is passing over a series of intermediate positions. But if it were merely an agglomeration of sense-data it would not exist at all whilst no one was present at that situation. Moreover a group of sense-data cannot explain the cat's being hungry since no hunger but one's own can be sense-datum to one. Russell thus contended that such a situation is bound to convince one that there are objects other than ourselves and our sense-data which have an independent existence without being depending upon our perceiving them.⁷

Russell thus concluded that the only neutral object accessible to all concerned, are physical objects, which are public. These neutral objects give rise to sense-data, which are private to each person and hence cannot be shared. But one cannot have direct awareness of the physical object. The only knowledge by acquaintance we have is with our private sense-data which indirectly gives us the knowledge of the physical objects. Russell then went on to say that

[W]e are not only aware of things [sense-data], but we are often aware of being aware of them. [*The Problems*, pp. 26-27].

7. Cf., *Problems*, p. 11.

With this we come to our second question: whether there is anything called "mind" apart from matter (a collection of physical objects)? The urgency to explain mind led Russell to introduced introspective data of thinking, feeling, willing etc. According to Russell, when one sees the sun one is aware of an object that is one's "seeing the sun", and furthermore, one is also aware of events like feeling, thinking, pain or anger which happen in one's mind. Russell called this "self-consciousness" (*ibid.*, p. 27), which does not refer to consciousness of one's "self", but merely to consciousness of particular thoughts and feelings. Before we go further we find that, from the preceding analysis, Russell was a dualist in 1912. He had clearly differentiated between physical objects, which make up matter, and one's knowledge and experience of the physical objects, which make up mind. What Russell was doing was in fact following the Cartesian foot-steps, regarding the mind and body dichotomy. Russell entered dualism through his theory of sense-data.

I have mentioned earlier that Russell's dualism was different from that of Descartes because he oscillates between Descartes and Hume in his analysis of mind. This resulted into a queer mixture of a Humean and Cartesian analysis of mind.

We know that Hume in his *A Treatise of Human Nature* contended that nothing was experienced except loose and separate "perceptions of the self". To quote Hume:

For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch *myself* at any time without a perception, and never can observe anything but the perception. [P. 252].

In a similar way Russell said:

When we try to look into ourselves we always seem to come upon some particular thought or feeling, and not upon "I" which has the thought or feeling. (*The Problems*, p. 27)

Moreover he argued that it was not necessary to suppose that one was acquainted with a more or less permanent person that remained identical over time. But then he moves to a position held by Descartes, who in his *Discourse* argued that the "I" of his "I think, therefore I am" was essentially a thinking Substance. "... the soul by which I

am what I am, is entirely distinct from body, and is even more easy to know from body, and is even more easy to know than is the latter; and even if the body were not, the soul would not cease to be what it is."⁸

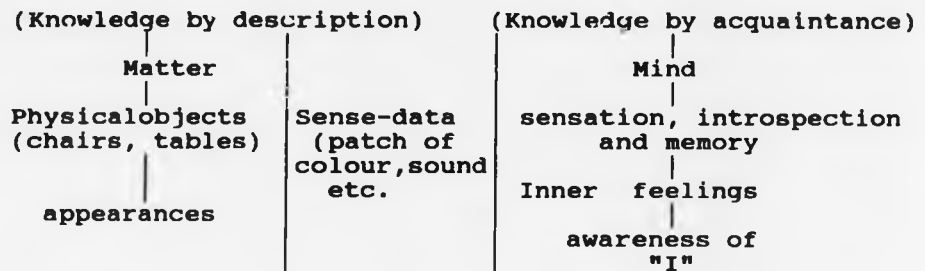
In a similar way, Russell maintained that one was acquainted with two different things when one said that one was acquainted with one's "seeing the sun". First there was sense-datum which symbolizes the sun. Secondly, there was that which sees the sense-datum. Russell then said it was difficult to understand what was meant by it, unless one was acquainted with something which one called "I". Therefore it was essential that one must be acquainted with "I", whatever its nature, which sees the sun and has acquaintance with sense-data.

Russell in the following year admitted that he "tentatively" (*Collected Papers*, vol. 7, pp. 36, 37) maintained that one had acquaintance with "I". He was perhaps right. What in fact Russell was doing was to explain mind and matter in terms of "data", both in sensation and introspection. As we shall see later, in the following year he retreated to Humean position. Russell in his "Analysis of Experience" said:

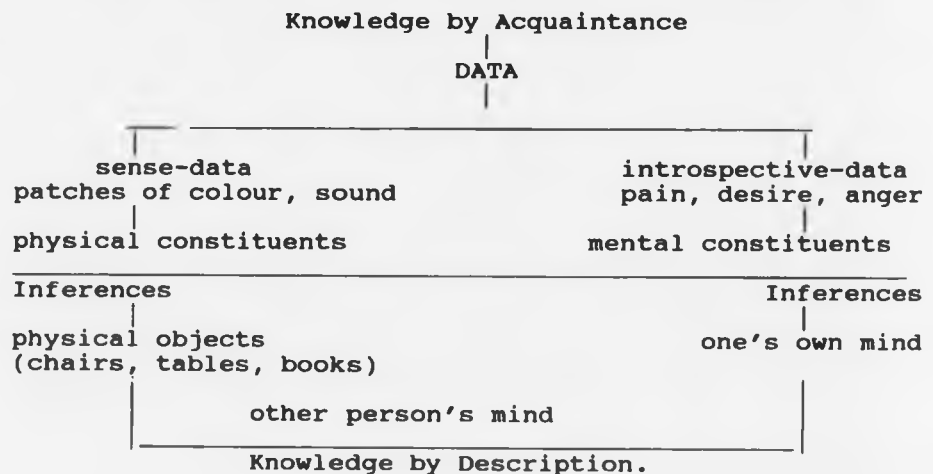
Hume's inability to perceive himself was not peculiar, and I think most unprejudiced observers would agree with him. Even if by great exertion some rare person could catch a glimpse of himself, this would not suffice; for "I" is a term which we all know how to use, and which must therefore have some easily accessible meaning. It follows that the word "I" as commonly employed, must stand for a description; it cannot be a true proper names in the logical sense, since true proper names can only be conferred on objects with which we are acquainted. (*Ibid.*, pp. 36,37.)

We know that, according to Hume, minds and bodies are simply bundles of what he calls "perceptions". But his theory results in ultimate scepticism. I would not say that Russell put forward a similar theory to Hume, but what I want to say is his theory of mind and body is in significant ways unlike that of Descartes. Let me represent Russell's theory of 1912 in the following schema:

8. Descartes, R., "Discourse on The method of Rightly conducting the Reason", in *The Philosophical Works Of Descartes*, vol. 1, p. 101.



But if we conjoin his 1912 and 1913 positions we see that mind and matter are both known by description. What we are acquainted with are data, in sensation and in introspection. Mind and matter are not the objects of immediate awareness and therefore it is a matter of inference constituted out of introspective-data and sense-data respectively. This position of Russell can be represented in the following way:



Despite Russell's giving much emphasis to sense-data, the constituent of material objects, yet he gave more prominence to sensation and introspection, the functions of the mind. The reason was that both were responsible for immediate awareness--where, as Russell said:

We have acquaintance in sensation with the data of the outer senses, and in introspection with the data of what may be called the inner sense-- thoughts, feelings, desires etc.; [*Problems*, p. 28].

By giving prominence to mind and by making data (both inner and outer senses) the constituents of both mind and matter Russell produced a thesis which is more inclined towards a sort of monism. It should be noted that Descartes gave prominence to mind ("I", "I think"), and believed in the interaction of mind and matter, yet he maintained that they exist independently of each other, i.e. even if the body died, the mind would continue to exist without interruption. Thus interaction is not a necessary condition, rather it is a contingent fact since the existence of either the mind or body does not demand interaction. When mind and body co-exist they interact but the matter does not require interaction of mind for its existence and vice-versa. The distinction between the mind and the matter is absolute.

4.2.4. Conclusion.

In 1912 Russell produced a relative dualism by making a relation between consciousness and physical objects via data belonging to sensations and introspection. Mind has access to physical objects via sense-data, and to itself through introspective-data. He makes a significant move, to close the gap between the mental and the physical.

Was Russell a neutral monist in 1912? The data out of which mind and matter are explained apparently looks to be monistic. To be monistic the data should be of unique kind capable of explaining both mind and matter. Russellian data lacks uniqueness because matter requires sense-data, caused by physical objects, while mind requires introspective-data, which are subjective. These data have no independent existence, either from physical objects or from consciousness. Sense-data are the result of matter and sensation (function of mind) and introspective-data are the result of consciousness and introspection (function of mind). This left the status of "data" to be both mind oriented and relational, and not neutral. This is because neutrality demands that the "stuff", out of which mind and matter are constructed, should exist independently, without any reference to mind and matter. Russellian stuff depends heavily on mind. The data are subjective and as a result creates a Berkeleyian problem.

On the basis of this theory of mind and matter Russell criticised James's theory of neutral monism. I now turn to this criticism.

Section B.

4.3. Russell's Critique of Neutral Monism.

Introduction.

Preoccupied with epistemological problems, it was in 1913 that Russell produced his first objections to neutral monism. Under the heading "On The Nature Of Acquaintance"⁹ Russell wrote three essays of which his critique of neutral monism is the second one. In his critical estimation Russell quoted Mach and James to discuss the shortfalls of neutral monism in general. He held that neutral monism failed for several reasons; the problem with James's account of knowledge was one he gave prominence.

Russell produced twofold arguments showing both the advantages and disadvantages in accepting such a theory. Moreover he also suggested a certain solution in order to overcome any difficulty arising from the theory.

4.3.1. Arguments In Favour Of Neutral Monism.

Eight years before he formally accepted the theory and declared himself a neutral monist Russell gave a wonderful description of neutral monism in his critique.

"Neutral Monism"-- as opposed to idealistic monism and materialistic monism-- is the theory that the things commonly regarded as mental and the things commonly regarded as physical do not differ in respect of any intrinsic property possessed by the one set and not by the other, but differ only in respect of arrangement and context. The theory may be illustrated by comparison with a postal directory, in which the same names comes twice over, once in alphabetical and once in geographical order; we may compare the alphabetical order to the mental, and the geographical order to the physical. The affinities of a given things are quite different in two orders, and its causes and effects obey different laws. Two objects may be connected in the mental world by the association of ideas, and in the physical world by the law of gravitation. [*Collected papers*, vol. 7, p. 15].

According to Russell the first and most favourable aspect of the theory is the "simplification which it introduces" (*ibid.*, p. 21). He regards that dualism in

9. First printed in *The Monist* in 1914. Reprinted in *Logic and Knowledge*, ed. R.B. Marsh, 1956, and *The Collected Papers of Bertrand Russell*, vol. 7, 1984. My reference would be the latter.

perception is far less satisfactory to our intellectual desires. According to Russell, Occam's Razor prescribes neutral monism as preferable to dualism if it could be made to account for the facts. Moreover under the influence of scientific hypotheses the matter is reduced to "a remote super-sensuous construction". Russell writes:

What is immediately present in sense, though obviously in some way presupposed in physics, is studied rather in psychology than in physics. Thus we seem to have here, in sense, a neutral ground,... from which we may pass either to "matter" or to "mind"...." (*ibid.*, p. 21).

Russell quoted in a footnote, as an illustration of neutrality as regards sensation in orthodox philosophy from Stout's *Manual of Psychology*. He remarked that although there is an acceptance of neutral monism as regards "sensation" for psychology, Stout would be far from adopting it generally. [*Ibid.*, p. 21, footnote].

Secondly, a large part of the argument in favour of neutral monism consists in a polemic against the idealists' view that we know the external world through the medium of "ideas" which are mental. Russell fully agreed with neutral monists and did not think that when an object is known to me, there was in my mind something which may be called an idea of the object, the possession of which constitutes my knowledge of the object. Russell pointed out,

"But when this is granted, neutral monism by no means follows. On the contrary, it is just at this point that neutral monism finds itself in agreement with idealism in making an assumption which I believe to be wholly false. The assumption is that, *If anything is immediately present to me, that thing must be part of my mind.*" [p. 22].

The term "idea" has gained different connotations in the hands of different philosophers. Plato regarded an idea as something objective, quite independent of minds. For Descartes, whatever the mind directly perceives is an idea. By an idea Locke understood that it is an immediate object of the mind which it perceives and has before it. The idealist, like Berkeley believed that material objects are nothing but ideas created in the mind of God or other conscious beings. What we call the external world is mind dependent or rather a copy which we possess as a conscious being. This is based on the assumption that what is immediately present is part of my mind. But when the neutral monists argue that what is immediately present they mean that they are "subjectless given" and therefore not mental. Hence what is subjectless cannot be part of one's mind in the sense the idealist use of the term. What is part of a

particular mind is a set of entities governed by psychological laws. The same entities are subject to physical laws. The entities as such are neutral.

According to Russell since the idealists believe in the duality of the mental and the physical, they infer from such an assumption that only ideas and not physical things that can be immediately present to us. Neutral monists, rightly recognised that constituents of the physical world can be immediately present to us, infer that the mental and the physical are composed of the same "stuff". Since the assumption is false hence, according to Russell, the opposing theories are false. But if we consider the assumption in two parts neutral monism simply conforms to the first part, i.e. that the entities are immediately present to us.

4.3.2. Objections Raised Against Neutral Monism.

We know that Russell believed that neutral monism would be preferable to dualism if it could possibly be made to account for the facts. He thought that neutral monism proved its inability to do so and therefore suggested that it should be replaced by a better theory which explained the difference between what is experienced and what is not experienced by a given subject at a given moment, rather than denying the existence of mental entities.

As we proceed we encounter eight major defects which Russell pointed out, although he registered only five. They take two forms:

(4.3.2.1.) arguments that the theory is not neutral, and (4.3.2.2.) arguments that the theory cannot account for the facts.

(4.3.2.1.).

(1) According to Russell there is a difference between a colour seen and the same colour unseen, which has nothing to do with relations. But to the neutral monist it is not logically possible to have one experience since a thing is mental in virtue of its external relations.

With regard to this criticism, Russell was right in pointing out that James and other neutral monists categorically speak of external relations in relating two bits of experience, be it a mind or a body. Suppose, if I have a momentary experience of a

patch of colour it does not follow that one bit of experience is being experienced. Between what we call mind and the patch of colour a series of experiences, related causally, are experienced. It is logically possible for a mind to have exactly one experience, say a particular orange patch, and neutral monist can prove it easily. For James a particular patch of colour (one experience) is both physical and psychical at once. But such an analysis brings a sort of contradiction to what James said about the cognitive aspect of a particular experience. At least two sub-feelings are required to have knowledge. Since there is no subject and object distinction in the stream of experiences it is in retrospection and appropriations one can have knowledge. At the same time he also reiterates that a particular feeling is not "psychical zero". [See Chapter Two]. We have seen that such analysis proves that an experience is heterogeneous and have intrinsic elements. [See Chapter Three].

(2). Russell showed how James confused belief with sensation; and had no theory of error or false belief. There was no entity corresponding to the erroneous belief that to-day is Wednesday.

I think that Russell rightly contended that belief was different from sensation or presentation, and error was in no way analogous to hallucination. He also held that a hallucination is a fact and not an error. Russell said:

What idealists have said about the creative activity of mind, about being relations due to our relative synthesis, and so on, seems to be true in the case of error; to me, at least, it is impossible to account for the occurrence of the false belief that to-day is Wednesday, except by invoking something not to be found in the physical world. [Collected Papers, vol. 7, p. 24.]

In order to illustrate his argument Russell examines W.P. Montague's essay "A Realistic Theory of Truth and Error". He summarises Montague's views in three statements:

(1) every reality is a proposition; (2) false propositions subsist as well as true ones; (3) the unreal is the class of false propositions. [Ibid., p. 25.]

Russell pointed out that the error committed by Montague and the neutral monists in general is the so-called "illusion of sense" which is no more illusory than normal sensation. Russell argued that mistaking the day of the week or a date of a historical event, forced into the mould of illusion of sense,

"at the expense of supposing the world to be full of such entities as 'the discovery of America in 1066'-- or in any year that the ignorance of schoolboys may suppose possible." [*ibid.*, p. 25.]

We know that Montague was not a neutral monist [see 1.3.3.] and therefore the particular criticism does not apply to his theory. But as regards neutral monist it is different. It is true that a belief is different from presentation. But this does not mean that belief necessarily involves something different. A mental belief of extramental object could be done in the same way as the mental belief of the object present. James provided a solution [see Chapter Two] by showing how subjectivity and objectivity equally belongs to the non-perceptual experiences, i.e. the experiences which has no presentation in the world we accept to be true. He argued that our world of thought would be the only world, and would enjoy complete reality in our belief. So belief in mental objects which differ from sensation can be cashed in the "ideal" world which happens in dreams and day-dreams. But instead of multiplying the entities James multiplied the world and suggested reality *ad infinitum*.

When we discuss Russell's theory of neutral entities (in Chapter Six) we will see that he also failed to explain belief in terms of neutral stuff. Beside the neutral stuff he brought in the concept of images, which was essentially subjective.

(3) James's definition of knowledge is not satisfactory. But Russell doubted how far this view of knowledge was relevant to neutral monism.

The definition of knowledge is not regarded by James as it is typically regarded. For example, "I know that the earth is spherical" or "Colombus discovered America" could be called propositional knowledge or knowledge by description. We have seen that, according to Russell, we can have immediate knowledge of sense-data like a patch of colour. This is knowledge by acquaintance. For James, in knowledge by acquaintance there is no cognition. He held that knowledge is a relation, a mode of connection between experiences; i.e. a process of leading from one experience to another. This is what he called "knowledge about" where a certain transition within a stream of experiences takes place and hence we are cognisant of them.

(4). Russell considered the term "space" to be ambiguous, and therefore granted it to the neutral monist without analysing it.

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We know that a thing is both in space and time, but a thought is only in time. If we say that the neutral entities are in space, we could side with the materialist and if we say that they are in time we would side with idealism. Russell contended that with scientific developments in the field of physics and psychology, different interpretations had been suggested about the concept of space, and therefore it could not be a criterion to distinguish the mental and the physical.

How could Russell grant this premise to the neutral monists when it is true that the term "space" if it remains unexplained, poses a major threat to the holders of the theory? Perhaps Russell was too enthusiastic about the neutral monistic theory. In criticising he was actually making the theory more acceptable and pushing the exponents to clear up the apparent inconsistencies by suggesting possible solutions. Mach and James did not live long enough to enjoy the revolutionary development (the Theory of Relativity) brought in by Einstein in the field of physics. Russell was lucky. In an opportune moment (1927) he incorporated Einstein's general theory of relativity to explain his version of neutral monism, which he had finally accepted in 1921. The theory of relativity triumphed by abolishing the concept of one cosmic time and the one persistent space by substitution of space-time in place of both.

(4.3.2.2.).

(5). A belief is a temporal fact, but James and his followers regard it as an event in time.

A neutral monist can explain this situation very easily. If a belief in the thing, e.g. a chair, is the arrangement of neutral entities, then belief in thought, e.g. $2+2=4$, is similarly the arrangement of the same stuff. We know that both thing and thought are in time. The question which concerns us here is whether the stuff out of which everything temporal and non-temporal is constructed is essentially neutral or not. If it is, then mental or physical, temporal or non-temporal is constructed out of neutral entities and the difficulty diminishes. Russell in 1927, following Einstein's general theory of relativity declared that the ultimate stuff out of which mental and physical are created are neutral events which are in space-time.

(6). Is it possible to analyse remembering a past event? According to Russell what we remember now is something which happened in the past, so the present event, i.e. my

remembering, cannot be identified with the past event the essence of which is not any present event.

It is possible to answer Russell's fourth objection. No two moments are identical. For example if a particular event is experienced in two moments, say A and A', it could not be experienced the way it is experienced once in A and again in A'. But if the two events counted in terms of degrees, we find a negligible difference. Russell suggested that it could be possible if we analysed remembering in terms of "ideas" of the past event; but conceded that it goes against neutral monism. The neutral monist could analyse this in a similar way a belief could be analysed.

(7). To this seventh objection Russell urged the question: "How is the group of my present experiences distinguished from the things?" He said that it is undeniable that, at any given moment, some of the things in the world, but not all, are somehow collected together into a bundle consisting of what now lies within my immediate experience. Russell thought that neutral monism couldn't give a tenable account of the bond which unites the parts of this bundle, and the difference which marks them out from the rest of the things in the world.¹⁰

In order to show how neutral monists explain this situation Russell quoted Perry. Perry, in his *Present Philosophical Tendencies*, explained it by reference with the nervous system. Accordingly he said that elements become mental contents when reacted in a fashion peculiar to the central nervous system. This did not satisfy Russell. He argued that to know what lies within one's experience does not necessarily mean having knowledge about one's nervous system. There are people who are not aware of physiology. They are able enough to know what comes within their experience. Russell thought the issue is liable for further investigation. He suspects if that is so,

"then neutral monism cannot be true, for it is obliged to have recourse to extraneous considerations, such as the nervous system, in order to explain the difference between what I experience and what I do not experience, and this difference is too immediate for any explanation that neutral monism can give." [*Collected Papers*, vol. 7, p. 31].

Later when we discuss Russell's theory of neutral monism we will see that he emphasised the importance of brain, quite like the physicalist theorists, in order to

10, Cf. *Collected papers*, vol. 7, p. 28-29.

explain things which comes within one's experience. The critics read this that in the guise of neutral monism Russell produced an identity theory of mind. I shall discuss this issue in chapter six. One of the major problem with neutral monism, as Russell argued, was that it failed to deal with the "emphatic" particulars. Since Russell considered this criticism decisive against neutral monism I have dealt this separately which I discuss next.

4.3.3. The Problem of Indexicals.

(8). Russell regarded this criticism as the most conclusive one, and demanded an explanation as to whether the neutral monist could solve the problem and remain a neutral monist.

Russell doubted whether neutral monism could account for such emphatic particulars as "this" and "I" and "now". He said:

What I demand is an account of that principle of sensation which, to a given person at a given moment, makes one object, one subject, and one time intimate and near and immediate, as no other object or subject or time can be to that subject at that time, ... it seems obvious that such "emphatic particulars" as "this" and "I" and "now" would be impossible without the selectiveness of mind. I conclude, therefore, that the consideration of emphatic particulars affords a new refutation, and the most conclusive one, of neutral monism. ["Analysis of Experience", *Collected Papers*, vol. 7, pp. 40-41].

Russell himself suggested possible solutions to the problem. The characteristics of experience shows that experiencing is a two term relation which, he thought, the neutral monists ignore. Russell held that it was true that the neutral monist cannot readily accept this, but it was necessary to explain experience of our experiences to arrive at the notion that we have experiences.

This situation had been explained by James. He introduced the concept of "co-conscious transition" to show that we have the knowledge of experiences. This I will discuss shortly.

In his evaluation we find that Russell not only criticized neutral monism but also criticized his own views and believed that there are arguments which went in favour

of neutral monism. One such argument is the analysis of experience into a dual relation of subject and object, and the suggestion that it was perhaps "derived from the elusiveness of the subject in introspection." [*Ibid.*, p. 36]. What we are aware of are our experiences and not the subject itself. Russell, who "tentatively" agreed that we have acquaintance with subject, now rejected the thesis that we have such acquaintance. The truth is, according to the neutral monist, there are no subjects except "experiences" or "sensations", the neutral entities. I have mentioned in section A, that this was one of the reason why Russell retreated to the Humean position. Now mind and matter simply stood for a description. What we are acquainted with are data of inner sense (thoughts, feelings, desires = mind) and outer sense (a colour patch, shape, heavy, sound = matter).

Russell went on to redefine "I" without the assumption that we are ever acquainted with the bare subject of an acquaintance, which we are not. Russell said:

When two objects O and O' are given as parts of one experience, we perceive the fact "something is acquainted with both O and O'". Thus two instances of acquaintance can be given as having a common subject, even when the subject is not given. It is in this way, I think, that "I" comes to be popularly intelligible. [*Ibid.*, p. 37].

After clarifying his position Russell tried to produce a possible solution to the problems of so-called "emphatic particulars". According to him, in one moment, e.g. of conscious life, a man can attend at least to one object, and since he is attending can name the object as "this". The word "this" being a logically proper name can be used for various objects and therefore does not describe the object. It can only be applied to the object attended by a given subject at a given moment. At the same moment there must be a subject attending to "this", and that subject is called "I". Russell held that the relation of presence, i.e. the time of the things which have to "I" is called the present time. So "I" is attending to "this" at the present time, i.e. "now".

By suggesting this possible solution Russell in fact reduced the burden of the neutral monist, who can, I think, easily prove that it was possible to have a very intimate relation with the part of the person concerned.¹¹ One can have an intimate experience of muscle movement and heartbeat of one self. Even in one's own "sneeze" the particulars related to them are present to one at the moment of sneezing. Moreover by

11. Cf., Sainsbury, *Russell*, p. 265.

claiming that experience is the neutral stuff, which explains mind and matter, the neutral monists can easily meet Russell's challenge by showing that an experience is both object(this) and subject (I) at any moment (now). In order to explain such a situation James introduced the concept of "co-conscious" (see Chapter Two under the heading Conjunctive Relations) experience where one is immediately aware of the flow of experience within oneself. According to James within the personal history there are certain interests and purposes which are continuous. One can be co-conscious of these interests belonging to the same self. The question of selectivity of experience can be answered by saying that it depends on the degrees of near to and far off. By near we mean that the experience of the part of the person, and far, which is not part of the person.

Russell increased the plausibility of neutral monism by further suggesting that:

It may be urged that different people can know the same object but cannot have the same presentation, and that this points to something other than the object as a constituent of a presentation. As against neutral monism, the argument is valid if its premiss is granted.¹²

By doing this, Russell simply paved the way for the neutral monists by granting the premise, and in a way unfolded his true motive. This finally resulted in his acceptance of neutral monism.

Russell first proposed the above argument in 1912¹³, where he said that different people may see the table slightly differently, but all see similar, not the same, things when they look at the table. Later he dealt with it in his essay "The Relation of Sense-data to physics" (*Scientia*, 1914), where he argued that the physical objects are simply theoretical constructions, i.e. they are constituted out of sense-data, and "if such objects are to be verified, it must be solely through their relation to sense-data" (*Mysticism and Logic*, p. 108). So physical objects cannot be the object of any presentation. The objects of different presentations are the immediate data of senses, i.e. sense-data. Russell stated that he did not hold that the difference between the mental and the physical is one of arrangement, yet he said that what he had to say was compatible with Mach and James's doctrine and "might have been reached from their standpoint" (*ibid.*, p. 112).

12. "Analysis of Experience", p. 43.

13. See section A. The passage is already quoted for different reason.

4.3.4. Conclusion.

Russell's admission and his later realization enlightens us that what in fact he was doing was actually preparing his own ground for accepting neutral monism, which he finally did in 1921. In his "The Philosophy of Logical Atomism" (1918) Russell admitted that "the whole theory of neutral monism is pleasing to me," and realising his mistakes said, after a few lines, "I think some of the arguments I used against neutral monism are not valid. I place most reliance on the argument about "emphatic particulars", "this", "I", all that class of words, that pick out certain particulars from the universe by their relation to oneself, and I think by the fact that they, or particulars related to them, are present to you at the moment of speaking." Regarding "this" Russell argued that it is a proper name for the present object of attention and therefore means nothing. Finally he said that what we do is we pick out certain facts, past and future and all that sort of thing, they radiate out from "this". Russell then concedes "I have not myself seen how one can deal with the notion of "this" on the basis of neutral monism."¹⁴

This sincere admission of Russell's and his interest in "rewriting" the criticisms suggests a significant step towards neutral monism. As a preliminary arrangement he shed his dualistic guise only to embrace phenomenism before finally accepting neutral monism.

14. Logic and Knowledge, p. 222. While I discuss Russell's later commitment to neutral monism I will discuss how he handled the problem of indexicals. Also how he accepted knowledge, supposedly a significant difficulty for James.

Section C.

4.4. Phenomenalism (1914-1919).

Introduction.

It is sometimes said (e.g. Maxwell, Quinton, Ayer)¹⁵ that Russell's 1914 position is a kind of phenomenalism. I shall argue, however, that it is not a true phenomenalism. It is rather an odd quasi-phenomenalist position¹⁶, half way, as it were, between the dualism of 1912 and the neutral monism of 1921. And because it fails to resolve the questions of how knowledge of physics is possible, it already contains the seeds of Russell's later shift i.e. a commitment to neutral monism.

Russell did not set out to develop a theory of phenomenalism as a stop gap between his theory of dualism and ultimate development of the theory of neutral monism. Phenomenalism was simply a technique in Russell's hand to overcome the epistemological dualism of 1912 in which his theory of sense-data left an "uncomfortable gulf" between mind and matter. As we have seen, his pre-occupation with the epistemological problem led him in 1912 to consider the question: How do we have an access to physical objects? There he explained that sense-data, which make up the appearances of the physical objects, are known by acquaintance, without any intermediate processes. Knowledge of physical objects is a risky inference from knowledge by acquaintance; probable opinion at best.

By 1914 onwards, Russell tried to bridge the gap between physical objects and sense-data, by making physical objects hypothetical constructions from sense-data. This is the main reason, as far as I understand, why his position is called phenomenalistic¹⁷.

15. Maxwell, Grover, "Russell On Perception: A Study In Philosophical Method" in Pears, ed., *Bertrand Russell*, p. 110; A. Quinton, in "Russell's Philosophical development", said that "running from *Our Knowledge of the External World* to *The Analysis of Mind*, in which material things were identified in almost phenomenalist fashion with the class of their appearance" (p. 5); A.J. Ayer in his "An Appraisal of Bertrand Russell's Philosophy" (Pears, ed.) said that in 1914 Russell gave up causal theory of perception "in favour of the phenomenalist position" (p. 15).

16. I came to this conclusion independently, but later found that Lockwood, in his "What Was Russell's Neutral Monism", regards that quasi-phenomenalism was a feature of Russell's thinking of this period [1914], p. 145.

17. MacNabb, in his essay "Phenomenalism" regarded Russell a phenomenalist. According to him phenomenalism offers an answer to philosophical questions about material objects via sense-data of which we are immediately aware in sense experience, p. 67.

The opposite view has also been maintained. C.D. Broad rejected Russell's 1914 position as phenomenalism. He argued that one of the objectives of the phenomenalist was to dispense with physical objects. This was what Russell was trying to do in 1914 and hence is regarded as phenomenalist. But in order to get rid of physical objects, according to Broad, Russell assumed

"more entities than the common view, and those entities seem to be precisely the same kind as physical objects on the ordinary theory"¹⁸.

Russell had his own answer about the introduction of hypothetical entities Beside sense-data. In his "The Relation of Sense-Data to Physics", 1914, he admitted that it would be difficult to construct matter out of experienced data only. [Cf. *My Philosophical Development*, pp. 78-9]. He stated that if physics is to be verifiable we are faced with the following problem:

Physics exhibits sense-data as functions of physical objects, but verification is only possible if physical objects can be exhibited as functions of sense-data. We have therefore to solve the equations giving sense-data in terms of physical objects, so as to make them instead give physical objects in terms of sense-data. [*Ibid.*, p. 79].

Russell was compelled to assert that this was an impossible task and therefore agreed upon "with a picture of the world which fitted physics and perception harmoniously into a single whole" (*Ibid.*). Such confessions by Russell led his critique to be regarded as "his brief and notorious flirtation with phenomenalism"¹⁹.

As I understand it, phenomenalism was merely the ideal Russell set before himself for a very different motive than that which he suggested. I partially agree with Russell about his reasons for admitting hypothetical elements in his construction of mind and matter in terms of neutral elements. This will become clearer as we proceed.

18. "Phenomenalism", p. 236.

19. Maxwell, p. 110.

4.4.1. What is Phenomenalism?

Phenomenalism is the thesis that what we are aware of in immediate perception are sensations or sense-data; or what appears are the basis of knowledge and that we can know nothing that is not given in sense-experience. On the basis of such interpretation the term "phenomenalism" has been used in different ways: (A) phenomenalism as a thesis about the world, and (B) phenomenalism as a thesis about statements.

4.4.1.1 Types of Phenomenalism.

*A. Factual Phenomenalism*²⁰: As a thesis about the world, phenomenalism analyses physical objects in terms of actual and possible sensations. This version aims to bridge the gap between sensations and physical objects by rejecting the notion that there are forever inaccessible physical objects lurking behind the curtain of appearance.

B. Linguistic Phenomenalism: According to this version, statements about physical objects can be analysed into equivalent sets of statements about sense-data.

The theory proposed by Russell in 1914 was quite akin to that of factual version of phenomenalism. Following Ayer²¹ I will regard phenomenalism, as a theory according to which physical objects, such as chairs, tables, shoes etc., are constructions out of sense-data. On the basis of this I will distinguish three forms of factual phenomenalism. They are:

(1) *Hyper-phenomenalism*: everything is a logical construction from one's own sense-data. This is the view held by Berkeley which ends in solipsism.

(2) *Pure phenomenalism*: everything is a logical construction from all *actual* (i.e. all actually sensed) sense-data.

(3) *Weak or quasi-phenomenalism*: everything is a logical construct from sense-data and sensibilia. We shall see that this fails to resolve the epistemological problem in Russell's philosophy of 1914.

20. Cf., Hirst, "Phenomenalism", p. 131.

21. "Phenomenalism", in *Proceedings*, p. 163.

4.4.1.2. Phenomenalism Vs. Neutral Monism.

In chapter one, under the heading "Neutral Monism", I have discussed the aims and characteristics of neutral monism and its differences from phenomenalism. Here I will briefly summarise what I have already discussed in order to show the extent of Russell's commitment to phenomenalism.

One of the basic agreements between phenomenalism and neutral monism is that they both postulate sense-data as the fundamental elements in accounting for the phenomena. As a result both argue in favour of empirical substratum known by acquaintance to underpin physics and psychology and to reject any sort of elements not known as the constituents of physical objects.

Despite such an agreement, neutral monism does deviate from its own promise to stick to only observable elements. The exponents of neutral monism reasoned that physics demands continuity, but continuity is incompatible with phenomenalism. Phenomenalism explains physics in terms of only observed entities, but physics requires the possibility of hypothetical unobserved occurrences in places where there are no sense-organs. As against phenomenalism, neutral monism gives way to the inferred elements by providing similar metaphysical status as those of observed elements. Hence to the neutral monists both observed and unobserved elements are identical, i.e. having same metaphysical status.

It may be argued that beside actual sense-data a phenomenalist also introduces possible (inferential) sense-data. Mill defined matter as a "permanent possibility of sensation". Beside actual sensations there are a large number of possible sensations which remain unobserved. These potential data have the possibility of being actualised in the process, i.e. when one moved or turned one's head. But the neutral monist argues that the merely potentially inferred elements can never be a data to a mind. The phenomenalist would reject such an interpretation.

4.4.2. Russell and Phenomenalism.

Russell contended that "there is a philosophy called "phenomenalism" which is attractive, but to my mind not practically feasible". But he maintained that "for my part, I regard phenomenalism as an ideal, which a prudent man will approach as nearly as he can without rejecting physics". [*Collected Papers*, vol. 9, p. 281].

There is a further confirmation made by Russell to those who regard him a phenomenalist. In his "Physics and Perception" (1922), written as a reply to C.A. Strong's "Mr Russell's Theory of the External World" (1922) where Strong used both *Our Knowledge of the External World* and *The Analysis of Mind* in preparing his article, Russell categorically denied that he was a phenomenalist. [*Ibid.*, vol. 9, p. 125-33]. He said,

"I am not a phenomenalist. For practical purposes, I accept the truth of physics, and depart from phenomenism so far as may be necessary for upholding the truth of physics.... But I do not in the least accept the phenomenist philosophy as right...." (*ibid.*, p. 128).

Russell agreed that on the question of probable inferences by induction and analogy "I approach as near to phenomenism as I can without destroying the whole edifice of science. *What is involved is not an absolute philosophical principle, but a method of securing a higher degree of probability*" (*ibid.*, p. 130. The italics are mine).

The term "sense-data", technically used by Russell in 1912 to mean simply the appearances of physical objects, acquired a new connotation in 1914: constituents of physical objects. This view, which he put forward in *Our Knowledge of the External world*, then explicitly formulated in his two essays, "The Relation of Sense-Data To Physics" and "Constituents of Matter" both published in *Mysticism and Logic*, was labelled as phenomenism. I will begin first by sketching Russell's theory, proposed on the three occasions and second by showing that Russell was not a phenomenist, in the true sense of the term, but arrived at such a position as a stop gap, a transitional phase to neutral monism.

The concept of sense-data redefined.

Russell had two objectives in mind. First to provide a basis for the empirical verifiability of physics. Secondly to prove that physics demands continuity. This he does by re-defining the term "sense-datum". Two quotations from his essay "The relation of Sense-Data to Physics" will provide an insight into the direction that Russell was heading:

[N]o valid objection exists to the view which regards sense-data as part of the actual substance of the physical world, and that, on the

other hand, this view is the only one which accounts for the empirical verifiability of physics. [p. 131]

When I speak of a "sense-datum", I do not mean the whole of what is given in one sense at one time. I mean rather such a part of the whole as might be singled out by attention: particular patches of colour, particular noises, and so on.... the particulars which are constituents of a datum of perception are always sense-data in the strict sense. [pp. 109-110]

These quotations suggests that sense-data, which we know exists, forms the epistemological ground of all knowledge of external particulars. But the difficulty arises as to whether the objects which are at one time sense-data continue to exist at times when they are not data to any one. Berkeley faced a similar problem, but solved it by appealing to the omnipresence of God. Russell said:

I wish to distinguish sharply between ontology and epistemology. In ontology I start by accepting truth of physics; in epistemology I ask myself: Given the truth of physics, what can be meant by an organism having "knowledge," and what knowledge can it have? ["Reply", p. 700].

He tried to solve it philosophically by embarking from an *epistemological* consideration to an *ontological* consideration. He suggested that "they [sense-data] are all that we directly know gives of course, no presumption that they are all that there is." [*Mysticism and Logic*, p. 110]. Hence he conceded the fact that there are particulars with which we are not acquainted, and thus left us in a baffling situation. Baffling, because the moment he took his mission to empirically verify physics he abandoned it by suggesting particulars with which we are not acquainted. This is one reason why his theory failed to be phenomenalist. I shall discuss this later.

Sensibilia, the unperceived sense-data.

In order to accommodate both sensed and unsensed sense-data Russell gave the name "sensibilia" (singular "sensible") to "those objects which have the same metaphysical and physical status as sense-data, without necessarily being data to any mind." [*Ibid.*, p. 110]. He illustrated this by saying that the relation of a sensible to a sense-datum is like that of a man to a husband. A man is a husband when married. Similarly, a sensible is a sense-datum when someone is acquainted with it. Hence all sense-data are sensibilia but we cannot say vice versa. (Similarly all men are not husbands). As we know men can exist without being husbands; but Russell faced an awkward question: "Can sensibilia exist without being given?" (*Ibid.*)

As far as sensed sense-data are concerned, Russell faced no difficulty because we are acquainted with such objects which constitutes the epistemological basis of our knowledge of external particulars.. Interpreted in this way the status of sense-data in Russell's position in 1914 is similar to that of 1912. As Russell became less concerned about epistemology in 1914²² and became more inclined towards ontology, such questions bother us: What is the metaphysical position of sense-data in 1914? Are sense-data mental or physical or neutral?

Status of sense-data.

Since both the questions point to similar answers, I will not deal with them separately. Before answering such questions it should be noted that Russell distinguished between the "mental" and the "physical" but said nothing about "neutral". By "physical" Russell meant "what is dealt with physics." [*Mysticism*, p. 111]. Regarding the term "mental" he said: "I shall call a particular "mental" when it is aware of something, and I shall call a fact "mental" when it contains a mental particular as a constituent." [*Ibid.*]. Russell then went on to say that "*sense-data are physical*" and perhaps "never persist unchanged after ceasing to be data." [*Ibid.*, p. 112]. He rejected the view that non-persistence implied that sense-data are mental, rather if sense-data did persist after ceasing to be data, that would, perhaps tend to show that they are mental.

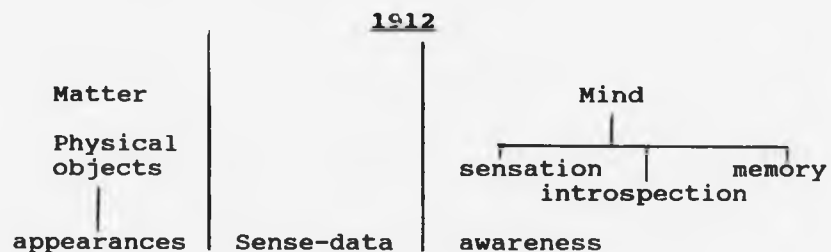
Sense-data are not only physically but also physiologically subjective. By "physiological" subjectivity Russell was referring to their causal dependence on the sense-organs, nerves and brain. The declaration of sense-data as physical was not at all a surprise. It was a very expected move which Russell undertook in order to bring his 1914 position closer to neutral monism. With the help of Occam's Razor he eliminated such thing as physical objects. In 1912 Russell initiated the distinction between sensations, sense-data, and physical objects, and gave an ambivalent status to the sense-data. Now Russell was in a position to have a direct access to the Constituents of matter and not via physical objects. This is also one of the reasons why he was called a phenomenalist.

Sense-data, which were somewhat intermediary between physical objects and sensations in 1912, have replaced physical objects by becoming the constituents of physical objects. The fate of the "sensations" in 1914 remain the same as in 1912. As

22. Cf., Stace in Schilpp. He thinks Russell has become more "empirical", p. 358.

in 1912 Russell reiterated that by a "sensation" he means the fact consisting in the subject's awareness of the sense-datum. "Thus a sensation is a complex of which the subject is a constituent and which therefore is mental." [*Mysticism*, p. 113].

Russell's analysis of "sense-datum" and "sensation" clearly suggests that his positions of 1912 and 1914 were quite similar. The difference we find is that in 1912 Russell claimed that two things are to be taken into account while explaining a piece of matter.²³ One is that physical objects might have other intrinsic properties apart from their appearances, constituted by sense-data. The intrinsic properties which form the real basis of physical objects remain unknown. The other is the sense-data or appearances, which we perceive and can be acquainted with, exist where matter is; and the matter, which we cannot know, is the cause of those appearances. Let us compare his positions of 1912 and 1914 schematically:



As we have noted, his theory of 1912, was barely dualistic and which by 1914 was reduced to its minimum, and in consequence brought in line with neutral monism. More concerned about matter, Russell in 1914 declared "sensibilia" as the ultimate constituents of the external physical world and hence gives a direct blow to phenomenalism, which I shall discuss later. To him no sensible is ever a datum to two people at once. The different appearances of the same thing to different observers are each in a space private to the observer concerned. Each observer has a private world different from every other. But the fact remains that the things seen by two different

23. Cf., Stace in Schilpp, p. 357.

people are so similar that the same word can be used to denote them. This similarity does not terminate the difference, which remains. The place at which a sense-datum is, is a place in the private space of another. Russell explained the world of sense with a model hypothesis.:

Let us imagine each mind looks out upon the world, as in Leibniz's monadology, from a point of view peculiar to itself;... Each mind sees at each moment an immensely complex three-dimensional world; but there is absolutely nothing which is seen by two minds simultaneously.... The three-dimensional world seen by one mind therefore contains no place in common with that seen by another.... inspite of the differences between the different worlds, that each exists entire exactly as it is perceived, and might be exactly as it is even if it were not perceived. We may further suppose that there are an infinite number of such worlds which are in fact unperceived. [*Our Knowledge of the External World*, pp. 94-95].

In saying this, Russell departed from his own commitment, that is, "empirical verifiability of physics". Instead of having knowledge of physics in terms of sense-data, he brought in the hypothetical and inferential elements like unsensed sense-data and also sensed sense-data belonging to the private world of different people. Russell proved the existence of the unsensed sense-data in the following way:

If two men are sitting in a room, two somewhat similar worlds are perceived by them, a third world, intermediate between the two previous worlds, begins to be perceived. It is true that we cannot reasonably suppose just this world to have existed before, because it is conditioned by the sense-organs, nerves, and brain of the newly arrived man; but we can reasonably suppose that *some* aspect of the universe existed from that point of view, though no one was perceiving it. [*Ibid.*, p. 95; *Mysticism*, p. 114].

Instead of getting rid of unnecessary multiplication of entities, Russell was in fact doing the opposite. I know, possibly, the sense-data connected from my perception of the table, for instance, but I cannot know the sense-data of other persons, which are quite different, and the nature of more mysterious entities that are never a datum to any mind. This shows that I can never know a whole table but only a part of it constituted by my own sense-data. So, as in 1912, the table simply becomes inferential knowledge. This, I consider, is one of the significant departure from phenomenalism.

Russell thought that it was possible that we could in fact empirically verify that there is a table. This could be done by the system of "perspectives", which includes both the perceived and unperceived universe.

Thus a "private world" is a perceived "perspective" but there may be any number of unperceived perspectives. [*Our Knowledge*, p. 95].

He holds that it is possible for two men to perceive very similar perspectives when they see the table. In between the two similar perspectives we can imagine a whole series of other perspectives, some unperceived but quite similar, and thus the space which consists of relation between perspectives can be rendered continuous, and three-dimensional.

Russell also said that there are as many private spaces as there are perspectives. [See Chapter Six]. But as to perspective-space there is only one whose elements are single perspectives, each with its own private space. The word "perspective" is used by Russell equivocally and this confuses the reader. He some times says that perspective "is a place where a thing is" (*Ibid.*, p. 99) and also at the same time says "when I wish to speak of a private world without assuming a percipient, I shall call it a perspective" (*Mysticism*, p. 118). At times it seems Russell was talking about an aspect of a thing as perspective and sometimes "the appearance which the universe presents from a point of view" (*Ibid.*). Russell uses "perspective" in both the senses simultaneously, hence making it difficult for the reader to decipher actually in what sense he uses when he uses the term "perspective".

Russell then went on to explain the correlation of private perspective space by an interesting example. He considered, in this case, a penny²⁴ which appears in many perspectives. In a number of different perspectives a penny looks in some larger and in some smaller, in some circular, in others elliptical etc. We may collect all those perspectives in which the penny appeared circular, say, and place them in a series depending upon the change in the apparent size of the penny. The perspective in which the penny looks larger is considered as nearer to the penny. In another straight line of perspectives the penny looks like a straight line of a certain thickness. These are also ordered as before by the apparent size of the penny. These two lines will meet in a certain place in perspective space and will determine a place for the penny. What Russell has not said is how we collect these perspectives and bring them into a straight line. But from his analysis it seems that hypothetically we may collect the perspectives and place them in two different straight lines. According to Russell, the apparent size of the penny will not grow beyond a certain limit and if brought very

24. Cf., *Mysticism*, p. 161, also see *Our Knowledge*, p. 98.

near to the eye it could not be seen. He then says that if we move along and form a straight line of perspectives and reach a point where all the lines meet in a certain perspective, this is "the place where the penny is". Common-sense tells us that the size, shape etc. of the penny depends on how near you are to the penny or how far off. It holds that the place of the penny is always where the penny *is*, and not the where the perspectives meet.²⁵

Russell then explained the correlation between a private space and parts of perspective space. If there is an aspect of a given thing in a certain private space, then we correlate the place where this aspect is in the private space with the place where the thing is in perspective space. According to Russell various parts of our body acquire positions in perspective space. He then said "that the perspective to which our sense-data belong is inside our head" (*Mysticism*, p. 120), by which he meant that the private world is a place in perspective space, and may be part of the place where our head is.

Russell stated that two places in perspective space are associated with every aspect of a thing, i.e. the place where the thing is, and the place in which the aspects forms part. Thus the aspects of a thing in different perspectives are to be conceived as spreading towards from the place where the thing is and also undergoing changes. Russell regarded these to be empirical facts out of which the hypothetical picture of the world is constructed.

In a similar way he constructed time out of sensibilia. Between two perspectives of one person's experience there is a time-relation of before, after or simultaneity. He introduced the term "biography" and defined it "as everything that is (directly) earlier or later than, or simultaneous with, a given "sensiole"" (*ibid.*, p. 123). This resulted in a series of perspectives, which form parts of one person's experience dividing the history of the world into a number of mutually exclusive biographies. With the help of a "velocity of sound and light" Russell tried to show how the correlation of times in the different biographies is achieved. The example below assumes a velocity of sound:

25. As far as we understand Russell had two reasons for saying that the place of the penny is where the perspective meet. They are first, for instance when there is lightning we do not instantly hear the thunder. We hear the sound later than the actual occurrence. Secondly, Russell accepted the causal theory of perception and insisted that from the epistemological point of view the percepts are in our head. So what we see or hear is in our brain and not something out there. I will discuss this issue in Chapters Five and Six.

Suppose [Russell says] A shouts to B, and B replies as soon as he hears A's shout. Then between A's hearing of his own shout and his hearing of B's there is an interval; thus if we made A's and B's hearing of the same shout exactly simultaneous with each other, we should have events exactly simultaneous with a given event but not with each other.... we assume a "velocity of sound". That is, ... the time when B hears A's shout is halfway between the time when A hears his own shout and the time when he hears B's. [*Mysticism*, p. 123]

After this explanation Russell proceeded to consider how appearances at different times are formed as part of one "thing" and how we arrive at the persistent "matter" of physics. He thinks that the supposition that things are permanent is not "metaphysically legitimate" (*ibid.*, p. 124). What is seen by us is merely a construction, i.e. the grouping of certain "sensibilia". Russell elaborates this in his essay "The Ultimate Constituents of Matter" (1915)

Russell argued that "a true theory of matter requires a division of things into time-capsules as well as into space-capsules" (*Mysticism*, p. 196). He explained this by suggesting that a persisting thing for common sense is simply an illusion, which arises only through the approach to continuity. But for physics matter is in constant change. The conception of the persistence of matter is because two appearances of the same piece of matter at different time is "continuity"; which, Russell thinks, cannot be the criterion for the total explanation of persistence for two reasons. First, it is largely "hypothetical", because we do not see any one thing which is continuous. Secondly, continuity is not a sufficient criterion to explain persistence. As for example, in the case of a chair or a table it is sufficient, but it fails in respect of a fluid. Then we can explain, something like "the real man... is really a series of momentary men, each different one from the other, and bound together, not by numerical identity, but by continuity and certain intrinsic causal laws" (*ibid.*). The ego is not one single persistent entity, but a series of entities in time succession and of which lasts for a short duration. The same could be said of a body consisting of smaller bodies, each occupying a very tiny volume of space and is composed of entities of less duration.

Russell declared that the world consisted of a multitude of entities in a certain pattern. Entities so arranged are called particulars. The particulars collected as a whole are called, by Russell, "logical constructions" or "hypothetical constructions" or "symbolic fictions". Though Russell did not give a precise view as what he precisely means by logical construction, there is no doubt that he used it as an epistemological

theory to cement the gap between perception and physics.²⁶ In 1912 he struggled to give a definite status to sense-data in order to have an immediate acquaintance with the physical objects. In 1914 Russell deconstructed physical objects in terms of both actual and possible sense-data. The sense-data became the ultimate constituents of the physical objects. In order to prove the epistemological viability of unperceived entities Russell said: "The supreme maxim of scientific philosophising is this: wherever possible, logical constructions are to be substituted for inferred entities." (*Mysticism*, p. 115). Since the arrangements of both perceived and unperceived entities is hypothetical Russell preferred to call them symbolic fictions²⁷. According to Russell entities arranged in a certain pattern are called "particulars", which are analogous to that of notes in a symphony which lasts for a short time.

Russell faced a hard task in providing similar metaphysical status to both perceived and unperceived sense-data. But this was solved by a discovery of a new theory. Russell claimed:

There were several novelties in the theory as to our knowledge of the external world which burst upon me on New Year's Day, 1914. The most important of these was the theory that space has six dimensions and not only three. [*My Philosophical Development*, p. 79].

The whole world of particulars is arranged in a six dimensional space, i.e. where three is to assign its position (of a given particular) in its own space and three of its space among other spaces. These particulars are classified in two ways; those that belong to a given "perspective" and those that are different "aspects" of the same "thing". To quote Russell:

... if I am (as is said) seeing the sun, what I see belongs to two assemblages: (1) the assemblage of all my present objects of sense, which is what I call a "perspective"; (2) the assemblage of all the different particulars which would be called aspects of the sun of eight minutes ago- this assemblage is what I define as *being* the sun of eight minutes ago. Thus "perspectives" and "things" are merely two different ways of classifying particulars. [*Mysticism*, p. 104].

26. I will discuss this in chapter six. There I will explain Russell's two usage of construction: epistemological and metaphysical. It is the second usage he laid emphasis on as a neutral monist.

27 See Prichard, "Mr Bertrand Russell On Our Knowledge of The External World", p. 185, where Prichard said that Russell confirmed that he held his constructions to be fictions. See further discussion in chapter six.

It is difficult to define perspective, since it includes both perceived and unperceived data. Russell defined a perspective of a given particular as "all particulars which have a simple (direct) spatial relation to the given particular" (*Ibid.*, p. 104). Between two patches of colour seen by different men, those particulars which have direct spatial relations to a given particular will belong to the same perspective. But there must be particulars with no direct relation that also belongs to the same perspective, according to Russell. He also said that for their own convenience physicists classify particulars into "things" and the psychologists classify them into "perspectives" and "biographies". After such explanation Russell said:

The particulars occupying... six-dimensional space, classified in one way, form "things", from which with certain further manipulations we can obtain what physics can regard as matter, classified in another way, they form "perspectives" and "biographies", which may, if a suitable percipient happens to exist, form respectively the sense-data of a momentary or of total experience. [*Mysticism*, p. 107].

According to Russell this theory cleared the puzzles (*My Philosophical Development*, p. 81) (a) about the distinction between different peoples perception of one thing, (b) about the causal relation between a physical thing and its appearances at several places, and (c) between mind and matter.

The above explanation indicates Russell's real motive behind his theory which is quite like that of a neutral monist. The main motive out of which neutral monism, as a theory, came into being is to get rid of psycho-physical dualism by resolving the conflicting views of physics and psychology. Russell claims he has done so. As he says:

It is only when physical "things" have been dissected into series of classes of particulars, as we have done, that the conflict between the point of view of physics and the point of view of psychology can be overcome. [*Mysticism*, p. 107].

4.4.2.1. Was Russell a Phenomenalist?

Russell moved towards phenomenalism to resolve an epistemological problems. But the form of phenomenalism he adopts (or quasi-phenomenalism) is so weak that it only partly solves the epistemological problem, because it requires a hypothetical inference to sensibilia. Whereas the epistemological virtue of phenomenalism is

presumably that sense-data (i.e. the actually *given* sensibilia) are perfectly transparent, knowledge by acquaintance, can't be mistaken about.

The fuzziness (weakness, quasi-) of Russell's phenomenalism is connected with his eventual shift to neutral monism:

(1) introduces new ontology (vis. sensibilia), eventually to scrap both sense-data and sensibilia, work with sensation alone;

(2) criticizes James's neutral monism for inadequate account of knowledge. But his own quasi-phenomenalism does not solve the epistemological problem he began with;

(3) criticizes James's neutral monism for inability to handle emphatic particulars--but he avoids solipsism only by introducing hypothetical sensibilia.

We have seen the main motive out of which phenomenalism has developed is the idea that physical objects can only be known through appearances. Both of its formulations, factual and linguistic, lay stress on the claim that physical objects can be analysed in terms of sensations and therefore there is no need to postulate unknowable objects mistakenly thought to be hidden behind them. This is what the phenomenalist intends to do.

We have uncovered at least two reasons why Russell was called a phenomenalist. First, his declaration of sense-data as the ultimate constituents of matter. Secondly, his decomposition of physical objects into sense-data in order to show that there are no physical objects other than sense-data, thus making sense-data physical and empirical constituents of matter.

Before proving that Russell was not a phenomenalist, it would be better to see as to what he thought of his 1914-1915 position. In 1921, when Russell officially declared himself a neutral monist he, in *The Analysis of Mind*, regarded that the stuff, out of which both mind and matter are constituted is neither mental nor material but something more primitive than either. [Cf., *ibid.*, pp. 10-11]. In one of the footnotes (see p. 11) he mentions that as regards matter he has set out his neutral monistic views in *Our Knowledge of the External world* (chapters III and IV), and also *Mysticism and Logic* (Essays VII and VIII). This claim contradicted his original claim

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in 1914, that the ultimate constituents of matter are sense-data which are purely physical. In order to make physics empirically verifiable he tried to explain physical objects in terms of physical elements without making any reference to mind. In 1914 Russell was a physicalist and not a neutral monist as far as the explanation of physical objects are concerned.

There is more evidence which proves that Russell's position of 1914 and 1915 was not that of a neutral monist. In his "Excursus into Metaphysics: What There Is" in *The Philosophy of Logical Atomism*, 1918, he expressed his bias in favour of neutral monism. First because it exemplifies Occam's razor, because one runs less risk of error by assuming fewer entities. Secondly, every diminution in the number of entities increases the work for mathematical logic to do in building up things. Russell said, "therefore the whole theory of neutral monism is pleasing to me but I do find so far very great difficulty in believing it" (p. 86). He also said, "I do not profess to know whether neutral monism is true or not. I am not without hopes of finding out in the course of time, but I do not profess to know yet". But in the same page he also said, "I feel more and more inclined to think that it may be true. I feel more and more that the difficulties that occur in regard to it are all of the sort that may be solved by ingenuity." (p. 153).

From the above consideration and especially the confession of 1918 we can conclude that Russell was not a neutral monist in 1914.

Russell was not a phenomenalist either. A well defended version of phenomenalism is, I think, Ayer's essay "Phenomenalism", which possibly will help us in judging Russell's position of 1914 as a phenomenalist. In Ayer's essay one is bound to encounter at least two basic requirements, if not more, which are necessary to carry out the programmes of a true phenomenalist. They are: (1) no reference, whether directly or indirectly, to a physical object should occur in the phenomenalist's analysis of the external world, and, quite analogous to the one stated, (2) the phenomenalist should not allow himself "to speak of "sensibilia" having a continued and distinct existence in space and time--" (p. 196).

The only tool or raw material, or whatever we call it, a phenomenalist has, is sense-data. The sense-data are the only things that exist and hence the question of any hidden mysterious cause or object behind the veil of perception does not arise. Moreover a phenomenalist cannot say that such and such things causes sense-data, nor

can he say that sense-data cause physical objects. What there is are sense-data and sense-data are all that we know. As Ayer said:

The phenomenalist's tale does not include the author; it is in that respect, a tale that tells itself. [p. 195].

According to Ayer difficulty arises if anyone says that the sense-data are sensed by anyone. From this we could gather, anyone could be myself, my neighbour, my friend or anybody else. Such reference not only implicate to spurious existence of physical objects, but also leads us to such difficulties "concerning the possibility of physical interaction between the observer and the event that he is put there to observe" (*ibid.*, p. 194).

Russell in 1912, in discussing the causes of sense-data, stated that sense-data, which we think are connected with a chair, for example, "are really signs of the existence of something independent of us and our perceptions" (*The Problems*, p. 13). These independent objects are physical objects. But in 1914 without much explanation he tacitly avoided mentioning physical objects and regards sense-data, of which we are aware in our sensations, to be the ultimate constituents of the external world. Then concluded that sense-data differ from person to person,

"yet there is sufficient similarity among their data to enable them to group together certain of these data as appearances of one "thing" to the several spectators, and others as appearances of another "thing". " (*Mysticism*, p. 114)

This means that in the presence of a table, e.g., "A" senses certain sense-data peculiar to himself, "B" senses certain others, so do "C", "D", "E" etc. Each of their data are different. But how are we to assume their similarity? Is it via a hypothetical generalisation about the private experience? Or illegitimate reference to physical bodies as the source of the similarity? In either way we are bound to damage the whole programme of phenomenalism. Russell did both. He made hypothetical contentions, and in doing so draws attention to the presence of physical bodies. He did it so openly that it leaves no doubt that the actual programme of Russell is not phenomenalism. To make it more clear let me quote Russell;

[T]he appearances which a given thing in the room presents to the actual spectators, there are, we may suppose, other appearances which it would present to other possible spectators. If a man were to sit down between two others, the appearance which the room would

present to him would be intermediate between the appearances which it presents to the two others. [*Mysticism*, p. 114].

This passage and many other similar passages, which I have already quoted, suggests that Russell was not a phenomenalist nor did he intend to be, because he was so overwhelmed with the theory of neutral monism that he, perhaps, used phenomenalism to be a technique to bridge the gap between mind and matter. As a first step, in 1914, he declared that there are no such things as physical objects but only sense-data. What we call physical objects are simply constructs out of more basic constituents known as sense-data.

Ayer said that once we accept "sense-datum language" then not only physical objects but also the observers, which are at the physical level, must be reduced to sense-data. To quote Ayer:

For to allow them [the observers] to stand outside "having" or "sensing" the sense-data would be to bring sense-data themselves up to the physical level and so vitiate the whole phenomenistic programme. [p. 194].

This is what Russell did in 1914. He declared sense-data to be physical, i.e. is to say that they are part of the actual subject-matter of physics. He also held that sense-data which are causally dependent on sense-organs, nerves and the brain, are physiologically subjective. In order to be a true phenomenalist, physical fact should be totally analysed in purely sensory terms.

Russell's departure came, only if he did try to establish phenomenalism, when he declared "sensibilia" to be the ultimate constituents of matter. Sensibilia, the unsensed sense-data, supposed to have the similar metaphysical and physical status as sense-data. These unsensed sense-data exists in space and time without any change as the existence of the sense-data. To put it in Russell's words

We must include among appearances not only those which are actual sense-data, but also those "sensibilia", if any, which, on grounds of continuity and resemblance, are to be regarded as belonging to the same system of appearances, although there happen to be no observers to whom they are data. [*Mysticism*, p. 154].

Ayer thinks that if phenomenalist speaks of sensibilia it will vitiate the ultimate aim of phenomenalism. Not only that, Ayer contends "these sensibilia are only physical objects, or attenuated physical objects, in disguise" (p. 195). By claiming the

existence of sensibilia, it has been argued²⁸ that Russell postulated sensibilia on the same level as that of physical objects. His acceptance of sense-data was simply to fill up the gaps where no observers are present.

The above consideration makes us more convinced that phenomenalism was simply a catalyst in Russell's philosophical exercise, but certainly not his objective. He has spelled out his desire, I think very clearly, when he said that physics, being an empirical science, is supposed to be verifiable, and that is what he thought he did in 1914. The question which really concerns us in this context is not whether Russell succeeded in establishing phenomenalism or neutral monism, but whether he establish the verifiability²⁹ of physics? I do not think Russell does.

4.4.2.2. Sensibilia: The Introduction of Hypothetical Elements.

He deviated from his own commitment by analysing unsensed sensibilia into the logical constituents of physical objects. The hypothesis of unperceived sensibilia is itself not verifiable, i.e. not knowable by acquaintance. Also by making sense-data private to oneself, Russell left us in a hypothetical assertion that others also have sense-data, say in the presence of a table, quite similar to mine. I can only know my sense-data, but I possibly cannot know, though can guess, our sense-data and the unsensed sense-data which might become mine if I am properly placed. Moreover sense-data are short lived, like the notes of a symphony as Russell said, and this transitoriness makes it difficult for sense-data to be compared.

I think Stace rightly observed that by 1921 epistemological motives were becoming less important to Russell. In his *The Analysis of Mind* Russell concerned himself with the problem of what there is and not how do we know. Perhaps, actually in 1914 he implicitly laid the ground for his future investigation, and in doing so his 1914 and 1915 papers did not really succeed in establishing how physics can be known.

28. For instance Hirst, *op.cit.*; Stace, 'Russell's Neutral Monism; cf., Nusenoff, "Russell's External World: 1912-1921", p. 69.

29. Please note that when Russell uses the word "verifiable" he simply means "knowable". His initial engrosment in epistemological problem pushed him to establish physics knowable by acquaintance. So the use of the word "verifiable" should not be taken to classify him as "verificationist".

4.4.2.3. (A) The Problem of Knowledge and (B) The Problem of Indexicals Remain Unresolved.

(A) The Problem of Knowledge.

We have already noted that in his critique of James's neutral monism Russell thought that James's account of knowledge was the main reason his theory failed. Apart from this he also thinks that neutral monism cannot account for such "emphatic particulars" or indexicals as "this" and "I" and "now" which, according to Russell, is the most conclusive argument against neutral monism. These are the few issues which held Russell back from accepting neutral monism, although he found the theory "pleasing". Before he finally accepted the theory in 1921, Russell tried to solve these problems.

As to the first problem we know that Russell moved towards phenomenalism to resolve epistemological problems. But the form of phenomenalism he adopted, which is weak, only partly solves the epistemological problem. Because it requires hypothetical inferences to sensibilia; whereas the epistemological virtue of phenomenalism is presumably that sense-data, i.e. the actually given sensibilia, are distinct and known by acquaintance. In 1912 Russell's main intention was to have access to physical objects, which he partially did via sense-data which made up the appearance of physical objects. But in 1914 he gave up physical objects in favour of sense-data, the ultimate constituents of physical objects, and could not resist the admission of hypothetical elements, sensibilia. And with this admission he failed to solve the epistemological problem he began from. It is interesting to note that as he approaches neutral monism he becomes less interested in epistemological problems and gives more emphasis to the questions of the ontological status of sense-data including unperceived sensibilia. This became more apparent in 1921 when he openly declared "those occurrences (if any) which do not form part of any "experience" belong only to the physical world" (*The Analysis of Matter*, p. 25). Perhaps Russell realized that for neutral monism epistemology is not important, and this he expressed in 1913 when he said, "... difficulty arises in regard to the definition of knowledge offered by James, though here it is hard to say how far this definition is essential to neutral monism". [*Collected Papers*, vol. 7, p. 32]. Hence we find that in 1921 Russell, somewhat reluctant about epistemology, totally avoided bringing up the issue which therefore remained unresolved in this phase of his philosophy.

(B) The Problem of Indexicals.

Similarly the issue of emphatic particulars remained unresolved in 1921. We have already seen that Russell casts doubt that since "this", being a proper name, does not stand for one particular thing, its connotation is determined the moment it is used, and differs at the next moment, because the object of attention is always changing from moment to moment and not from person to person. Hence it is ambiguous, and therefore Russell doubts how one can deal with the notion of "this" on the basis of neutral monism. This of course he admitted in 1918. But if we look back we find that in 1914 Russell could not solve this problem.

In his "The Relation of sense-data to Physics" Russell claimed that it is true that two people cannot have the same sensations, and, although similar, the sense-data of one cannot belong to the of the other. This shows that it is not possible for any person to be aware of all sense-data. Not only this, there are unsensed sense-data which are not data to any mind. Russell had no alternative. If he only said that one's sense-data is all that exists his theory would eventuate in solipsism. He avoids solipsism only by introducing hypothetical sensibilia. And in doing so he failed to deal with emphatic particulars in 1914. he failed because his analysis of selves into biographies tends to show that no two people can have the same biography. He explained biography in the following way:

The sum-total of all particulars that are (directly) either simultaneous with or before or after a given particular may be defined as the "biography" to which that particular belongs. ... just as a perspective need not be actually perceived by anyone so a biography need not be actually lived by any one. [*Mysticism*, p. 105].

Not only this a person's own biography is also not constant, there are different moments in his history. For instance, "this" a moment earlier and a moment later does not have the same reference. Because the transitoriness of sense-data are such that it becomes difficult to give a proper reference to the indexicals. The identical sense-data may never form the part of biography to a particular individual.

Russell, of course, did take up the issue in 1940 in his *An Inquiry into Meaning and Truth* only to tell us that the problem of indexicals could be solved but "they are not needed in any part of the description of the world, whether physical or psychological" (p. 103). He explains that all indexicals can be defined in terms of "this". Hence, "I" means "the biography to which this belongs"; "here" means "the place of this";

"now" means "the time of this" and so on (cf., p. 102). He further states that "this" designates an object without describing it. According to Russell many objects are present to attention but on each occasion the word "this" is used to refer to only one object. Since the word "this" is a proper name, he says, it can be used to different object at different time. When it is applied to a new object it ceases to be applicable to the old one. But Russell was not content with such an explanation because if "this" is merely a name then it cannot have a constant meaning since a name means "what it designates, and the designatum of "this" is continually changing" (p. 103). Since "this" is a proper name and applies to one object at a time it cannot be treated as a description..

In the *Inquiry* Russell suggested a way in which the problem of indexicals could be solved. This is a way where a verbal reaction to a particular stimulus may be immediate or delayed. When it is immediate the afferent nerves are stimulated and carry nerve-impulses to the brain which passes the impulse back through the efferent nerve to the appropriate muscles and produces a sentence beginning "this is". In delayed reaction the message passed is stored and later sent back in such a way that it produces a different sentence, such as, "that was". Hence the difference between a sentence beginning "this is" and one beginning "that was", lies not in their meaning, but in their causation. In such an analysis it shows that the word "this" is not needed for the description of the world. Russell thought that in a similar way the problem of all the indexicals could be solved.

According to Russell the word "I", since it persists for a certain period of time is derived from "I-now" by certain causal relations. Then he went on to say:

The connexion between "I-now" and "this" is obviously close. "I-now" denotes a set of occurrences, namely all those that are happening to me at the moment. "This" denotes some one of these occurrences. "I", as opposed to "I-now", can be defined by causal relations to "this", just as well as to "I-now"; for I can only denote by "this" something that I am experiencing. [*Inquiry*, p. 107].

Subsuming a similar theory of selves as he did in 1914 and in 1921 Russell echoed:

[T]here is reason to believe that no two families ever have a common member, i.e. that there is nothing of which two different persons can be aware. [*Inquiry*, p. 217].

There he explained that awareness, "A", is a relation between two events in one person's experience. He also said that in terms of A, we can define the person to whose biography a given event belongs. Russell explained this position by means of "the R-family of x". If "P", e.g., means "parenthood", the P-family of x is x's ancestors and descendants, and brothers and sisters and cousins, and himself—provided he has parents or children. But if x has no parents or children then the P-family of x does not include x (p. 216). Russell applied this in "awareness", "A", where awareness consists of noticing or remembering. Russell said if x is an event in some person's biography, x's nearest relatives with respect to A will be events noticed or remembered by x and events which notice or remember x. And if y is one of these, events noticed or remembered by y and events which notice or remember y will be relations of x in the second degree. This process will go on for any finite number of generations. By regarding an event as "personal" (if it is aware of something or something is aware of it) Russell said its A-family contains the event itself and other terms, but if the event is not personal its A-family is the null class. Russell then defined "persons" as "all A-families except the null class", and hence says it is possible to define "I" as "the awareness-family of this". [*Inquiry*, p. 217].

It is on this ground that Russell reiterated his position by saying that two people cannot have same sensation. This also shows that since no two families ever have a common member the fate of the emphatic particulars remain unresolved as late as 1940. Perhaps, Russell found difficulty in solving the issue in a neutral monists way, he thought that they are not needed either in physics or in psychology.

4.4.3. Conclusion.

In discussing the types of phenomenalism I have distinguished factual phenomenalism into three types. If Russell had accepted hyper-phenomenalism, i.e. only one's own sense-data exists, then his theory would have eventuated in ultimate solipsism. Possibly Russell could have solved the immediate problem of knowledge by saying that one is acquainted with one's own sense-data that are all supposed to exist. But that would have left e.g. the other people's sense-data unexplained. We have seen his acceptance of weak phenomenalism left him with unsensed sense-data.

Now the question that arises is what would have happened if Russell accepted pure phenomenalism, i.e. actual sense-data are all what we know exists and are public? This perhaps would have solved the problem of both knowledge and the indexicals.

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One would say, for example, the plate, a physical object, is construction out of actually sensed sense-data. The sceptics would argue about the existence of sense-data from different point of view. An elliptical sense-data may turn out to be round with the movement of body and change of position. In that case we cannot possibly assert that the elliptical sense-datum is the actually perceived constituent of the plate. Russell of course was aware of this problem. Moreover the object plate may have certain causal properties which make it brittle for example. How can one have access to the data which constitutes this brittleness?

We know that Russell's explanation of the indexicals shows that not only can two person communicate but also that in a particular person's own history the same sense-datum does not occur twice. The problem could be solved by a slight change in defining "this". In this case the word "this" could refer to a sense-datum, not private to oneself, as a publicly observable event, so that when a person utters it he can have the experience of it at that moment.³⁰

Perhaps Russell could solve the problems partially but his aim was not to commit himself to the theory of phenomenalism. His aim was to develop the theory of neutral monism and explain mind and matter in terms of neutral stuff only. He has categorically said that physics demands continuity and phenomenalism cannot explain continuity without postulating inferential elements which would be against its own programme. Although Russell failed to solve the epistemological and the indexical problems, this was not a hinderence to develop his ontology of neutral events. What neutral monism demands is that the ultimate constituents of both mind and matter should be neutral, i.e. neither mental nor physical. This will become clear when we discuss his theory of neutral monism. But for the present we can say that his acceptance of quasi-phenomenalism has at least solved his immediate problem that the epistemological questions are not necessary to make ontological theory viable. In explaining the sense-data and physical objects Russell gave in to a number of circular arguments in order to ground his theory in a more profound epistemology. I will again raise this issue in chapter six and fully discuss it in chapter seven.

30. Cf., Gale, R.M., "Indexicals Signs, Egocentric Particulars, And Token-Reflexive Words", p. 152. Also see Chapter Five under the heading "Events as neutral entities".

Chapter 5.

Russell's Theory of Neutral Entities: A Critical Appraisal

The Stuff of the world may be called physical or mental or both or neither, as we please; in fact, the words serve no purpose. [*An Outline of Philosophy*, 1927, p. 148].

But from the stand-point of philosophy the distinction between physical and mental is superficial and unreal. [Russell, *The Analysis of Matter*, 1927, p. 402].

Introduction

Six years after his critique of James's theory of neutral monism Russell said:

William James, in his Essays in *Radical Empiricism*, developed the view that the mental and the physical are not distinguished by the stuff of which they are made, but only by their causal laws. This view is very attractive, and I have made great endeavours to believe it. I think James is right....

A few lines later he pronounced:

[W]hen we come to consider the stuff of the two sciences [he means physics and psychology], it would seem that there are some particulars which obey only physical laws (namely, unperceived material things), some which obey only psychological laws (namely, images, at least) and some which obey both (namely, sensations). Thus sensations will be both physical and mental, while images will be purely mental.¹

Conscious of the need to be both careful and definite, Russell unceremoniously launched his famous theory of neutral monism in 1919, not even mentioning that he was doing so, perhaps, to feel the pulse of his critics, so that in an opportune moment he could establish it. It was not until 1921 that he officially declared himself a neutral monist, and it is this theory (the second quoted passage) he developed and elaborated in *The Analysis of Mind*, without making any significant change.

We know that Russell's acceptance and ultimately his commitment to neutral monism was initiated by his reading of Mach and James. Further the scientific progress made in the fields of psychology and physics prepared a ground work which pushed him to

1. Both the passages are taken from his essay "On Propositions: What they are and how they mean", in *Logic and Knowledge*, p. 299.

make an effort to reconcile psychology and physics. As I have already said the twentieth century movement in physics led to the re-introduction of idealistic argument by suggesting an active role for consciousness in the perceptual act, whereas in the field of psychology an opposite trend had been observed. The behaviouristic movement led to the denial of introspective mental states such as thoughts and explained all actions in terms of behaviour; hence making psychology a materialist study. [See Chapter One].

In 1921 Russell took his task to be to reconcile this materialistic tendency of psychology with the anti-materialistic tendency of physics, and to present a thesis according to which the "entities" of which the world is ultimately composed are neither mental nor material, but neutral, out of which both mind and matter are constructed.

We have earlier seen in chapter four that between 1912 and 1915 Russell was not a neutral monist. In 1912 Russell produced a relative dualism by making a relation between consciousness and physical objects via data belonging to sensations and introspection, both functions of mind. But by 1914 he reduced the gap between mind and matter by absorbing physical objects into sense-data and declaring sense-data, which are physical, to be the ultimate constituents of matter, thus making an easy access to matter. As regards this explanation of matter he is a physicalist and not a neutral monist. Russell categorically denies that sense-datum is mental. In a letter to the editor of *The Journal Of Philosophy, Psychology, And Scientific Method*, June 7, 1915, he wrote "indeed my whole philosophy of physics rests upon the view that the sense-datum is purely physical." [*Collected Papers*, vol. 8, pp. 88]. But the fact is that until 1914 Russell's world remain divided, because sense-data could support only the theory of matter and the theory of mind remain unsupported. Perhaps he still believed his 1912 analysis of mind and did not feel any urgency to change it until 1921, the year he finally accepted neutral monism.

As a neutral monist Russell has to show that the entities out of which mind and body are created are of a single unique kind. This single kind of entity should be such that it should not depend for its existence either on mind or matter; but it should be able to constitute both matter and mind. If Russell intends to turn his theory of 1914 into neutral monism, it is essential for him to bring about some changes. They are as follows:

(1) he has to show that the data, the entities, should be neutral and should explain mind and matter well. Sense-data are physical and only explain matter;

(2) he has to get rid of hypothetical elements, such as unperceived sensibilia. This is because there are sensibilia, according to Russell, which are never a datum to any mind and therefore it is difficult to know about their status which is essential for the theory to be truly neutral.

These changes are necessary to abolish the relative dualism of 1912. My main concern will be,

1. to see how he analyses "neutral entities" and to determine whether there is any shift in his position;
2. to see whether he is successful in explaining mind and matter wholly out of "neutral entities" and how he retains a monistic stance as against dualism;
3. and finally to prove that his theory of neutral entities, like James, succumbs to covert dualism.

In this chapter I will deal with his analysis of neutral entities. In doing so I will argue that the supposedly neutral entities are not neutral but covertly dualistic. For an entity to be neutral it should not admit any elements which were mental or were physical. [See section 1.2.3.]. The second and the third parts will follow in detail in chapter six when I discuss his theory of mind and matter as a neutral monist.

Russell at the very beginning of his analysis of mind and matter in terms of neutral entities undertakes to refute a theory of consciousness which he held as a dualist.

5.1. Rejection of the Term "Consciousness" in Jamesian Style.

We have seen earlier in chapter two how James in his essay "Does 'Consciousness' Exist?" made an effort to give a new connotation to the term "consciousness". There he rejected consciousness as an entity and argued that it stands for a function and that function is *knowing*. This knowing is a sort of relation between two terms where one of the terms becomes the subject knower and the other becomes the object known. For James the term "consciousness" is an "epistemological necessity", though there is "no direct evidence of its being there" (*Radical Empiricism*, p. 5).

Following James, Russell, in his *The Analysis of Mind*, adopted a similar attitude in refuting a theory according to which "the essence of everything mental is a certain quite peculiar something called 'consciousness'" (p. 9) and said "which I formerly

held myself". Here he spoke of consciousness "either as a relation to objects, or as a pervading quality of physical phenomena" (*ibid.*). But in 1912, as we have seen, Russell did not speak of consciousness either as quality or relation. All he said was that we could not know the truth or even understand what is meant by "I am acquainted with this sense-datum" unless we are acquainted with something which we call "I". This "I", of which Russell speaks, is a thing different from sense-data, which constitutes the appearance of matter (1912). If "I" is a thing other than matter or sense-datum, then "I" must be an independent entity, which constitutes mind.

Russell's refutation of consciousness began with a historical analysis, in which he showed the importance of consciousness from the stand-point of both traditional and modern psychology. Traditionally mind has been characterized as being conscious. When I talk to a friend, e.g., I am not only conscious of what she is saying or doing, but I am also conscious of my own feelings, attitudes and intentions, which belongs to the category of wilful act. "Being conscious" is the major criterion of separateness between ourselves and physical objects, such as tables, chairs, desks and so on. We usually think that when we bang on a table, we are conscious of banging on it; but the table is not aware of being banged on. Russell said that perception, memory and belief are the ways of being conscious.² These ways are important for the analysis of mind but not in the way a conventional psychologist might suppose. Russell said that in perception we perceive anything which we recognize through senses. What I am writing at a particular moment is a perception to me, so is my uttering of a sound. But customarily it is thought that in perception we go beyond the sensation to the "thing" which it depicts. When I hear a cock crow I do not only hear a noise, but realize that it comes from a cock. In memory, Russell said, we are conscious of the past happening which no longer exist. And belief is the way of consciousness which gives both knowledge and error.

Apart from these three ways of being conscious there are things like desire, pain, pleasure, which are ordinarily called mental, which together form the cognitive elements in mind, i.e., they denote mental processes connected with understanding, such as, formulation of beliefs, attainment of knowledge quite distinct from such wilful acts as wanting, intending etc.

2. In Chapter Six, in discussing Russell's theory of mind, we shall see that he analysed these in terms of neutral entities and considered them to be complex mental phenomena.

According to Russell, in describing consciousness in this way there is one element which is common: that they are all directed to "objects" in the sense that consciousness is one thing, and that of which we are conscious is another thing. More precisely, traditionally it is thought that the object of consciousness is not mental, but consciousness is. In order to explain the importance of this view in traditional psychology, Russell discussed the theory of Brentano, presented in his *Psychology from the Empirical Stand-point* (1874). Following Brentano he believed that mental phenomena has essential reference to objects, except in the case of pleasure and pain. But Russell confirmed in *The Analysis of Matter* that he no longer believed this, even in the case of knowledge (cf., p. 15).

The rejection of consciousness led Russell to repudiate various dualistic criteria he has accepted to distinguish between the mental and the physical. The acceptance of these criteria left his earlier (1912) analysis of mind and matter as "relative dualism".

One of the criterion is the notion of *intentionality* developed by Brentano. Brentano's view has also been developed by his successor Meinong. According to Meinong, there are three elements involved in the thought of an object. They are the act (or subject), the content, and the object. If, for instance, I think of a book, I perform the act of thinking. Then there is what makes the character of the thought as contrasted with other thoughts; this is the content. And the third is the book which is the object of the thought.

Russell accepted this realist distinction between the act and the object but rejected the content. In his Manuscript Notes, "On Sensations and Ideas", in 1918, Russell explained his reasons for accepting this distinction in the sphere of cognition. Suppose we see a "patch of red". The patch of red is not psychical but physical, whilst our seeing of it is not physical but psychical. Hence our seeing the patch must be other than the patch itself. Since the argument is directed against idealism Russell accepted it to refute idealism (cf., *The Collected Papers*, vol. 8, p. 253) This relational view is rejected by James, Dewey and the American realists. They accepted the object, but no longer used the name "object", because the term suggests a relation to a subject.

In the same "Notes", Russell discussed the view held by Dewey in order to accept that our seeing a patch of red is identical with the patch of red. Dewey, in his *Studies in Experimental Logic*, says that perceptions are not *per se* causes of knowledge, but simply natural events with no knowledge status. He challenged the realists to try the

experiment of conceiving perceptions as pure natural events and not as awareness or apprehension, - "they will be surprised to see how little they miss" (*ibid.*, p. 253). Russell argued that Dewey is right and says that it will be necessary to reduce every thing cognitive to "pure natural events", if "neutral monism" is to be defensible. This is what James tries to do with his philosophy of "pure experience". In this particular "Note" Russell cautioned that he was not developing the theory of neutral monism but accepted Dewey's proposal to dispense with the relational occurrence consisting in awareness of sense-data. This he thought as the first step towards abolishing dualism of mind and matter. According to the doctrine of intentionality the difference between the psychical and the physical is that the psychical phenomena consists of "acts" directed to "objects".³ The dualism in the Cartesian tradition has emphasized not only the "raw feel" but also the "intentional" features of mind.⁴ Now he thought that "act" is "unnecessary and fictitious" and therefore cannot be discoverable "empirically" (*The Analysis of Mind*, pp. 17-18). Moreover "the reference of thoughts to objects is not ... the simple direct essential thing that Brentano and Meinong represent at as being" (*ibid.*, p. 18). Such reference is largely "derivative" and consists in beliefs.

As we go along we shall see that in 1921 Russell also accepted the concept of "mnemic" in characterizing mind (*The Analysis of Mind*, pp. 82ff). According to him sensations which enter mnemic context constitutes mind, and that it is by means of mnemic phenomena that an "experience" is defined. [*Collected Papers*, vol. 9, pp. 31-2]. This he confirmed in a letter to The Editor of "The Japan Weekly Chronicle" against the review made by Neil Gordon Munro published in January.]

Although Russell accepted the concept "mnemic" as a criterion of mind, he did not regard it belonged exclusively to mind. The difference between mind and matter is simply a difference of degree, and therefore on should not "erect and absolute barrier" between them (see *An Outline of Philosophy*, p. 306.) Russell explained that to "some slight extent" the "inanimate matter" behaves the way the living body behaves. For instance if we unroll a roll of paper, it will roll itself again. Russell said that mnemic causation is "too wide" (*The Analysis of Mind*, p. 295), and hence:

[If we are to avoid what I have called "mnemic" causation, which involves action at a distance in time, we must say that mnemic phenomena in mental events are due to the modification of the body by past events. [*An Outline*, p. 306].

³ *The Analysis of Mind*, p. 14ff.

⁴ Feigl, H., "The 'Mental' And The 'Physical'", p. 417.

Russell not only rejected the mnemonic phenomena to distinguish the mental and the physical, he also rejected the "subject-object" distinction.

5.1.1. The Notion of "Subjectivity" and "Objectivity".⁵

As we know that in accepting neutral monism James not only rejected that "subject" but also the "object" which distinguishes the mental and the physical. For James the "subject-object" distinctions arise simply out of "special purposes", i.e. when a complex of neutral entities are viewed in two ways. [See Chapters Two and Three].

Accordingly, Russell argued that subjectivity is not a characteristic of mind, nor is objectivity the characteristic of physical object. These characteristics are equally shared by organism with brain and also the photographic plate.

The acceptance of the criterion of "subjectivity" was mainly due to the acceptance of "introspection" as a source of self knowledge. James in his *Principle* accepted "introspection" to explain knowledge. But by accepting neutral monism he accepted the term "retrospection", which, I have argued, amounts to similar interpretation as that of the term "introspection". Russell also accepted the method of introspection, and hence committed similar mistakes like James. This will become apparent as we go along.

Russell discussed James's theory of introspection which Knight Dunlap discussed in his article "The Case against Introspection" (*Psychological Review*, vol. xix, no. 5, 1912; see *The Analysis of Mind*, p. 110). According to Dunlap the real ground for "James's original belief in introspection was his belief in two sorts of objects, namely, thought and thing.... it was a mere inconsistency on James's part to adhere to introspection after abandoning the dualism of thoughts and things" (*The Analysis of Mind*, p. 116). Russell partly disagreed with this view and said:

But then I hold that knowing itself consists of much constituents suitably related, and that in being aware of them we are sometimes being aware of instances of knowing. [P. 116].

According to Russell the distinction between subjectivity and objectivity is "one of degree, not of kind" (*The Analysis of Mind*, p. 119).⁶ If we confine ourselves to

5. Cf James's notion of "subjectivity" and "objectivity" (2.6.2).

6. Cf., "Perception", *Collected Papers*, p. 188; the abstract of the first part "Introspective Analysis" forms the subject matter of Chapter 19 of *An Outline of Philosophy*, but the second, "Causal Analysis",

sensations we see that "there are different degree of publicity attaching to different sorts of sensations" (*ibid.*, p. 118). Sight and hearing are the most public of the senses. The smell, touch and the taste are semi-public. Touch can be regarded as public "in the sense that a number of people can *successively* have very similar perceptions, but they cannot all touch the same spot at the same moment" (*Collected Papers*, vol. 9, p. 188; cf., *The Analysis of Mind*, p. 118). The bodily sensations, like headache, toothache, hunger, thirst, the feeling of fatigue and so on are the private sensations. Regarding privacy, Russell said that all images, of any sort, belong with the sensations which only give knowledge of our sensations are such that "even the most primitive sensation has correlations which would theoretically enable another observer to infer it" (*ibid.*, p. 119; cf., *Collected Papers*, vol. 9, p. 188). For instance the dentist who does not observe the pain of his patient, can see the cavity and can guess that one is suffering even if the patient did not tell him. Thus Russell enacts the behavioural principle in explaining mind.

By bringing neutral monism in line with behaviourism, Russell showed that mind and matter are constructed out of three neutral entities - sensations, images and sensibilia.⁷ Earlier he said that "other occurrences" such as sensibilia belonged to the physical world only and "images" being mental belonged to mind exclusively (see Chapter Six. An elaborate discussion is carried out to show how mind and matter is constructed out of neutral constituents). In 1927 Russell argued that images have a position in the brain and hence are part of external world. Mind and matter are constructions not of one but three entities which is not even nearer to James's position.

Despite his adaptation of behaviouristic psychology Russell accepted introspection or self observation. He provided three possible reasons. First the acceptance of introspection was because "some of the things we observe cannot, even theoretically, be observed by any one else" (*The Analysis of Mind*, p. 117). Second, because images cannot be brought under the causal laws of physics, "though perhaps ultimately they may be" (*ibid.*). As to the third reason Russell spoke adversely to introspection. "I think that observation shows us nothing that is not composed of sensations and images, and that images differ from sensations in their causal laws, not intrinsically." [*Ibid.*]. He explained these successively.

is not found in the book (*ibid.*, p. 180). The second abstract, I think, forms the subject matter of Lecture VI, "Introspection", of *The Analysis of Mind*.

⁷ Quinton, A., *op.cit.*, p. 96.

For instance two people looking at the same table do not get the same sensation, because of the law of perspective and the way the light falls. But one can correlate one's private data. More over the most private sensations have similar correlations with things that others can observe. Such as dentist does not observe somebody else's ache but can see the cavity which causes it, and guesses the suffering caused by the ache. Russell argued that Watson and his followers by laying importance on observable behaviour try "to extrude from science observations which are private to one observer" (*The Analysis of Mind*, p. 119). Favouring introspection as a source of knowledge Russell said "privacy, therefore does not by itself make a datum unamenable to scientific treatment. On this point, the argument against introspection must be rejected" (*ibid.*, p. 119).

The acceptance of introspection as a source of knowledge differentiates Russell's theory from the behaviourists, particularly J.B. Watson. In his *An Outline of Philosophy* Russell carried out an elaborate discussion on Watson's views against introspection. He agreed that publicity of physical facts, which is the greatest assets of physics and is accepted by the behaviourists must be admitted. [P. 177]. On this Russell has no reservation. But his objections to behaviourism as an ultimate philosophy come from a different kind of considerations. To explain this He said that let us take a proposition: "All facts that can be known about human beings are known by the same method by which the facts of physics are known" (*ibid.*, p. 180). this Russell considered to be true.

As we shall see that Russell conveniently located percepts on the head. Since percepts explains both physics and psychology Russell held that "the facts of physics, like those of psychology, are obtained by what is self observation". [*Ibid.*]. According to Russell, from the stand point of physics, all of our percepts come at the end of the causal chain. Therefore whether visual or auditory all percepts, are in our head. For instance when we "see the sun", it is an event in us that we know; their external causes are simply inferences and therefore could sometimes be mistaken. [*Ibid.*, p. 180]. The only distinction that can be discovered between physics and psychology, according to Russell is the degree of correlation with events outside the body of the observer. [*Ibid.*, p. 181].

We have seen that James coined the concept "co-conscious transition" by which one experience passes into another when they belong to the same self. Within the personal histories of each individual, subject and object, interest and purpose are continuous.

He also argued that discontinuity is felt when the transition takes place between at least two individuals. In such transition one has to get on and off again, "to pass from a thing lived to another thing only perceived". [See Chapter Two].

In a similar fashion Russell argued that a man can know more about his own body which is an inference to another man and the knowledge is therefore indirect. In the case of toothache, the dentist by looking the cavity infers that the patient feels toothache. But such difference is a matter of "degree" not of a "kind".

In 1927 Russell carried out an elaborate discussion on the issue of "subjectivity" and "objectivity" in a perception in his *An Outline of Philosophy* (pp. 158 ff.) and *The Analysis of Matter* (pp. 222 ff.) Regarding objectivity in a perception Russell reiterated that this is a "matter of degree" which not only depends on the physical condition but also upon the experience of the percipient. Russell argued:

We shall call the elements which are alike "objective" elements in the impression, and those which are peculiar we shall call "subjective". [*An Outline of Philosophy*, p. 160].

For instance when two people have percepts as belonging to one group, and if the inference of the two observers agree, that perceptions may be objective. But if the inferences of the one differ from the other then one of them must be drawing false inferences, and therefore has an element of subjectivity. [Cf., *The Analysis of Matter*, pp. 222-223].⁸

According to Russell subjectivity in perceptions can be traced to three sources. [*The Analysis of Matter*, pp. 222-225]. They are:

- (1) physical subjectivity, i.e. when the objects are between the body of the percipient and the centre of the group to which the percepts belongs;
- (2) physiological or sensory subjectivity, i.e. when they are in the body of the percipient and not in the brain; and,
- (3) psychological or cerebral subjectivity, i.e. when they are in the brain.

"Physical subjectivity" exists in a photograph, compact disc etc. The stick that looks bent when it is half in water is an example of physical subjectivity. "Physiological subjectivity" arises through defects of sense-organs, efferent nerves and drugs. We

8. *The Analysis of Mind*, pp. 130-31; *An Outline of Philosophy*, pp. 160ff.; *The Analysis of Matter*, pp. 222ff; also cf., Feigl, the notion of "in-principle-intersubjectively conformable". According to this the terms "subjective" or "private" is not to be considered as logically incompatible with "objective" or "public"; *op. cit.*, p. 399.

will have physiological subjectivity where, for instance, "one person sees two colours, red and green, another only sees one" (*The Analysis of Matter*, p. 224). "Psychological or cerebral subjectivity" arises as a result of past experience. "An obvious example is a sensation which appears to be in a leg which has been amputated." [*Ibid.*, p. 225].

In explaining physiological subjectivity Russell held that subjectivity enters in perception when "we are led to make false inferences" (*ibid.*, p. 225). His use of the concept "subjectivity" is some what puzzling. In the one hand subjectivity is the source of "error", on the other hand the subjectivity enters as a source of modification. [See section 5.7.].

Russell's discussion of this is interesting but, as I said, puzzling. The analogy between physical misperception - the stick appearing bent when in water- and physiological misperception is misleading. Certainly the perceptual effects of the physical and the physiological environment through which the causal chain passes are equally important.

But the "subjectivity of perception" which Russell needs occurs equally when the physiological apparatus is functioning properly. This element of subjectivity - the perspective- is also shared with the properly functioning photographic plate.

Conclusion.

Russell's analysis of the notion of "subjectivity" and "objectivity" on the one hand was to provide a theory of neutral entities and on the other hand to counter behaviourism. It should be made clear that behaviourism rejects any form of inner life and therefore cashes mentality in terms of observable behaviour. In other words behaviourists tend to reduce mind as something that can be observed. According to Russell since matter and bodies have been dissolved by Einstein and relativity into a series of "events", "the behaviourist may remain justified as against traditional psychology, but not as against the revolutionary physics of our time"⁹. On the contrary the neutral monists excludes any reductive analysis not only about mind but also about matter. There is only one thing that is the neutral stuff, the subjectless given, and the question about mental and physical is simply viewing of the same thing

9. "Behaviourism", in *The Collected Papers of Bertrand Russell*, vol. 9, p. 52; the essay first published in *Vanity Fair*, 21, 1923 under the title "An Essay on Behaviourism" (see *ibid.*, p. 45).

in different ways. James maintained that what we call "subjectivity" and "objectivity" are simply functional attributes realized by a new retrospective experience when a particular experience is taken in two different contexts. [See 2.6.2].

5.1.2. Amalgamation of Sense-data And Sensibilia into Sensations.

Eight years after his critique of James's theory of neutral monism Russell accepted and followed what James accepted almost thirteen years earlier. He argued:

I have to confess that the theory which analyses a presentation into act and object no longer satisfies me. The act or subject, is schematically convenient, but not empirically discoverable. It seems to serve the same sort of purpose as is served by points and instants, by numbers and particles and the rest of the apparatus of mathematics. All these things have to be *constructed*, not postulated: they are not the stuff of the world, but are essamblages which it is convenient to be able to designate as if they were single things. The same seems to be true of the subject, and I am at a loss to discover any actual phenomenon which could be called an "act" and could be regarded as constituent of a presentation. ["On Propositions", p. 305].

In order to abolish psychophysical dualism Russell argued that the "act" or "subject" seem to me to be "derivative, and to consist largely in beliefs: beliefs with various other elements which together make up the object" (*The Analysis of Mind*, p. 18).

In rejecting Meinongian distinctions Russell pronounced that the "act seems *unnecessary and fictitious*. The occurrence of the content of a thought constitutes the occurrence of the thought" (*ibid.*, p. 17; my italics). the supposed act cannot be discovered empirically. theoretically no reason to say it is indispensable. Russell ridiculed: "Meinong's "act" is the ghost of the subject, or what once was the full-blooded soul." [P. 18]. Russell explained that the "act" is introduced because "it is supposed that thoughts cannot just come and go, but need a person to think them" (*ibid.*) for instance when we say, "I think so-and-so, and this word "I" suggests that thinking is the act of a person.

Accepting neutral monism Russell declared that thoughts can be collected into bundles or groups, so that one group is my thoughts, another is your thoughts and so on. Because such commitment does not require person, and therefore one can easily dispense with it. Russell reasoned that a "person"

"is not an ingredient in the single thought: he is rather constituted by relations of the thoughts to each other and to the body" (*ibid.*, p. 18).

Now the question arise how can we explain such grammatical forms such as "I think", "you think". Russell replied that instead we can change the form as "it thinks in me" and "there is a thought in me". If this could be done then why Russell accepted "subject" on the first place. Russell reasoned: First, "it is introduced, not because observation revealed it, but because it is linguistically demanded by grammar..." [*Ibid.*, p. 141]. Second to counter idealism and to emphasise that the "patch of colour" is physical and not psychical as Berkeley and his followers maintained.

Thus Russell discarded "subject" from his general philosophical pursuit. As a neutral monist he argued that the subject appears to be a logical fiction like mathematical points and instants and therefore it is not necessary to retain this in the particular case of sensations (the neutral entities) because it is "perfectly a gratuitous assumption". He explained:

The functions that they (subject) appear to perform can always be performed by classes or series or other logical constructions, consisting of less dubious entities. [P. 142]

Since subject is no longer the "actual ingredients" of the world, "the possibility of distinguishing the sensation from the sense-datum vanishes" (p. 142). Following James, Dewey, and the realist Russell declared:

The patch of colour may be both physical and psychical, the reason for distinguishing the sense-datum from the sensation disappears, and we may say that the patch of colour and our sensation in seeing it are identical. [P. 143].

He further emphasised:

[T]he sensation that we have when we see a patch of colour simply is that patch of colour, an actual constituent of the physical world, and part of what physics is concerned with. A patch of colour is certainly not knowledge, and therefore we cannot say that pure sensation is cognitive. through its psychological effects, it is the cause of cognitions, partly by being itself a sign of things that are correlated, and partly by giving rise to images and memories after the sensation is faded. But in itself the pure sensation is not cognitive. [P. 142; *My Philosophical Development*, p. 10].

This is how Russell merged sensation and sense-datum in order to enact the doctrine he had so long criticized and resisted.

5.2. A Critical Analysis of Neutral Entities.

It was in 1921 Russell finally accepted the theory of neutral monism. The analysis of his theory is spread out in several of his well known books.¹⁰ As we discuss his theory we shall see that in 1921, beside sensation, the neutral entity, Russell also declared image, the subjective entity, and the unperceived, the physical entity. It was in 1927, in accepting the theory of quantum mechanics and Einstein's theory of relativity, he declared events as the ultimate constituent of the world. He neither rejected images nor the unperceived as constituents of mind and matter. The only change we shall see that Russell tried to show that both image and the unperceived have similar status like sensation or percept, the neutral entity. This he did on the basis of "structural similarity". Intrinsically images and sensations are similar and both have a position in the brain. Regarding the unperceived and the sensation he said that their mathematical properties are same. This will become clearer as we go along. But this left his theory different from that of James. James explained his theory of mind and matter by a single unique neutral entity called "experience".

It was in 1948 Russell declared allegiance with James (see Chapter Six) and hence repudiated the dualistic theory of perception. As a result the epistemological distinction between sensation and image lost their significance. More over by accepting "postulates" of scientific inference from percepts to material objects and unperceived events, Russell claimed that percepts and unperceived events have "similar" or "semi-similar" structure. [See section 5.5].

In discussing his theory of neutral entities I shall show that A.J. Ayer is not right when he, in his *Bertrand Russell*, argued that Russell has attributed the same properties to "percepts" as he had attributed to sense-data. My arguments will unfold that sense-data are different from sensations. It is rather percepts that have the same properties as those of sensations. That is to say in Russell's philosophy percepts and sensations are interchangeable. In my further analysis I will show that, like James's supposedly neutral entities, percepts or sensations are covertly dualistic. [See, section 1.2.3.].

10. *The Analysis of Mind, An Outline of Philosophy, The Analysis of Matter, Human Knowledge, Portraits Form Memory and My Philosophical Development*; see Chapter Four, "Introduction".

5.3. The Analysis of Sensations.

Before his abandonment of sense-data, Russell argued in "The Nature of Sense-Data", 1913, that there are two main cognitive relations with which a theory of knowledge has to deal. They are presentation - which is the same as acquaintance - and judgement. He explained the distinction between the two in the following way:

[P]resentation (or acquaintance) is a two-term relation of a subject, or (better) an act, to single (simple or complex) object, while judgement is a multiple relation of a subject or act to the several objects concerned in the judgment. From the fact that presentation is a two-term relation, the question of truth or error cannot arise with regard to it In the case of judgment, error can arise The difference, in this respect, between judgment presentation is due to the fact that judgment is a multiple relation, not a two term relation. [P. 76].

The only objects in which the presentation is *sensible* are sense-data defined by Russell as "presented objects simultaneous with the act of presentation" (p. 77). As opposed to "sense-datum" the word "sensation" is used either for the act alone or for the complex "act-acquainted-with-object" (p. 77). Russell used the term "perception" synonymously with "sensation".

Now it had become imperative for him to produce a theory of presentation and belief where the "subject" or "act" did not have any role in the constituent of a presentation. Russell knew that the assumption of existence or non-existence of a subject ought to be avoided totally in his new theory. He thought that the effect of the refusal of the subject is to present a less relational theory of mental occurrences. On this ground he said that Brentano's view that mental phenomena are characterized by "objective reference" is unacceptable.

Then Russell, by assuming the theory of physical objects (constructions out of sense-data) developed in his *Our Knowledge of the External World*, said:

[A] sensation becomes equally part of the subject-matter of physics and of psychology: it is simultaneously part of the mind of the person who "has" the sensation, and part of the body which is "perceived" by means of the sensation. [*Ibid.*, p. 306].

This is what he said in 1919, and finally declared in 1921 as a neutral monist. Obsessed by the thesis of James and his counterparts, the American realists, Russell

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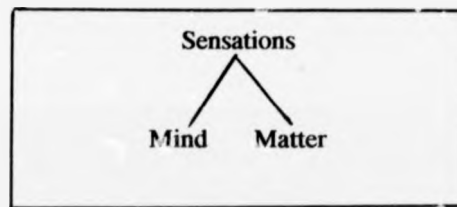
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could not but finally declare, in 1921, "sensations" to be the ultimate stuff out of which both mind and matter are constructed. He said:

Our knowledge is to be constructed out of what the American realists call "neutral" entities, which have neither the hardness and indestructibility of matter, nor the reference to objects when is supposed to characterize mind. [*The Analysis of Mind*, p. 36].

We could represent his professed theory in the following way:



The above representation shows that within the box are the neutral entities which explains both mind and matter. There are no illegitimate additions which together with the neutral entities belong to the constitution of either mind or matter.

We have seen how, in Jamesian fashion, Russell tried to discard psycho-physical dualism by repudiating consciousness as an entity. He merged sensation and sense-datum into sensation. According to him the sensation that we have when we see a patch of colour simply is that patch of colour, which is the actual constituent of the physical world. In 1914 Russell identified the patch of colour with sense-datum. But in 1921 Russell thought that an act or the subject seems "unnecessary and fictitious" [*The Analysis of Mind*, p. 17] and therefore the polar opposition between the sensation and the sense-datum breaks down which brings them together to stand for the same thing. At the end we are left with an entity called "sensation" which may eventually belong to both psychology and physics. Hence the term "sensation" gains a new connotation and a new status as a neutral entity in his 1921 philosophy.

By giving a new status to sensation, in 1921, Russell defined sensations as the intersection of mind and matter (cf., *ibid.*, p. 144). The essence of sensation is its independence of past experience. It is core in our actual experiences which exists in very young infants but never in isolation. Sensation, which was knowledge by itself in 1912, now supplies the data of our knowledge of the physical world, including

bodies. When I see a person, for example, it seemed that mere seeing were knowledge. But this was a mistake.

In his new definition, sensation stands for coloured patches, sounds, smells and also the seeing of coloured patches, hearing the telephone ring, the feeling of muscular strain and so on. (Sensation replaced the sense-data of 1912. In his later works Russell gave similar status to "percept"). They are the neutral entities, the stuff of the world. Sensations are innumerable and have a short duration. For instance the same patch of colour will not occur twice. At the most there might be similarity between the two patches occurring at two different occasions. These entities are subjectless and are given. Russell called these entities "particulars", "aspects" and "appearances", which are in themselves neither mental nor physical but neutral. What we call a piece of matter or mind is simply arrangements of the neutral entities. The distinction between the mental and the physical is simply contextual. The same arrangement in one context is considered as a mental phenomenon and in another context a physical object.

Russell explained how sensations can enter two relations at the same time. With the help of the stellar photography (*ibid.*, p. 99ff; *My Philosophical Development*, p. 79) he clarified his point. If a photographic plate is exposed on a clear night, it can produce a picture of any selected portion of the starry heavens. Any star can be photographed at any place from which it would be visible if a human eye were there instead of the photographic plate. At the place where the photographic plate is placed, innumerable things are happening which are connected with all the different stars that can be photographed there. [*My Philosophical Development*, p. 79; *The Analysis of Mind*, p. 100].

There are two ways of collecting these "happenings" or "appearances" (as Russell sometimes preferred to say) into bundles. First:

We can collect to gather all the happenings, in different places, which are connected in the way that common sense regards as being due to their emanating from one object. [*The Analysis of Mind*, p. 100].

In this bundle all the appearances of a, say a given star, in different places are collected together by "continuity and inherent laws of correlation". This bundle, according to Russell, is considered a piece of matter or physical object.

Second:

We can collect together all the happenings in one place, as is done by photography so far as light is concerned. [*Ibid.*]

In the second bundle, instead of collecting all the appearances which are appearances of one thing, we collect all the happenings which are appearances at one place. The whole of appearances at one place, Russell called it a "perspective". The sum total of one's sensations at a given time constitutes one perspective.

In the first way of making bundles, we had a bundle consisting of many appearances of the given star., But the second bundle contains only one appearance of the star associated with one appearance of each "thing" that is perceptible from that place. Russell said:

It is this second way of making bundles that is especially appropriate in psychology. One perspective, when it happens to be a brain, will consist of all the momentary percepts [sensations] of the man whose brain is concerned. [*My Philosophical Development*, p. 81].

It is the second bundle which represents a momentary mind.

Regarding perspective, Russell further emphasised that there are as many perspectives as there are views of the world of different things from a given place (see Chapter Four). Subjectivity is the characteristic of perspective, the characteristic of giving the view of the world from a certain place. This subjectivity is equally present in the photographic plate and the organism with brain and nervous system. For instance if an organism with sense-organs form part of the intervening medium, instead of the photographic plate, we receive an impression of the star which is called an appearance of the star. Analogous to the above example the sensations can be collected in two ways, one bundle will form a material object, the star, and the other bundle will make a mind, together with images. [See, 5.3.]. Thus sensations are the neutral stuff which explains both mind and matter.

According to Russell every particular belonged to the two groups simultaneously, constituting, on the one hand a physical object, and on the other, a momentary mind (perspective). Hence both physical object and perspective are constituted out of same entities, the sensations. They differ not in respect of substance or stuff, (as the neutral monist prefers to call them), but only in respect of arrangement, i.e. the way the

particulars are collected. Let us see how Russell characterized sensations as neutral entities.

Are Sensations Neutral?

Russell defined sensation as "those that have physical causes and mental effects" and hence we can consider "sensation as the non-mnemic elements in a perception". [*The Analysis of Mind*, pp. 138, 139]. Every thing is sensation that comes to us through the senses. Not only the sound we hear or smell we smell, but also such things as headache or the feeling of muscular strains. Traditionally, experiences like "telephone ringing" is interpreted as perception and not sensation because it gives us immediate knowledge. Russell warned:

[S]o much interpretation, so much of habitual correlation, is mixed with all such experiences, that the core of pure sensation is only to be extracted by careful investigation.... In order, therefore, to arrive at what really is sensation in an occurrence ... we have to pare away all that is due to habit or expectation or interpretation" (*ibid.*, pp. 139-40).

Although sensations are the source of our knowledge, unlike sense-data, they are non-cognitive. A patch of colour may stand for a knowledge but in itself is not a knowledge.

We know that the main motive behind Russell's abandonment of sense-data was to produce a theory in which the distinction between the subject and object did not arise. Such a distinction not only creates epistemological dualism but also ontological dualism between mind and matter.

C. Wade Savage, in his article "Sense-Data In Russell's Theories of Knowledge" in *Rereading Russell* (1989), argued that "Russell's suggestion that he "dispense[s] with the subject" in *Ami* is a dramatic overstatement.... Russell... replaces the simple subject by a complex subject composed of metaphysically neutral constituents" (pp. 144-145). This is true. Russell did not deny the fact that there are subjects and objects which are constituted out of neutral entities. What he denied is that "sensation" is a relational term. In its pure form a sensation is non-cognitive. A sensation may be grouped with a number of other occurrences by a memory-chain, which becomes a part of mind or it may also be grouped with its causal antecedents, in which case it appears as part of the physical world. This simplification helped Russell to abandon

the "subject" and to regard the traditional problem of the relation of mind and matter as definitely solved (Cf., *My Philosophical Development*, pp. 103-4).

But new problems, of which at first I was not fully conscious, arose as a consequence of the abandonment of "sense-data". Such words as "awareness", "acquaintance", and "experience" had to be re-defined. [Ibid., p. 101].

The problem in question is what is meant by "empirical evidence", i.e. how we have knowledge of the external world, since "sensation" is not cognitive. In his *The Analysis of Mind*, Russell said that when a person has a sensation it does not provide him with knowledge the way sense-datum did. Unless there is some sort of awareness one cannot possibly have knowledge. And if one has no knowledge of one's sensations one cannot have knowledge of the external world. This difficulty led Russell to assert:

There is a duality ... in any form of knowledge.... We are aware of something, we have a recollection of something, and, generally, knowing is distinct from that which is known. This duality, after it has been banished from sensation, has to be somehow re-introduced. [*My Philosophical Development*, p. 104].

Accordingly, Russell said, "In the *Inquiry into Meaning and Truth*, ... I replaced "acquaintance" by "noticing", which I accepted as an undefined term" (ibid., p. 104). The term "noticing" which is "hard to define" is a "matter of degree". Russell says,

"[noticing] seems to consist mainly in isolating from the sensible environment. You may, for instance in listening to a piece of music, deliberately notice only the part of the cello. You hear the rest, as is said "unconsciously".... It seems then, that the most immediate knowing of which we have experience involves sensible presence *plus* something more.... [which] may be called "attention"; this is partly a sharpening of the appropriate sense-organs, partly an emotional reaction. A sudden loud noise is almost sure to command attention, but so does a very faint sound that has emotional significance. [ibid., pp. 47-8, also *My Philosophical Development*, pp. 104-106].

Following the above, Russell declared:

Every empirical proposition is based upon one or more sensible occurrences that were noticed when they occurred, or immediately after, while they still formed part of the specious present. Such occurrences, we shall say, are "known" when they are noticed. [*MPD*, p. 106, *Inquiry*, p. 48].

Thus Russell could not but re-introduce the duality between the act of knowing and the object known. [See Chapter Three; James accepted epistemological distinction as a result his theory succumbed into covert dualism]. This is in fact a deviation from his promissory note that he will abolish any form of dualism in order to make neutral monism a success. Russell did this rather openly unlike James. What Russell called a "sensation" is regarded by James as "feeling" in his psychology, and "experience" in his metaphysics. In both the places James (see chapter two and three for detail discussion) said that knowledge by acquaintance such as feeling is "dumb" and "helpless" because it can neither name nor classify, i.e. in other words it is non-cognitive. Feeling is cognitive only through its relation to different feelings in a particular arrangement. But at the same time he argued that a "feeling" is not "psychical zero". By saying this, James brought in the duality of subject and object. This is one of the reasons I call his theory covertly dualistic. [See 1.2.3].

In case of Russell he did not deny that any form of knowledge did involve duality which cannot be avoided. Such innocent admission left his theory covertly dualistic like that of James. I will discuss this point again in chapter six when I discuss Russell's theory of mind and matter. At present let us see what Russell had to say about perception. In his *Analysis of Mind* Russell said that when mnemonic phenomenon (see, 5.3.) is added to sensation we have perception. "Sensation is the theoretical core in the actual experience; the actual experience is the perception." (P. 132). "But at the time when I wrote the *Analysis of Mind* I was not fully aware of the need for re-interpreting what common sense calls "the evidence of the senses"." (*My Philosophical Development*, p. 102). After re-introducing duality in sensation Russell brought out the following distinction between "sensation" and "perception".

"Perception" as opposed to "sensation" involves habit based upon past experience. We may distinguish sensation as that part of our total experience which is due to the stimulus alone, independently of past history. This is a theoretical core in the total occurrence. The total occurrence is always an interpretation in which the sensational core has accretions embodying habits. When you see a dog, the sensational core is a patch of colour stripped of all the adjuncts involved in recognising it as a dog. You expect the patch of colour to move in the way that is characteristic of dogs, you expect that if it makes a noise it will bark or growl, and not crow like a cock. You are convinced that it could be touched and that it will not vanish into thin air, but has a future and a past. I do not mean that all this is "conscious", but its presence is shown by the astonishment that you would feel if things worked out otherwise. It is these accretions that turn a sensation into a perception. [*Ibid.*, p. 106].

If we analyse what Russell had to say about his abandonment of a relational theory of sensation we clearly see that the concept of "awareness" or "acquaintance" has been replaced by the term "notice", and "sense-data", the object, by the term "sensational cores".¹¹ Russell reasoned that he had to do this in order to explain how we have knowledge of the external world. He said that there is a difference between different sensations. Accordingly he explained:

Smells and tastes and bodily feelings such as headache or stomach-ache do not suggest this duality [knowing as distinct from known] as forcibly as sight and touch and hearing. Before we begin to reflect, we think of the things that we see and hear and touch as external to ourselves, and it is only by an effort that we can turn our attention to seeing as opposed to what is seen. When a dog sees a rabbit, we can hardly suppose that it says to itself, "I am having a visual sensation which probably has an external cause". But if the view of James and Mach is right, what occurs in the dog when it "sees a rabbit" has only an indirect and causal relation to the rabbit. This view strikes one as odd, and it is on account of the oddity that I was so slow in adopting it [the theory of neutral monism]. [*My philosophical Development*, p. 104].

The above passage leads us to two questions. They are: Has Russell introduced the mental act to explain knowledge? Or, has he re-introduced the sense-data which are knowledge by acquaintance? Regarding the above questions A.J. Ayer, in his book *Bertrand Russell*, argued:

In *The Analysis of Mind*,... Russell gives up his belief in the existence of mental acts. This is partly because of his view that the subject, to which they are ascribed, is a logical fiction, and partly ... because he has been persuaded that no such things are empirically detectable. No longer believing that there are sensations, in the sense in which he had previously used the term, he cannot *a fortiori* believe that they have any objects; and he therefore denies that there are sense-data. But although he subsequently speaks of himself as having "emphatically abandoned" [*My philosophical Development*, p. 245] sense-data at this time, the change in his view is much less radical than this would suggest. He did cease to employ the term "sense-datum", but he continued to speak of percepts, to which he attributed the same properties as he had attributed to sense-data, except that of being correlative to sensory acts. [P. 71].

Ayer's suggestion has been regarded by Savage as "dubious".¹² He quoted Russell, who, in his review of Ryle's *Concept of Mind* (in *My Philosophical Development*, p. 245), said "A second point upon which I am in agreement with him [Ryle] is the

11. Cf., Savage, p. 147.

12. *Ibid.*, p. 150.

rejection of sense-data. I believed in these at one time, but emphatically abandoned them in 1921". Savage pointed out that first, this statement of Russell cannot be reconciled with Ayer's suggestion. Second, there is an evidence that Russell replaced sense-data with entities having different properties. To quote Savage:

[Before] abandonment, sense-data were held to be absolutely certain (infallible, indubitable), immediate (uninferred, self-evident) and precise (analyzed, simple); after abandonment, they were held *relatively* certain, immediate and precise. [Pp. 150-151].

Russell would be in more agreement with Savage than Ayer. There is no doubt that Russell abandoned sense-data in 1921. Earlier in 1914, Russell regarded sense-data as physical, whereas sensations are neutral. Moreover in any case of presentation (sense-data are objects of sensible presentations) there is a certain relation of an act to an object. As a neutral entity a sensation does not have such "certain relation". What Russell did was that he provided a "relative certainty" to sensation by redefining the term "acquaintance" in terms of "noticing". For example, "the patch of colour" may not produce such knowledge that "it is a dog", but it does produce certain expectations that it belongs to something and that may be a dog. That is why Russell said "I do not mean that all this is "conscious", but its presence is shown by the astonishment that you would feel if things worked out otherwise". It is in these sense Russell described the word "sensation", which stands for neutral entities.

Russell also emphasised that the neutral entities which are the "ultimate constituents" are simple. [See 6.1.]. But while further characterizing sensations Russell declared:

When I speak of "ultimate constituents," I do not mean [that the neutral entities are] incapable of analysis, but ... at present, we can see no means of analysing. I speak of such constituents as "particulars", or as "relative particulars" when I wish to emphasize the fact that they may be themselves complex. [*The Analysis of Mind*, p. 124].

In discussing his theory of events I will show that in 1948 Russell analysed events in the similar way making his theory covertly dualistic. [See section 5.6.].

Beside "sensations", neutral entities, Russell also accepted "images" and "unperceived" entities (mental and physical respectively) as the constituents of mind and matter. As far as the neutral monist programme goes, mind and matter should be constructions of neutral entities, and if they are not, the theory will not be accepted as a neutral monist theory. Any admission of mental entities (images) and physical

entities (unperceived particulars) will result in a Cartesian type of dualism. It was Descartes who accepted two kinds of substances to explain mind and matter. As we know the whole programme of neutral monism is directed against Cartesianism.

Keeping this in view my next topic will be to discuss Russell's theory of images and to see how they fit in his thesis. This will help us to judge the status of images as the constituent of mind and matter.

5.4. The Status of Images

In 1919 and 1921 Russell had clearly stated that sensations are the neutral entities which can be arranged in two group, where one group will represent a piece of matter, and the other will represent a momentary mind. Despite such assertions Russell was not fully convinced as what James and the American realists had to say about the constitution of mind and matter in terms of neutral entities *only*. In his *The Analysis of Mind* he declared this in the following way:

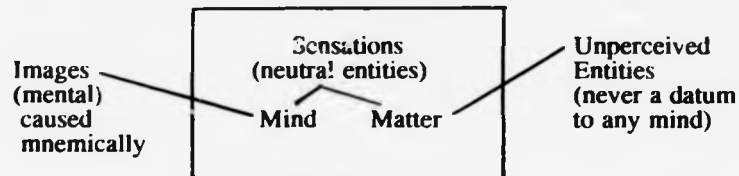
[T]he American realists are partly right, though not wholly, in considering that both mind and matter are composed of a neutral-stuff which, in isolation, is neither mental nor material. I should admit this view as regards sensation: what is heard or seen belongs equally to psychology and to physics. *But I should say that images belong only to the mental world, while those occurrences (if any) which do not form part of any "experience" belong only to the physical world.* [P. 25, italics mine].

The above passage clearly suggests that sensations, the neutral entities, cannot in isolation construct mind or matter wholly. The mental world requires, beside sensations, images in order to be complete. It is the strict programme of neutral monistic theory of the world not to admit into itself any element which is not neutral. Russell could be right¹³ in saying that the mental world and also the physical world requires something else, beside sensations; and if he is right he cannot call himself a neutral monist. Apart from "images" Russell also admitted of other "occurrences" (unperceived entities) which do not form part of any experience. These occurrences if

13. See, Price, H.H., *Perception*. Price holds that it seem to be true that "sense-data are intimately related, and in more than one way, both to minds and to external, that is extracerebral objects; and that without reference to sense-data the nature of neither can be fully understood.... Only the conclusion drawn by Neutral Monism, that both mind and matter consists of sense-data, does not follow from this, and does not, in fact, seem to be true. There are other relations Beside that of "being a constituent of", p. 138.

any, do not belong to neutral stuff, for them to be neutral they have to be a core in our actual experiences and can never exist in isolation.

With the admission of images and other unperceived entities Russell could not depart from dualism as he professed to do so by entering neutral monism. We can represent his theory of 1921 in the following way:



In box = neutral entities; outside box = illegitimate additions

Now let us see what Russell has to tell us about the status of images and unperceived entities in his theory of neutral monism. I will begin with images and see,

- (1) what prompted him to admit the existence of images,
- (2) how images differ from sensation,
- (3) can images be neutral.

In his essay "On Proposition" Russell declared that:

We have ... two sorts of mental "stuff", namely (a) sensations, which are also physical, and (b) images, which are purely mental. Sensations do not "mean", but images often do, through the medium of belief. [*Logic and Knowledge*, p. 306].

Russell was prompted to admit the existence of images because he thought that any "theory of language which takes no account of images is incomplete in a vital point" (*ibid.*, p. 291). Here he was mainly pointing to the behaviouristic theory of language as put forward by J.B. Watson in his book *Behaviour* (1914). According to Russell:

The behaviourist view ... maintains that "mental" phenomena ... are not amenable to scientific treatment, because each of them can only be observed by one observer, ... it is highly doubtful whether even one observer can be aware of anything not reducible to some bodily occurrence. [*Ibid.*, p. 291].

Russell maintained that behaviourism is not a "metaphysics" but a "principle of method". He argued:

Since language is an observable phenomenon, and since language has a property which we call "meaning", it is essential to behaviourism to give an account of "meaning" which introduces nothing known only through introspection. [P. 291]

Watson denied the occurrence of images but replaced them by faint kinaesthetic sensations. Russell conceded to the fact that kinaesthetic images can be explained away as being small sensations of the same kind as those that would belong to actual movements, when the word is uttered. For example, inner speech consist of small sensations, which is accompanied by small movements of the tongue or throat. Similarly tactile images could be explained. But the difficulty arises with visual and auditory images, which, according to Russell, if taken as sensations would contradict the laws of physics. Russell put it:

The chair opposite to you is empty; you shut your eyes and visualize your friend as sitting in it. This is an event in you, not in the outer world. It may be a physiological event, but even so it must be radically distinguished from a visual sensation, since it affords no part of the data upon which our knowledge of the physical world outside our own body is built.... When Professor Watson says: "I should throw out imagery altogether and attempt to show that practically all natural thought goes on in terms of sensori-motor processes in the larynx (but not in terms of imageless thought)"... he is, it seems to me, mistaking a personal peculiarity for a universal human characteristic. [*Ibid.*, p. 293].

Russell contended that the rejection of images by behaviourists was due to their rejection of introspection as a source of knowledge. For instance Knight Dunlap [see *Russell's The Analysis of mind*] rejected introspection and said that images are muscular contractions. But, Russell said, the essential characteristic of introspective data is concerned with localization. It could be that the introspective data are either not localized or they are localized in a place already physically occupied by something which would be inconsistent with them if they are regarded as part of the physical world. In any case these data do not obey the laws of physics and therefore an attempt is made to reject them.

Russell explained localization of stomach-ache, Eg., by saying that it has a position near the surface of the stomach. But the localization of images differ according to the nature of images. Images of private sensations can be localized where the private

sensations would be. Similarly the images of words in the mouth is located in the mouth. But visual and auditory images cannot be localized because "the physical event to which they would point if they were sensations is not taking place" (p. 296). Since the physical world does not include all that we are aware of (visual and auditory images), introspection must be admitted as a source of knowledge different from sensation.

Russell's introduction of images as distinct from sensations is a direct blow to the behaviourists, who try to explain all feelings and thoughts in terms of publicly observable behaviour. Not only the behaviourist theory is at stake so is Russell's own neutral monism. Russell openly admitted that images are mental. He was perhaps aware of this and thought that images can be reduced to sensations of a peculiar kind. One can feel his anxiety when he said: "If Professor Watson is right as regards inner speech, this whole region is transformed from imagination to sensation".¹⁴

We know Russell accepted images as part of the stuff of the world beside sensations. But he followed Hume in explaining the *epistemological* distinction between images and sensations. According to Russell although in the causation of sensations the stimulation of nerves carrying an effect into the brain...plays an important role...images and sensations cannot ... be distinguished by their intrinsic nature". [*The Analysis of Mind*, pp. 151, 154; *An Outline of Philosophy*, p. 187ff]. Intrinsically they are same because images are "copies" of sensations.

Now the question arise that why do we need images? In order to explain this Russell quoted several passages from Hume, where he made distinction between "impressions" and "ideas". According to Hume impressions are all our sensations, passions and emotions, as they first appear in the soul. Ideas are the faint images of these impressions in thinking and reasoning. Russell explained that similar to Humean distinctions images resemble antecedent sensations "which enables to call them images "of" this or that. To uphold the importance of images Russell said:

For the understanding of memory, and of knowledge generally, the recognizable resemblance of images and sensations is of fundamental importance. [*The Analysis of Mind*, p. 155].

There is no absolute difference between images and sensations. It lies simply in their causes and effects. (Cf., *ibid.*, pp. 145, 149ff.). Sensations come through sense-

¹⁴. *The Analysis of Mind*, p. 152.

organs, while images have mnemonic causes. Following Semon [see Russell's *The Analysis of Mind*], Russell gave the name of "mnemonic phenomena" "to those responses of an organism which ... can only be brought under causal laws by including past occurrences in the history of the organism as part of the causes of the present response". (*Ibid.*, p. 78). He said "the causation of an image always proceeds according to mnemonic laws, i.e. that it is governed by habit and past experience. Images, beside having mnemonic causes may also have physical causes. But sensations have only physical causes". [*ibid.*, p. 151].

Apart from the above distinction, images also differ from sensations in respect of their effects. Sensations have both mental and physical effects, whereas images have only mental effects. But images may produce bodily movements, but that is only in accordance to mnemonic laws.

Although against behaviourist programme Russell included images as one of the constituents of the world, his theory failed to comply with the strict programme of neutral monism. Russell was aware of this situation. In 1927 in his *An Outline of Philosophy*, he carried out an elaborate discussion on images under the heading "Images".

Here we find that Russell's entire exercise rests on one consideration: images and sensations have similar status. It is correct to say that images are "centrally excited" which are excited by a stimulus to some sense organ. Accordingly he argued:

Sensations ... have *proximate* causes in the brain; images also may be due to some excitement of a sense-organ. [*Ibid.*, p. 188].

In Russell's philosophy neutral entities are located in the brain [See below]. In order to provide similar status to images as those of sensations Russell said that the connection of images with past experience "works through an effect of the past experience on the brain" (*ibid.*, p. 189). Russell thus provided a "physical basis" to images. He explained:

If a *physical basis* is wanted, it can be assumed to exist in the brain. The state of the brain which causes us to hear the word "Napoleon" may become associated with the state of the brain which causes us to see a picture of Napoleon, and thus the picture will call each other up. The association *may* be in the sense-organs or nerves, but may equally well be in the brain. [*Ibid.*, p. 187, *my italics*].

This should not be thought that by providing physical basis to images Russell abandoned the idea that there is no distinction between images and sensations. He clarified that the *psychological distinction is abandoned*; the distinction that remains is "solely one as to physical antecedents" (*ibid.*, p. 192). We have seen that sensations have physical antecedents, without which Russell reasoned physics will collapse. [See Chapter Six; it was in 1948 the distinction between the sensation and image lost their epistemological significance].

After explaining both the similarities and differences between images and sensations, Russell provided the definition of images. He said, "we might have called an event an "image" when it is recognisably of the same kind as a "percept" (sensation), but does not have the stimulus which it would have if it were a percept". [*An Outline of Philosophy*, p. 193]. Russell further clarified himself by redefining the concept of "image" as "an occurrence recognisably visual (or auditory or etc., as the case may be), but not caused by stimulus which is of the nature of light (or sound or etc., as the case may be), or at any rate only indirectly so caused as a result of association" (*ibid.*, p. 193).

These definitions of "image", in 1927 certainly show a shift from his 1919 and 1921 position. There Russell clearly stated that images are mental and depends on mnemonic laws, which are psychological. Russell knew that such an assertion will undermine his theory of neutral monism. At the same time he believed that images exist. Russell brought images under physical law in order to provide similar status as those of sensations. This he did by bringing certain changes in his analysis of mnemonic causation and mnemonic phenomena. Following Semon Russell called "mnemonic" phenomena a certain kind of effect of past occurrences. There is a time gap between the cause and the effect. This is, what Russell called, action at a distance in time. Now Russell said:

[I]f we are to avoid what I called "mnemonic" causation, which involves action at a distance in time, we must say that mnemonic phenomena in mental events are due to the modification of the body by past events. [*An Outline*, p. 306; *Inquiry*, Chapter 21, pp. 272-73].

Russell agreed with Laird ("On Certain of Russell's Views Concerning The Human Mind") that "the hypothesis of causes acting at a distance is too violent, and I should therefore now explain habits by means of modifications of brain structure" (*Reply*, p. 700). He rejected mnemonic causation as a criterion of mental phenomena because it is

"too wide" (*The Analysis of Mind*, p. 295). The reason is the mnemonic causation is not wholly confined to living organisms. Russell said, "magnetized steel looks just like steel which has not been magnetized, but its behaviour is some ways different" (*ibid.*, p. 78). As to this Anthony Quinton observed:

This is presumably an acknowledgement of the fact that temporarily remote causes, which are not linked to any hitherto discoverable present state of affairs, have to be invoked to explain the responses of living organisms generally, and not just those that have minds. ["Russell's Philosophy of Mind", in Pears ed., *Collection*, p. 104].

As a result images turn out to be less mental and more physical somewhat on "behaviourist lines", to put it in Anthony Quinton's phrase (p. 106). This development disclaimed that images are purely subjective and can never be found in the physical world.

But the inclusion of images, as neutral entities, does not solve Russell's problem. What Russell did was instead of making the image an illegitimate addition (outside the box in the above diagram), he gave it a similar status as to that of sensations. We know that according to the neutral monist there must be a single kind of stuff which should explain both mind and matter. Beside images he also includes unperceived entities which further damaged his theory.

5.5. The Status of Unperceived or Sensibilia.¹⁵

In his *The Analysis of Mind* Russell said:

If physics is true, there are, beside the particulars that we experience, others, probably equally (or almost equally) transient, which make up that part of the material world that does not come into the sort of contact with living body that is required to turn it into a sensation. [Pp. 143-44].

What Russell said in 1921 is the same as that of 1914. I have already discussed this at length in discussing his phenomenalist account of matter. I have shown that Russell failed to stick to the strict programme of phenomenism and could only produce a theory which could be at best named "quasi phenomenism". In 1921 he thought that:

15. I have discussed this theory of unperceived entities in discussing Russell's commitment to phenomenism in Chapter Four, under the heading "Sensibilia: The Introduction of Hypothetical Elements". Here I will mainly concern Russell's treatment of the unperceived entities as neutral stuff; cf. Chapter six, by accepting postulates of scientific inference Russell provided similar status to the unperceived entities as those of percepts.

what he had said in 1914 was the neutral monist account of matter. If this is so then it turns out to be suicidal.

According to the programme of neutral monism mind and matter both should be explained in terms of neutral stuff. We know, as Russell has explained, sensation is a neutral entity, which fulfils certain criteria to be neutral. They are:

- (1) it should belong to the actual core of experience,
- (2) given in sensation it must be isolated, simple, exclusive and transient,
- (3) in isolation it must neither be mental nor physical, and
- (4) it should be there when sensed.

When Russell said "sensibilia" or unperceived entities he meant at least two things. First he meant that there are sensibilia which when obtained become sense-data, i.e., their epistemological and metaphysical status are the same. (Cf., *Mysticism and Logic*, p. 148). But there are sensibilia that cannot be obtained and can never be obtained. They are also similar (hypothetically) to that of sense-data, and hence both perceived and unperceived sense-data must be neutral. Second, he meant that although the status of both sense-data and sensibilia is the same, the unperceived ones belong only to the physical world because they obey physical laws, and therefore it is, I think relevant to call them physical

This involves contradiction. If sensible is neutral then it should also belong to mind as its constituent, and if it wholly belongs to the physical world, which Russell conceded, then it is physical and cannot have a similar status to that of sense-datum. Hence he admitted two different types of entities in the construction of matter.

Before we discuss the status of unperceived entities, let us go back to remind ourselves that while adhering to phenomenalism Russell tacitly abolished any reference to physical objects. The immediate knowledge of matter is possible only via sense-data. But sense-data, Russell argued, cannot explain matter alone. Beside one's own sense-data there are data which belongs to other person and data which are never known and are simply hypothetical assertions. As a result, in Russell's world, instead of unobserved physical objects, we are left with unobserved sense-data, called sensibilia.¹⁶ Physical objects are, in another sense, different arrangements of sense-data (including unsensed ones). Russell's acceptance of the existence of sensibilia is on the basis of similarity and continuity. (*The Analysis of Mind*, p. 99).

16. See Chapter Four; the unperceived entities are considered as physical objects in disguise.

Russell provided similar explanation of unperceived entities as those of sensibilia which he did in his *The Problems of Philosophy*, and "The Relation of Sense-Data to Physics". As a neutral monist he carried out an elaborate discussion in his *The Analysis of Mind* and *The Analysis of Matter*.

Russell very aptly explained how unsensed entities forms the part of the constituents of the physical world. Let us revert to the earlier example where sensations are grouped in two different arrangements. We have seen that a photographic plate is exposed in a clear night it reproduces the appearance of the sky with stars. Each star produces a separate effect on the photographic plate. According to Russell in between the star and the photographic plate "something" happens which is associated with the star. Russell explained these "something" as appearances or happenings. The crux of the argument is that these "something" in large part are accepted on hypothetical ground and on the basis of scientific inference. Russell explained the acceptance of this unperceived "something" in the following way:

If we assume, as science normally does, the continuity of physical processes, we are forced to conclude that, at the place where the plate is, and at all places between it and a star which it photographs *something* is happening which is specially connected with the star. [*The Analysis of Mind*, p. 99].

Russell argued that he accepted this "partly on general grounds of continuity, partly to account for the fact that light is transmitted with a certain definite velocity" (p. 100).

In a similar way he explained the existence of the unperceived entities by employing the principle of continuity in his *The Analysis of Matter*. This time cameras, Dictaphones or even compact disc can be used to prove that there are unperceived entities. For instance the cameras and Dictaphones can be used to record that "something" happens where there are no percipient. Say, a room is arranged with a man hidden behind a curtain, and also a camera and a Dictaphone. Suppose two men came into the room, converse and dine. If the record of the camera and the Dictaphone agrees with that of the man behind the curtain, "it is impossible to resist the conclusion that something happened where they were which bore an intimate relation to what the hidden man perceived" (p. 209).

But Russell thought that the principle of continuity is not enough to explain the existence of the unperceived entities. Following Whitehead's view of perception

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Russell accepted the causal theory of perception and agreed with him that "bifurcation of nature" does not follow. According to Whitehead the division of nature as the kind of view of appearance and reality conveyed secondary qualities such as colours to subjective experience and primary qualities to the physical sphere. He discarded this attempt of bifurcation and regarded perception as nature ordered in a perspective from the stand-point of an event with nature itself called the percipient event. In this respect all perceived qualities are qualities of nature.

Russell regarded that causal theory of perception affords a solid ground for review that unperceived entities exist. He contended that the causal theory has two parts. *First* the causal theory rejects the view that perception gives us direct knowledge of external objects. *Second*, it asserts the view that perception has external causes as to something can be inferred from it. Since it has all the qualities of a good scientific theory, Russell thought "epistemologically, physics might be expected to collapse if perceptions have no external causes".¹⁷

In order to make his position clear, about the causal theory of perception, Russell made a distinction between science and common sense. He explained that common sense holds that perception discloses external objects to us directly. when we "see the sun", for instance, we see the sun directly. But science interprets it quite differently. When we "see the sun" there is a process starting from the sun, travelling the space in between the sun and the eye, changing its character when entering the optic nerve and the brain and finally producing the event which we call "seeing the sun". This long chain of events includes both perceived and unperceived events. The unperceived events turn into sensations as they come into contact with the living organism. Russell held that the acceptance of the causal theory of perception lies in its three-fold merits:

that it links to gather a number of known facts, that it does not have any demonstrably false consequences, and that it sometimes enables us to make predictions which are subsequently verified. [*The Analysis of Matter*, p. 199].

On the basis of causal theory of perception, Russell attempted to prove the existence of the unperceived entities. They are not mere *Ding-an-sich* or Spencerian Unknowable (*The Analysis of matter*, p. 226). Russell agreed that difference in percepts imply difference in stimuli, for instance when a person hears two different notes of two different pitches. Russell explained:

¹⁷ *The Analysis of Matter*, p. 197.

[I]f a person hears two sounds at once, or sees two colours at once, two physically different stimuli have reached his ear or his eye. This principle, together with spatio-temporal continuity, suffices to give a great deal of knowledge as to the *structure* of stimuli. Their intrinsic characters ... must remain unknown; but we may assume that the stimuli causing us to hear notes of different pitches form a series in respect of some character which corresponds causally with pitch, and we may make similar assumptions as regards to colour.... there is a roughly one-one relation between stimulus and percept.... This enables to infer certain mathematical properties of the stimulus when we know the percept, and conversely enables us to infer the percept when we know these mathematical properties of the stimulus. [*The Analysis of Matter*, pp. 226-7].

From the above passage we can infer that percepts and the events causing them are similar in structure.¹⁸ This inference is made on the basis of assumption that a complex cause and effect have the same structure. [Cf Fritz, p. 170-1, (1952)]. Thus "similarity" is one-one relation between stimulus and percept- "i.e. between the events just outside the sense-organ and the event which we call a perception" (*The Analysis of Matter*, p. 227).

Beside being "similar" the relation between percepts and unperceived events can also be "semi-similar", i.e. many-one relation. The many-one relation is also important in explaining the group of events constituting a physical object. The relation of the events which are nearer the object to those which are further from it is many-one. In many-one relations the two systems which it correlates are "semi-similar". Although there is a different cause for every different percept, the different cause may not give different percepts. Russell explained:

We find often that indistinguishable percepts are followed by different effects- e.g. one glass of water causes typhoid and another does not. In such cases we assume imperceptible differences- which microscope may render perceptible. But where there is no discoverable difference in the effects, we can still not be sure there is not a difference in the stimuli which may become relevant at some later stage. [*Ibid*, p. 255].

This is how through the acceptance of the causal theory of perception and on the basis of "similarity of structure" Russell claimed the existence of the unperceived entities. We know that Russell has warned that perceptions need external causes if physics has to be explained.

18 Russell introduced the importance of structure in his *The Analysis of Matter*, it reached its culmination in his *Human Knowledge*; also cf., Alan Wood, p. 135.

Another reason for accepting unperceived physical entities on Russell's part was to discard the probability that his theory was Berkeleyan. In his *An Outline of Philosophy*, Russell explained that if non-mental events of physics have no reality then matter will be a construction built out of sensations and "our metaphysics will be essentially that of Berkeley" (p. 301).

But there are unperceived entities which can never be a data to any mind. This may be so that we are unaware of their existence. Now the question arises: Can we assert their existence only on the basis of causal theory of perception? In order to make his argument more plausible Russell argued that the events in the physical world have relations to each other through which we can arrive at the notion of "neighbour-hood" of an events. He said

It will consist roughly speaking of all the events that are very near the given event. When we say that neighbouring events have a certain relation, we shall mean that the nearer two events are to each other, the more nearly they have this relation, and that they approximate to having it without limit as they are taken nearer and nearer together. [*An Outline of Philosophy*, p. 116].

The notion of "neighbour-hood" is essential to show that group of percepts can be enlarged by unperceived events which are correlated with percepts by causal laws.

On the basis of this Russell argued, epistemologically the percepts come first but from the ontological stand-point they are the last in the chain of events. There are events which are ontologically first in the chain and which are also the cause of the percepts. Those events cannot be turned into sensations because we cannot know them directly. We can only think that they exist if we accept the causal theory of perception. But those events which cannot be a percept cannot become the cause of the percept. This is because according to the causal theory of perception, the unperceived events also are accessible as they come in contact with the living body.

By accepting the causal theory of perception Russell declared that the unperceived events are accessible and are quite similar to the percepts. This he did in order to show that these entities are not illegitimate additions but neutral. He thought that the acceptance of this did not undermine the neutrality of neutral monism. Russell said that the argument that the unperceived entities exist is not probable as those percepts of other people, but these arguments, the one from the causal theory of perception,

are as good as any of the fundamental inductions of science.[*The Analysis of Matter*, p. 206]. Accordingly on the basis of probability or certainty about the knowledge of the events we can say that our own percepts are extremely probable, the percepts of other people are less probable, and the unperceived events are less certain than the percepts of other people.

The inclusion of Unperceived events, or as Lockwood calls them "surrogate sense-data"¹⁹ (probably because they have similar metaphysical status as those of sense-data) had been criticised by different philosophers at different times. One of the difficulty pointed out (about sensibilia or unperceived entities) is by A.J. Ayer, in his *Russell and Moore*. Ayer said that by sensibilia Russell understood that what "be presented to an ... observer who.. had the appropriate point of view" (p. 60). But such an assertion would lead to the objection "that the character of a perspective is supposed to depend not only on the location but also on the physical condition of the observer, and that there is no reason to assume that all hypothetical observers would be in the same physical condition" (*ibid.*). In reply to this Lockwood argued that perhaps Ayer thought that there was a circularity in the procedure. The circularity arises "if we ... appeal to the physical condition and spatial location in the very specification of those elements out of which physical objects and space itself are to be constructed". Lockwood says "Ayer is labouring under a serious misapprehension if he thinks that the existence or character of unsensed sensibilia is a function of how things would look to an observer."²⁰ In fact Russell was talking about the continuity of events and the causal dependence on the sense-organs, nerves and brain. Russell said:

We have not the means of ascertaining how things appear from places not surrounded by brain and nerves and sense-organs, because we cannot leave the body; but continuity makes it not unreasonable to suppose that they present *some* appearance at such places. Any such appearance would be included among *sensibilia*. [*Epistemicism and Logic*, p. 111.]

Ayer observed:

I do not press the point that the postulation of unobservable entities as causes of our percepts is inconsistent with Russell's own derivation of the concept of cause from observed regularities, and with his principle that a concept is intelligible to us only if it is in our experience or is reducible to concepts which are so exemplified.... What I do find objectionable... is the notion that

19 "What Was Russell's Neutral Monism?", p. 145.

20. *Ibid.*, p. 148.

these unobservable entities are located in an unobservable space.
[Russell and Moore, p. 127].

Similar criticism had been provided by Stace. Stace in his "Russell's Neutral Monism" has pointed out that there was contradiction in the two claims, first that "unperceived aspect do not possess the same sort of characters as do the perceived aspects" and second "the unperceived aspects are verifiabiles because they are exactly the same sort of things as the perceived aspects, except that they do not happen to be perceived". Such counter arguments "falls to the ground". [P. 366].

In a sense Stace is right in showing the contradiction which lies between the two assertions. We know that since the inclusion of sensibilia in his construction of matter Russell¹ had provided different interpretations of the unperceived entities at different times. This is because along with gradual change in the construction of the external world, his epistemological presuppositions underwent a change. In this respect Anders Wedberg said:

The epistemologist Russell of 1914 occasionally gives the impression of not condoning the use of uncertain, non-demonstrative inductive inferences. In *Human Knowledge, its Scope and Limits* (1948), on the other hand, the study of induction stands at the centre of Russell's interest. He presents a number of inductive principles which are thought to justify inferences to unknown events from known events. For the epistemologist Russell of 1948 the supposition of non-experienced events is no longer illegitimate. ["Logic and Empiricism: Bertrand Russell", p. 158].

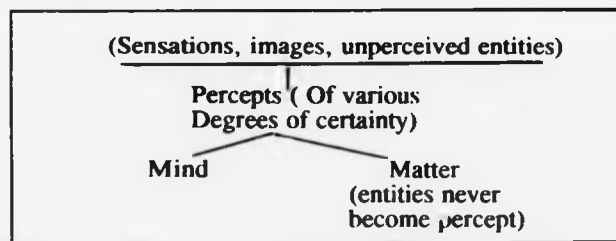
In *The Analysis of Matter* Russell said that although the unperceived entities are structurally similar to those of percepts we do not know the intrinsic character of those entities. It is on the basis of structural similarity Russell argued, that unperceived entities have the same metaphysical and epistemological status as those of percepts. But we know that Russell also included unperceived entities whose structural similarities cannot be known because they can never be a percept. They remain purely hypothetical assertion in Russell's philosophy.

Apart from the above criticism Stace also pointed out that Russell's interpretation also showed that "the unperceived aspects are to be identified with the etheric or spatial radiations of the physicist". [P. 366]. In reply to this Russell said:

Mr. Stace is puzzled by my hypothesis of unperceived aspects. Yet the hypothesis of such aspects is inevitable if we admit- as we all do in fact- that (a) causation does not act at a distance, (b) we can

perceive (in some case) things from which we are separated by an interval which is not a plenum of souls. For practical purposes, these unperceived aspects may be identified with light-waves or sound waves or their analogues for other senses, but in strict theory I should say that light-waves and sound waves are logical structures, built out of events more or less as points are built. Unperceived aspects, therefore, will be constituents of light-waves or sound-waves, but not be the waves themselves. ["Reply To Criticisms", p. 709].

After making himself clear Russell included the unperceived entities as the neutral stuff along with sensations or percepts and images. Now they seem to be no longer illegitimate additions in his theory of neutral entities. We can represent this in the following diagram:



Thus by providing a physical basis to images and making unperceived entities epistemologically viable, Russell brought his theory much closer to neutral monism. At this stage he renamed his neutral entities "events" and "percepts" instead of "sensations".

From the previous analysis it is clear that Russell's explanation of "sensations" as neutral entities affirms the fact that he brought in the duality of act and object in order to make percepts epistemologically viable. Before the introduction of this duality in 1921, Russell in fact postulated three distinct kinds of stuff, where one (namely "sensations") belong equally to both mind and matter. The images belong only to mind and unperceived entities belong only to matter, thus leaving a polar opposition between mind and matter. In his "Reply" Russell admitted that he no longer agreed with the view that he advocated in *Knowledge of the External World* and *The Analysis of Mind*, due to the reasons similar to those I have stated above [P. 706].. According to him in *The Analysis of Matter* he had proposed some change of view, which contained fuller and more careful statement of theories not very different from them.

Our next discussion will be of his theory of events as neutral entities. The main aim will be to see whether he can hold the above position as a neutral monist. I shall,

however, argue that Russell applied all the characteristics of "sensation" to the "percepts", which represented the neutral entities in his philosophy.

5.6. The Analysis of Events.

Accepting the results of modern physics, Russell, in his later philosophy [1927], declared that everything in the world is composed of "events". "[This] is the thesis I wish to maintain."²¹

He defined an "event" as having a small finite duration in time and a small extension in space. This occupation of a finite amount of space-time does not entail that it has parts. According to Russell the visible parts which could be identified are simply to be counted as events. He declared:

Seeing a flash of lightning is an event; so is hearing a tyre burst, or smelling a rotten egg, or feeling the coldness of a frog. [*An Outline Of Philosophy*, p. 287].

These events are data in the sense that they are objects of direct awareness. Such events are called percepts, i.e. percepts are a subset of all events in the brain. Apart from percepts there are events, such as telephone ringing, a tyre bursting etc., which are not data since they occur outside one's body. These events may be data to other people, or data belonging to nobody's experiences but cannot be data in the sense that they are an object of direct awareness. It is through percepts that one accounts for all inferences to events that are not percepts, and the accountability is because it is said that events are causally continuous, i.e. between the telephone ringing and one's hearing the telephone in the brain. To say that events are causally continuous means that in between the telephone ringing and the hearing of the telephone there is an atmospheric disturbance consisting of events travelling outward from the place where the ringing takes place, and then when this disturbance reaches the ear of a person that can hear, there is a percept. This percept is causally continuous with the events between the telephone ringing and the person's body, where perception takes place. In a similar manner, particular colours and sounds etc. are events, which are causally connected with other events in the brain.

²¹ *An Outline of Philosophy*, p. 287. Also see *The Analysis of Matter, Human Knowledge, Portraits from memory, My Philosophical Development*.

Einstein's theory of relativity and Whitehead's construction of "points" as systems of finitely extended events helped Russell to arrive at such a notion of an event. Einstein, creator of the special and general theory of relativity, brought a revolutionary change in both physics and philosophy. Two aspects of relativity theory has attracted Russell. [*Ibid.*, p. 114]. They are (1) continuous theory of intervening medium (see further discussion in section 5.7), and (2) that the laws of nature should be so formulated that it should be the same for any choice of space and time coordinates. Russell incorporated Einstein's general theory of relativity to make his philosophy of neutral monism more plausible.

Accordingly Russell held that for philosophy the most important thing about the relativity is the abolition of one universal time and the one constant space and the substitution of space-time in place of both. [*Ibid.*, p. 114].

Russell further held that it is a mistake to regard the universe as being in one state at one time and in another at another, because there is no cosmic time. For this reason one cannot speak of the distance between two bodies at a given time.

Since the notion of one cosmic time and one persistent space is abolished from physics, one should, according to Russell, deal with "events" instead of bodies. Russell explained this saying that "event" is anything which has both a date and a place. An explosion, a flash of light etc. would be an event.

Russell further characterised events by other attributes: every event in space-time is overlapped by other events. The events with which we are familiar are not infinitely complex, rather every complex event has a finite number of parts, composed of events. Accordingly he argued that a neutral event is devoid of any parts. It is only the physical objects (which are constructions out of neutral events) have spatio-temporal parts. Such events are called "minimal events". [*An Outline of Philosophy*, p. 288]. Despite such assertion Russell in his *The Analysis of Matter* maintained that the sensations are capable of analysis. But such analysis does not prove that neutral events have spatio-temporal parts [See 5.3.].

In order to clarify his point Russell distinguished an event from complexes of events. According to him in a certain sense, any series of events may be considered as a single event. For instance the Battle of Waterloo may count as a single occurrence. Russell argued:

But in a complex event of this sort, there are parts which have spatio-temporal causal relations to each other; no single entity devoid of physical structure persists through the whole period. [*The Analysis of Matter*, p. 293,].

By this Russell meant that anything simultaneous with everything that happened during the Battle is complex of parts not all simultaneous with each other. This complex parts have spatio-temporal position.

As for other characteristics events are neither impenetrable (An outline, p. 287) nor indestructible (The Analysis of Matter, p. 386). Following Eddington, Russell noted that events in the form of electrons and positrons may combine in order to destroy each other. Persistent units of matter no longer enjoy the metaphysical status they formerly enjoyed. He maintained the events have upper time limits according to which "no event lasts for more than a few seconds at most". [*The Analysis of Matter*, p. 294]. He disagreed with Whitehead who assumed that there is neither upper time-limit or lower time-limit to the size of events. [*Ibid.*, p. 292].

According to Russell everything in the world can be explained by "causal lines" (*Human Knowledge*, p. 477, *The Analysis of Matter*, p. 313, *An Outline of Philosophy*, p. 124; see Fritz {1952}, p. 192, Alan Wood, p. 135). Accepting this he denied "action at a distance". In causal chains the events are so situated that the knowledge of one event can help to infer other events situated in the causal line. The universe at large is composed of causal lines which are mutually dependent hence effect "modification". [*The Analysis of Matter*, p. 314; *Human Knowledge*, p. 490].

Events thus become the final residue in terms of which both mind and matter can be explained. Although Russell indicated in 1921 that "sensations" are further analysable, his analysis of "percepts" in 1927 denied spatio-temporal structure. But by giving similar status as those of sensations Russell in 1948 declared:

*The view I am suggesting is that an "event" may be defined as a complete bundle of compresent qualities, i.e. a bundle having the two properties (a) that all the qualities in the bundle are compresent, (b) that nothing outside the bundle is compresent with every member of the bundle.*²²

²² *Human Knowledge*, p. 97-98; my italics; a further discussion on this in chapter viii, "The Principle of Individuation"; also cf., Fritz (1952), p. 198; Ayer, *Russell and Moore*, p. 75ff; cf., Ahmad, M. (1968). He, in his thesis, argued that Russell was an "emergent neutralist". But my argument will show

Then Russell went on to say that a collection of qualities forms a complex of compresence, but "is not reducible to a statement about any or all of its constituents [*Human Knowledge*, 325]. Such complex of compresence of qualities in a particular relation will make the event "unique". When the qualities, within the event, are mutually compresent, "the complex is something new" [*ibid.*].

Such a complex, according to Russell, may be called an event. It will occupy a portion of space-time which has no parts that are portions of space-time.

One of Russell's commentators²³ viewed this analysis of neutral events in different way from that which Russell suggested. Tully argued that neither events nor sensations and images are the neutral stuff of Russell's doctrine. "Sensible qualities are the neutral stuff of Russell's doctrine." [P. 224.] His argument gained ground from Russell's suggestion that "the aim of physics ... has always been to discover ... the causal skeleton of the world" (*The Analysis of Matter*, p. 391). And since percepts belong to the brain, Tully argued that "the necessary fleshing-out of this skeleton is made possible by the intrinsic character of percepts, since it is by means of sensible qualities that observers come to know directly both the physical world and themselves. Such qualities are the primary focus of psychology" (p. 223).

I agree with the point that Russell's analysis shows that percepts (or rather events in general) have intrinsic character. Russell did not deny this either. But a single percept does not represent a single sensible quality, which is only studied by psychology and is therefore mental. Tully admitted that sensible qualities are the result of ones introspection, through which one can have knowledge of oneself and the external world. Such qualities of the percepts are studied by psychology, according to Russell "for their own sakes" (*The Analysis of Matter*, p. 392). The interpretation of percepts in terms of sensible qualities suggests that percepts are essentially mental. If percepts are mental and if matter is simply a construction of percepts, Russell feared, then "our metaphysics will be essentially that of Berkeley. If there are no non-mental events, causal laws will be very odd; for example, a hidden Dictaphone may record a conversation although it did not exist at the time, since no one was perceiving it" (*An Outline of Philosophy*, p. 301). Russell further argued that we can say:

that Russell was a covert dualist (in section 1.2.3. I have shown how covert dualism differs from other form of dualism). This will become clearer as we progress.

23. Tully, Robert, "Russell's Neutral Monism", 1988, pp. 209-224.

I cannot verify a theory by means of another man's perceptions, but only by means of my own. Therefore the laws of physics can only be verified by me in so far as they lead to predictions of *my* percepts. If then, I refuse to admit non-mental events because they are not verifiable, I ought to refuse to admit mental events in every one except myself, on the same ground. Thus I am reduced to what is called "solipsism", i.e. the theory I alone exist. [*Ibid.*, p. 302].

Tully's contention that sensible qualities *are* the neutral stuff of Russell's philosophy is another way of saying that Russell's neutral monism is essentially Berkeleian.²⁴ The position of percepts in the brain does not make a percept mental. According to the theory of causal perception the "percepts" which come at the very end of the causal chain "are in our heads" (*The Analysis of Matter*, p. 320). I will discuss this issue in the next section.

Ayer argued that the position Russell seeks to establish is

"that sensory particulars are after all dispensable: they can be replaced by complexes of qualities. For this purpose, Russell introduces the undefined relation of "compresence" which holds between qualities which occur at the same time in the same experience" (*Russell and Moore*, p. 75).

A percept is the "complex of compresence qualities" together with their relations. It has both the physical and mental elements. The sensible quality responsible for producing immediate knowledge of the percept, with regard to the external world, is the mental characteristic representing part of the percept. Beside mental qualities there are other qualities together with their relation we can have a complete knowledge of physics and psychology. It is through the physical characteristics of the percept we discover the "causal skeleton of the world".

Russell's interpretation of events as neutral entities provides a clear picture that an event is compresence of qualities and relations. The events are neither physical, like those of sense-data (1912), nor mental, like sensations (1912-1919). They are neutral in the sense that they can figure both as mind and matter. But the question is: Are events neutral as such? My view is they are neutral because they can figure both as mind and matter. It is this analysis which I will argue is *covertly dualistic*.

I have already said that by *covert dualism* I mean the acceptance of both distinctively physical and mental elements within the datum (a neutral entity). These compresent

24. I will revert to this argument in chapter six.

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elements (but not spatio-temporally distinguished elements) may be analysed as essentially mental or essentially physical. These elements form the inherent structure of the individual neutral entity. They are so arranged that the subject-object distinction follow implicitly without any interference of external causes.

Ayer argued that Russell seemed to imply,

"at one and the same time I am seeing something and hearing something else, remembering what happened yesterday and anticipating what will happen tomorrow, my visual and auditory percepts and whatever feelings or images form the psychological content of my remembering and anticipating are all mutually compresent" (*Russell and Moore*, p. 75).

Ayer, critical about this suggestion, argued that the "uniqueness which Russell attributes to complete complexes cannot plausibly be claimed for the combinations of qualities which characterise the neutral objects of our system [P. 76]. But according to Russell the uniqueness of the bundle does not come through individuation but through their mutual compresentness. I have explained that Russell did not deny that there are elements within the event. He called the elements qualities which are so compresent that we can perceive a complex without perceiving all its component qualities. [Human knowledge, p. 325]. These qualities are such that their mutual arrangement within the event makes it "new". For instance, when a shade of blue occurs it does not occur alone as a mere quality. It occurs as complex of compresent qualities. Such qualities include the hardness, the thickness, a particular shape and size etc. More over these qualities are so related that when the shade of blue occurs it is instantly "noticed" without any sort of inference. This shows that the subject and object distinction can follow without any interference of external causes. And this is one of the reasons, I think, why Russell has said that the view "I am having a visual sensation which has an external cause" strikes one as "odd", and because of this he was slow in adopting the theory of neutral monism. [See, 5.3.]. Percepts when occurs are "noticed", i.e. one can immediate knowledge of them. The percepts do not provide a "certain" relation, like those of sense-data, but they do provide a "relative certainty", like those of sensations. It is because although we perceive a complex we do not independently perceive all of its component qualities. It is for these reasons I consider that sensation and percept are interchangeable in Russell's philosophy.²⁵

25. Cf. Lockwood, "What Was Russell's Neutral Monism?". He said, "the neutral stuff of the earlier works is accordingly equated with a manifold of Einsteinian "event's", or space-time regions, which includes "percepts" (roughly equivalent to what he previously referred to as "sensations) as a proper subset" (p. 153).

From the above discussion we can see that an event is not simple. It is neither mental nor physical but is a complex of qualities. These qualities are so compresent that they have no spatio-temporal distinctions. It is through the mutual relations between the qualities within the event that makes it both physical and mental. It is in this sense they are covertly dualistic.

In short Russell constructed the neutrality of the event by integrating (through compresence) two disparate groups of qualities - the mental group and the physical group. There is no neutral affinity between members of the two subgroups and thus the ensuing "neutrality" is an artifact of Russell including them together in the "compresence". I will return for a fuller discussion of this in chapter six.

Ontologically all events are alike, i.e. they are complexes of qualities. The events have different grades of certainty. [*The Analysis of matter*, p. 338]. From the epistemological point of view the highest grades belong to one's own percepts (events); the second grade belongs to the percepts of other people who can communicate; the third grade to the events which are not percepts of anybody. Percepts are the subset of events, i.e. comes at the end of causal chain, and are dependent on both physical and physiological conditions.

5.7. The Physiological Condition.

According to Russell two people cannot have identical percepts because they are not only dependent on physical condition but also the physiological condition of the person concerned. The modification due to physiological dependence is also accepted by Ernst Mach. He explained:

When I see a green leaf (an event which is conditioned by certain brain-processes) the leaf is of course different in its form and color from the forms and colors, etc., which I discover in investigating a brain. [*The Analysis of Sensations*, pp. 61-2].

How perceptual organs "conditions" the appearances of objects is clearly stated thus:

A magnet in our neighbourhood disturbs the particles of iron near it; a falling boulder shakes the earth; but the serving of a nerve sets in motion the *whole* system of elements. Quite involuntarily does this relation of things suggest the picture of a viscous mass, at certain places (as in ego) more firmly coherent than in others. [*Ibid.*, p.]²⁶

26. Cf. Hamilton, A., *op. cit.*, p. 123.

The two quotations clearly reflect that Mach has accepted not only intrinsic modification but also extrinsic modification. In its extrinsic modification the disturbance takes place among several correlated elements. Further modification is carried out in their dependence on nerves and brain.

The influence of physiological apparatus was also maintained by Holt. According to Holt our physiological apparatus of perception and thought habitually distorts, mutilates, and disguises what it is perceiving.²⁷ Perhaps Russell was influenced by Mach's and Holt's interpretations.

We know that Russell accepted two aspects of theory of relativity. One of the aspects is the *continuous theory of intervening medium*. Accordingly he claimed that the sense-organs, nerves and the brain forms the intervening medium for the percepts or sensations. For instance our experience which we call "hearing the bell" can be explained in the following way: Let us suppose that the Church Bell which are ringing is a quarter of a mile away from the hearer. The sound which requires some time to reach the ear goes through different processes. The sound travels over the space between the Church and the hearer's ears, produces certain effect on the tympanic membrane and finally in the brain where the "hearing the bell" takes place. There is a time gap between the "bell ringing" and the "hearing the bell". As a result there are certain modifications between these two events. It is in this way the percepts are subjected to various adjustments, which are partly physiological, before the actual "hearing the bell" takes place.

According to Russell the percepts are causally dependent upon the condition and the location of the observer's body. [Cf., Ayer, *Russell and Moore*, p. 58]. Russell explained that the causal process involved in perception forms causal chains from the external object to the percipient's brain. In such a process the object we perceive, for instance the sun, becomes inferential, and our knowledge of events becomes direct. [*The Analysis of Matter*, p. 197]. But before the actual "seeing the sun" takes place, similar to "hearing the bell", the whole process is subjected to various modes of operation. This results into modification of events. According to Russell since percepts have their own causal antecedents different from those of the other percepts,

27. Robischon T., "E.B. Holt", in *Encyclopedia of Philosophy*, vol. 3 & 4, ed. Edwards, P., 1967, p. 60.

"there may be mutual modification- e.g. a colour looks different in the neighbourhood of another colour" (*ibid.*, pp. 314-5.; cf Mach's analysis).

In chapter four we have encountered how sensations are subjected to laws of perspective and are modified. For instance two persons looking at the same object will not have identical sensations. This modification depend on the physiological disposition of the individual. [Cf., James; in his philosophy since two people can know same object the question of modification does not arise].

In order to explain how sensations are modified Russell accepted both intrinsic and extrinsic causations. [*ibid.*, pp. 314, 324ff; *Mysticism*, pp. 101ff; *Human Knowledge*, pp. 494ff.]. In his "The Ultimate Constituents of Matter" Russell explained the "causal dependence of events" and the concept of "modification".

According to Russell there exists a chain of antecedent events which makes our seeing dependent upon the eyes and nerves and brain. But this does not even tend to show that there is not another chain of antecedents in which the eyes and nerves and brain as physical things are ignored. Russell argued that if we are to escape from the dilemma which seemed to arise out of the physiological causation of what we see when, for instance, we see the sun, we must find a way of stating causal laws for the physical world, in which the units are not material things. We know in accepting neutral monism Russell regarded that physical objects and mental phenomena are assemblages of momentary particulars. As a result the sun itself and the eyes and nerves and brain are regarded as assemblages of momentary particulars. [*Mysticism*, p. 102; *Collected Papers*, vol 8, p. 82; cf. Broad-Lovejoy criticism given below]. Now Russell is in a position to explain how the modification place:

Thus the sun of eight minute ago is a class of particulars, and what I see when I look at the sun is one member of this class. The various particulars constituting this class will be correlated with each other by a certain continuity and certain intrinsic laws of variations as we pass outwards from the centre, together with certain modifications correlated extrinsically with other particulars which are not member of this class. It is these extrinsic modifications which represent the sort of facts that, in our former account, appeared as the influence of the eyes and nerves in modifying the appearance of the sun. [*Collected Papers*, vol. 8, p. 82].

The cursory reading of the passage will disclose that in Russell's philosophy the modification of events rests on two causes, intrinsic and extrinsic. According to the intrinsic law (the law of perspective) the same object will look different from different

points of view. For instance when a man sees a table it may look round from one perspective and oval from another. Even if the man takes the same position his physiological condition will be different to what he had a moment ago. The other cause of modification is due to extrinsic cause. According to this there is a mutual modification of events. For instance the table is constituted out of a number of particulars or events. In the immediate neighbourhood of events there are other events which constitute another object, say a chair. Similarly throughout the world there are enormous numbers of events coexisting and are responsible for various other "things". This happens because of the mutual modifications between the events.

One may still have questions about the extrinsic modification. We know that something is modified when it passes from one medium to another. For instance a straight piece of stick will look slightly bent when immersed in water. Such modifications cannot be denied.

Apart from the above explanation we can say that since events are *covertly dualistic*, i.e. the complex of compresent qualities and relations the modification may take place within the datum. Whether an event is mental or physical can be determined by how the qualities are related.

Russell's notion of "causal dependence" and "extrinsic and intrinsic modification" is critically assessed by A.J. Ayer in his *Russell and Moore*. According to him "this seems...unnecessarily complicated" (p. 58).

Ayer's argument is countered by Lockwood. Lockwood quoted Ayer, who said that "if sense-data are existentially dependent on the presence of observers, they cannot exist, in the absence of observers as unsensed sensibilia" ({1981}, p. 147). Lockwood argued that Russell did not mean "existentially dependent" and did not use such a phrase. Lockwood explained:

But Russell did think it highly probable that the existence of such a sensible *causally* required the presence of appropriate, and appropriately functioning, sensory apparatus and that - again as a matter of scientific fact- wherever one had that one would a fortiori have a conscious subject. [Pp. 147-8].

The dependence of percepts on the physiological condition led to more severe criticism. A.O. Lovejoy in his *The Revolt Against Dualism* (pp. 259-61) extensively dealt with this issue. Lovejoy explained:

Among the eccentric causal objects recognized as such by Mr. Russell is the brain of the percipient;... the presence of this object in the region of space where that "appearance" of (say) the table which is a sense-datum occurs, distorts the appearance, making it... different from the pure or perfectly regular perspective aspect of a table which would have occupied the place if no brain had intruded there- and if also, no distorting influence had been at work in the intervening medium. [P. 259].

Lovejoy cited C.D. Broad's criticism which, he thought, Russell totally misunderstood. Broad recorded his criticism in his *Scientific Thought* (1952). Lovejoy explained that Broad accused Russell treating the observers body and the physical objects in two different ways in his theory. According to Russell's theory a physical object is a construction. It is constituted out of various correlated events. But, according to Broad Russell treated body as something which exists and is not a construction. Broad suggested that the theory

"owe some of its plausibility to the fact that, while we read his (Russell's) exposition, we think of our own bodies (and perhaps of other media, like mirrors and coloured glass) as physical objects in the non-Russellian sense, and other pieces of matter as physical objects in the Russellian sense" (p. 534; also quoted by Lovejoy, p. 259).

Russell met this criticism in his *The Analysis of Matter*. Clarifying his position Russell said that Broad's view,

"suggested that ... [Russell's] theory takes a common-sense view of the percipient's body, and derives from this an undue plausibility for the view which it suggests as to external objects. This is not the case...."

Russell argued that Broad's criticism is generated from his failure to understand that in the theory of perception a physical object has "twofold location". On the one hand, a physical object is a group of events or appearances; on the other hand, it has an influence upon the appearances of other objects, especially appearances in its neighbourhood, causing these to depart from what they would have been if they had strictly followed the laws of perspective. [Cf., Lovejoy, p. 259]. Russell argued that the sense-organs have only this second function to perform in the theory of perception, while the object perceived has the first function. He explained that "it is this difference of function, in the theory of perception, which makes it seem as if we were treating the percipient's body more realistically than external objects". But

actually "the appearance of an external object is modified also by other external objects- e.g., by blue spectacles or a microscope" (The Analysis of matter. pp. 259-60; Lovejoy, pp. 259-60).

The above explanation by Russell does not satisfy Lovejoy. First, he argued that a "physical object", from Russell's point of view, cannot have a neighbourhood because it is the aspects composing the object which can be neighbours to other aspects. Second, he said that Russell missed the main crux of Broad's argument. Lovejoy pointed out that Broad's objection is that objects, for instance, like mirrors, coloured glass and particularly sense-organs and nerve are not treated as having the properties of "a piece of matter" as defined by Russell. "It is no reply to this remark that a "physical object" (in the theory) has "a twofold character"; that fact is the point of departure of the objection." [P. 260]. The concept of "twofold character" of physical objects is dubbed by Lovejoy as "implicitly incongruous". To allocate one of the characters to the objects perceived and the other to the "media" such as sense-organ, mirrors, coloured glass, does not answer Broad's objection. In fact sense-organs or any other media "must have both characters - one set *qua* physical "in the Russellian sense", the other set *qua* causal - and yet cannot have both consistently" (p. 261). Lovejoy emphasised that Broad had "abundant ground" for suspecting that Russell's theory of matter consisted in operating two entirely distinct and opposed concepts of a "physical object", using one or the other as the exigencies of the argument required.

Lovejoy is right in a way in pointing to the fact that any medium, whether sense-organ, or mirrors must include both characteristics if Russell's theory of physical objects is to be coherent. But my reaction to the above two objections is that Russell's mistake is rather an innocent one. In Russell's philosophy both sense-organs, mirrors and photography plate or any other physical objects are constructions out of neutral particulars. It is true that physical objects have no neighbourhood, but the aspects constituting the physical objects have a neighbourhood. But those aspects which have a neighbourhood consisting of other aspects may, from another point of view, be called a physical object (assemblage of aspects). In every neighbourhood of events there may be physical objects from a certain point of view. It is in this sense Russell has said that physical objects have neighbourhood.

More over in explaining his views on intrinsic and extrinsic modification Russell categorically pointed out to the fact that "the sun itself and the eyes and nerves and brain must be regarded as assemblage of momentary particulars" instead of

actually "the appearance of an external object is modified also by other external objects- e.g., by blue spectacles or a microscope" (The Analysis of matter, pp. 259-60; Lovejoy, pp. 259-60).

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More over in explaining his views on intrinsic and extrinsic modification Russell categorically pointed out to the fact that "the sun itself and the eyes and nerves and brain must be regarded as assemblage of momentary particulars" instead of

considering them as material units. I think that both Lovejoy and Broad over reacted to the issue.

In essence, the Broad-Lovejoy objection is that Russell did not construct the physical just from neutral entities, but rather from neutral entities plus some particular physical objects - sense-organs.

Quite apart from the discussion of the neighbourhood issue above, I will argue that this apparent circularity of Russell's analysis is really part of *Bootstrapping*. I will return to this general issue in chapter seven.

5.7.1. Are Percepts In The Brain?

One of the reason why Tully's assertion that sensible qualities are the neutral stuff in Russell's philosophy is the admission that neutral entities have a location and that is in the brain.²⁸ Russell spoke of both physical and sensible location of the percepts. I shall begin how Russell assigned physical location to the neutral entities.

Russell argued that whoever accepts the causal theory of perception is bound to wind up saying that

"percepts [the neutral entities] are in our heads for they come at the end of a causal chain of physical events leading spatially, from the object to the brain of the percipient. We cannot suppose, that at the end of the process, the last effect suddenly jumps back to the starting-point, like a stretched rope when it snaps. And with the theory of space-time as a structure of events ... there is no sort of reason for not regarding a percept as being in the head of the percipient. I shall therefore assume that this is the case, when we are speaking of physical, not sensible location" (*The Analysis of Matter*, p. 320).

This view has outraged his critics. But at the same time it has also been accepted as a positive outcome of Russell's philosophy. In Russell's theory a percept has both physical and perceptual (sensible) location.

28. Tully identified the percepts with sensible qualities, hence making it subjective. But the location of percepts in brain also suggests that Russell's neutral monism is in fact physicalism in disguise. I will, of course, argue negatively. This I will discuss in chapter six when I discuss "anomalous monism".

In explaining the above passage A.J. Ayer called it, "the startling conclusion"²⁹. Ayer disputed that "naive realistic way of locating objects is incorrect,... one reason why I wish to dispute it is that the alternative theory, to which Russell believes that we are committed by the causal account of perception, appears to me quite unacceptable" (*Russell and Moore*, p. 127).

Although Russell has expressed himself in an unnecessary "paradoxical" way, the location of percepts, according to Lockwood, also makes a perfect sense within the context of Russell's neutral monism.³⁰

[W]hat the physiologist sees when he looks at a brain is part of his own brain, not part of the brain he is examining. [*The Analysis of Matter*, p. 383; also cf., *An Outline of Philosophy*, p. 146; Lockwood, p. 153].

In order to explain the above assertion Russell said that when we have percept, just as we perceive is an event occupying part of the region, which for physics, is occupied by the brain. This is because perception gives us the most concrete knowledge we possess as to the stuff of the physical world. What we actually perceive is not part of the stuff of tables and chairs, sun, moon, and stars but part of the stuff of our brains. Russell said:

Suppose we are looking at a leaf, and we see a green patch. This patch is not "out there" where the leaf is, but is an event occupying a certain volume in our brains during the time that we see the leaf. *Seeing the leaf* consists of the existence, in the region occupied by the brain, of a green patch causally connected with the leaf, or rather with a series of events emanating from the place in physical space where physics places the leaf. The percept is one of this series of events, differing from others in its effects owing to the peculiarities of the region in which it occurs. [*An Outline of Philosophy*, p. 292; my italics].

This view has confused philosophers and laymen equally. Russell argued "the feeling of paradox about this view comes... from wrong views of space" (*The Analysis of Matter*, p. 383). Russell in his "Reply" made his position clear. He said that Nagel "is indignant with me because I use the word "see in an unusual sense. I admit this. the unusual sense implies naive realism, and whoever is not a naive realist must either eschew the word "see" or use it in a new sense" (p. 704). Russell explained that common sense says: (1) "I see a brown table." This can be interpreted to such

29. *Russell and Moore: The Analytic Heritage*, p. 123.

30. See Lockwood, "What Was Russell's Neutral Monism".

statements: (2) "I see a table" and (3) "I see something brown". The first statement denies physics, the second denies that I see a table and the third deny that I see something brown. Among these three Russell chose (2), but admitted that (1) or (2) "would lead to at least equal paradoxes" (*ibid.*, p. 705).

Russell undertook an elaborate discussion to clarify his position (about the above quoted passage) which not only shocked Nagel³¹ but "has [also] shocked various other philosophers" (p. 705). According to him every event occupies a finite amount of space-time, i.e., overlaps with events which do not overlap with each other. Certain collection of events "points". "Causal laws enable us to arrange points in a four dimensional order. Therefore when the causal relations of an event are known, its position in space-time follows tautologically." [P. 705]. For instance when the physiologist sees the other persons brain a chain of event from "the other person's brain" produces a certain effect in the optic nerve and then to the brain of the physiologist, where the seeing takes place. Russell in his "Reply" held that it is the causal and temporal connections of percepts in sensory and motor nerves provides percepts a position in the brain of the perceiver. [P. 705]. He explained:

"Observe that a "portion" of a brain is a set of points (or minimum volumes); an event may be a member of certain points (or minimum volumes) that are members of the brain, and is then said to be "in" the brain, but it is not "part" of the brain. It is a member of a member of the brain". [P. 705-6].

Daniel Cory explained that the above quotation, though "difficult as it stands", presupposes "a certain familiarity with Russell's general analysis of matter and in particular his logical construction of "points" out of overlapping events. A physical object, such as a chair or human brain, is conceived to be an obstinate system of events, rather than a "thing" or "substance". ["Are Sense-Data "in" The Brain", p. 537].

Lockwood in his "What Was Russell's Neutral Monism" further clarified Russell's position. He argued:

What the physiologist sees when he examines someone else's brain is, as common sense would dictate, the *other* person's brain. For *ex hypothesi* the physiologist has visual percepts that are appropriately causally related to events in that brain; therefore he may be said visually to perceive the latter; and that after all precisely what the

31. Nagel, E., "Russell's Philosophy of Science", in Schilpp; Edwards. P.E., "Are Percepts In The Brain?".

word "see" would normally be taken to mean. What Russell has done, clearly, is assign to the term "see" a sense of his own, according to which having a visual percept may also be described as "seeing" it. [P. 153].

Thus the percepts have, to put it in Cory's words, a "definite "home" in the brain. This is the physical location of the percept where the "seeing" takes place. Here Russell clearly employed the bootstrap strategy to locate percepts in the brain. Percepts are events, and that events are in space time, and therefore percepts are in space time. Since percepts are in space-time they must have a location. The ideal location is the brain of the percipient and is known immediately. There is an obvious circularity. [See 5.1.].

It is the physical brain which gives a definite location to the percept. Percepts are not only physically located in the brain, they are also sensibly located from where one can have a "view of the world".³² According to Russell private space belongs to the private worlds of different percipients, with sense-organs, nerves and brain(see Chapters Four and Six for detailed discussion). This "view of the world" is also shared by properly functioning photographic plate. In other words the private space is the appearance which the universe presents from a certain point of view. This private space has a location in the percipients brain. Russell explained that in every area

"of physical space there is at every moment a vast multiplicity of occurrences corresponding to all the things that could be seen there by a person or recorded by an instrument. These things,... have spatial relations to each other which correspond ... with the correlated objects in physical space. The whole complex world that appears in a photograph of stars is at the place where the photograph is taken and, likewise, the whole complex world of my percepts is where I am ... from the stand point of physics. [*My Philosophical Development*, pp. 79-80].

A cursory reading of the above passage indicates that each private space, which is a view of the world, is a "visual area" or "duration" in the physical space. Russell in his *Human Knowledge* explained that a "small-region" of space-time is a collection of compresent events, and "among the events constituting a region thoughts are included.... [Therefore] a given thought... is a member of a class, and the class is a region in the brain " (p. 246).

32. I have discussed this issue in chapter 4, under the heading "Status of Sense-data". Russell spoke of both physical and physiological status of sense-data and sensations.

We have seen that an event is a compresence of qualities and relations. The space it occupies is along with other physical elements, together so compresent that they are not spatio-temporally distinguished i.e. not a sub-space of physical space. [I have argued that percepts are covertly dualistic; see above]. In other words each private space is a perspective space in which a percept is related to various other percepts forming a spatial unit or perspective.

Above we have seen that in explaining the sensible location Lockwood said that the physiologist has visual percepts that are appropriately causally related to events in that brain. It is for this the physiologist may be said visually to perceive the latter; and that after all precisely what the word "see" would be taken to mean.

Ayer not only criticised the physical location of the percepts but also the sensible location. He argued:

If we insist on there being a place where the mental processes occur, the obvious candidate is indeed the brain. I am... somewhat reluctant to follow Russell in identifying the mental processes, into which I am suggesting that percepts become transmuted, with events in the brain. I am not disposed to question the hypothesis that these processes are causally dependent upon events in the brain, but I doubt if the evidence is sufficient for us to be justified in translating this causal dependence into a factual identity. [*Russell and Moore*, pp. 128-9].

Daniel Cory found Russell's argument "rather convincing" when he said that percepts are "in" our brains. Cory quoted Russell from his *Physics and Perception*:

When I say that something is "outside" me, there are two different things that I may mean. I may mean that I have a percept which is outside the percept of my body in perceptual space, or I may mean that there is a physical object which is outside my body as a physical object in the space of physics. Generally there is a rough correspondence between these two. The table that I see is outside my body as I see it in perceptual space, and the physical table is outside my physical body in physical space. ["Are Sense-data 'In' The Brain?", p. 538]

From the above passage it is clear that the star is in physical space "outside" one's body which is also in physical space. But the percepts of the stars along with other percepts are "within" the percipient, which forms the private space. This private space is the "tiny region" in physical space "in" the percipient's body. And that physical space is the "brain" of the percipient. This point is further clarified by Cory, who

agreed with Russell's explanation of location of percepts in the head. Cory points out that to a layman a table, for example, cannot be "inside" one's head but "outside" one's head. Cory argued:

[H]e is right in one sense of the word "outside". The content of the naive perception ... can be phenomenally analyzed into a given arrangement of colored patches - what I call ... the "apparent thing", and the apparent table is certainly *outside* of my head, considered as another apparent thing in perceptual space [private space]... But if we are using the word "outside" in Russell's other sense, the layman is neither right nor wrong, because he does not make the necessary distinctions. In the second sense of the word, then, the physical table is *outside* of my physical head in the "inferred" space of physics. It does not follow from this, however, that the apparent table is *outside* of my physical head; on the contrary, if Russell is right, it is *in* it. ["Are Sense-data 'In' The Brain?", p. 539].

Cory said that Russell's explanation shows that there is a "rough correspondence" between the private space and the public space. They are not identical.

We can explain this in the following way. The "spatial relation" given in the percept is not the spatial relation of the percepts. Each is a different subset of the compresence qualities and relations. But we know that according to Russell we can infer their structure as similar. It is through the sensible location of the percepts in private space that we can know the intrinsic qualities of percepts. Although we can infer that each and every event has intrinsic nature we can only infer from our percepts, since they come at the end of the causal chain. But this should not be interpreted to mean that percepts are subjective, i.e. they are conscious and therefore wholly mental. On the basis of the above interpretation we can reject Tully's argument that the sensible qualities are the neutral entities in Russell's philosophy.

5.7.2. Status of Percepts.³³

As I have already said that in Russell's philosophy the percepts have similar status as those of sensations. The percepts are neither physical nor psychological. The claim that percepts are physical is because of their dependence on the brain. To consider percepts as subjective is because they enable us to explain how things are "noticed" and "known". According to Russell the concept "subjectivity" does not entail the "conscious" aspect of mind because there is no such thing as consciousness. Following

33. Cf., the status of percepts with sense-data in chapter 4, under the heading "Status of Sense-data".

James he has refuted consciousness. Percepts are physiologically subjective in the sense that they are dependent on the brain and nervous system of the organism.

Percepts are the neutral entities in Russell's mature philosophy. It is "simple", "subjectless" and are given. Both physics and psychology can be explained in terms of these basic neutral entities. Every thing in the world can be explained as constructions out of these percepts. [See Chapter Six, "The Theory of Construction"].

In Russell's philosophy, not only common-sense physical objects are constructions but also scientific entities. According to Russell something is a construction when it has properties:

The electron has very convenient properties, and is therefore probably a logical structure upon which we concentrate attention just because of these properties. [*The Analysis of Matter*, p. 319]

But Nagel³⁴ is critical about Russell's claim that Nature is not kind enough to provide the mathematician with "agreeable smooth mathematical properties". It is true, for the sake of the development of mathematical physics, that certain features of things have been isolated and others ignored, but it is not right to say that on this criterion "the event out of which electrons and other objects are said to be constructions should not be regarded as constructions" (Nagel, p. 340).

According to Russell, any thing which is complex have constituent parts. In other words whatever is analysable into parts having certain relations is a complex. Russell insisted that physics which deals with such concepts as "instants", "points", "electrons" etc. are all complexes because they are analysable into percepts which have spatio-temporal position. This can be explained in the following way: Let us consider a series of overlapping areas. With the addition of more and more members to the series, the area common to the members become smaller and smaller. One might consider that this series has a limit and take that limit to be a point. But such assertion would leave us with the problem of determining whether such a limit is an entity. One might argue that such a limit is a point or instant. Instead of referring these expressions as instants or points we can replace the expressions referring only to series of areas or durations. According to Russell such an analysis satisfies all the

34. Nagel, "Russell's Philosophy of Science", in Schilpp.

usual logical and mathematical uses of points. Such an analysis is considered as logical construction.³⁵

As a result the complex concepts of physics cannot be considered as a part of the "ultimate furniture of the world".

In our analysis of events we have seen that in 1948 Russell claimed that an "event", a neutral entity, has internal structure. That is to say that an event is a complete bundle of compresence quality. Does this make an event a construction? Russell's reply was no. [Cf., *Human knowledge*, Chapter Eight, pp. 310-25]. He said that in a "complete complex of compresence" all the members of the group are compresent, and nothing outside the group is compresent with every member of the group. Although we perceive a complex of compresent qualities we cannot perceive the constituent qualities. For instance, in the sentence "this is red", the subject can be named as "this" (a proper name) and then by attention we observe that redness is one of the constituent qualities. The later analysis into redness is a judgement by perception. But the initial naming as "this" is not analytic because the "whole was defined as "this", not as a complex of known parts" (*Human Knowledge*, p. 320). Russell said:

A complex of compresence ... is not to be conceived, like a class, as a mere logical construction, but as something which can be known and named without our having to know all its constituent qualities.... [In other words] a complex can, therefore, be mentioned in a way which is not reducible to a statement about any or all of its constituents. [*Ibid.*, p. 325].

When the qualities are given, such a complete complex is "unique". Ayer, critical about this suggestion, argued that "the difficulty is that the uniqueness which he attributes to complete complexes, in their capacity as total momentary experiences, cannot be plausibly be claimed for the combinations of qualities which characterise the neutral objects of our primary system" (*Russell and Moore*, p. 76). It is true that in his explanation of total momentary experience in one's personal biography Russell did not mean that it is the result of one event as complete complex of compresence. He mentioned a series of events forming a complex makes a momentary experience "unique". But the uniqueness of an event as bundles of qualities does not come through individuation but through their mutual compresentness (*Human Knowledge*, p. 325).

35. Cf., Fritz, "Russell's Philosophy of Science", pp. 159-60.

When I say "I can see a colour red" I mean "redness occurs", i.e. it is "this". That means when a sensation occurs it is immediately "noticed" and "named". A sensation or percept is both an object and knowledge. For Russell "the event is both mental and material at once" (*Portraits From Memory*, p. 152). This is what, I think, Russell meant when he said that an event is a bundle of complete compresence of qualities. Such a complex is "new" over and above the qualities. By which, I think, he meant that the new complex is neither mental nor physical but both mental and physical. This provides the basis of neutrality to the event which can figure in two groups. Since the event have both the mental elements and physical elements "it is possible for an event to have both the causal relations characteristic of physics and those of psychology" (*ibid.*, p. 152). This is why I called the percepts or neutral entities covertly dualistic. [See 5.6.].

In Russell's philosophy "percepts" and "sensation" have a similar status. Although percepts have internal elements these elements have no spatio-temporal position. Russell analysed "percepts" in the similar way James analysed "experience". James argued that experience is the ultimate datum according to which every thing in the world can be explained. It is neutral but "only, within the datum there are two parts, the objective and subjective parts... and as, within the datum, the one part is to the other, so will the datum itself in its entirety appear as the subjective part in the next datum which will contrast it with the objective part of its own content" (see 2.4). But James said that these parts can be seen in retrospection, hence it is mental and physical both at once. In chapter three I have shown that how James committed himself to covert dualism.

5.8. Conclusion.

The main aim of this chapter has been to analyse Russell's ontology of neutral entities.

Russell developed his theory of neutral entities in several of his well known books. The process of development started in 1919 until 1959. It was in 1921 he finally declared that James and the American realist had been right in denouncing that in perception we cannot see anything like "mental act". He rejected Meinong's threefold distinctions between act, content (this Russell never accepted from the very beginning

as a realist) and the object. In a process, following James, he rejected "consciousness" as an entity which explains mind and its function.

In chapter four I have shown that Russell's development of neutral entities began as early as 1912, when he accepted sense-data as the immediate object of knowledge. The knowledge of physical object became knowledge by description. Mind as a separate entity has been retained. It is in sensation we are aware of sense-data, such as a patch of colour, sound hardness etc. "We are not only aware of things, but we are often aware of being aware of them." [*The Problem*, 1912, pp. 26-27].

As his first objective as a neutral monist, Russell's immediate task was to abolish the distinction between "sense-data" and "sensation" in order to get rid of psychophysical dualism. This he did in 1921 with the announcement that since the subject is a "gratuitous assumption", and not empirically discoverable, we should dispense with it. Thus we are left with "sensation", the neutral entity, which is non-cognitive. A patch of colour is no longer knowledge by acquaintance, but is the empirical basis of our knowledge. With this came the end of his relational theory.

Now we are left with "sensations" as neutral entities, which can figure as a constituent in the construction of both mind and matter. But sensations are not enough to explain mind, which requires "images" (mental), and matter, which requires unperceived entities called "sensibilia" (physical). As regards the introduction of images Russell argued that the behaviourists had been wrong in rejecting introspection as a source of knowledge. Since the physical world does not include all that we are aware of, such as visual and auditory images, hence introspection must be admitted as a source of knowledge different from sensation. The introduction of "sensibilia" was mainly due to the fact that since physics demands continuity, there are entities which make up that part of the material that does not come into the sort of contact with living body that is required to turn it into a sensation.

Such an assertion left his theory of neutral entities, of 1921, openly dualistic in Cartesian style. Russell realised this mistake. In his later development he brought images (which have mnemonic causes, i.e. action at distance) on par with sensations. Following Hume Russell said images are copies of sensations and have no intrinsic difference between them. He discarded mnemonic causation and said that mnemonic phenomena in mental events are due to modifications of brain structure. He rejected action at a distance and provides images with a physical basis. It was only in 1948

that images and sensation lost their epistemological importance. As regards unperceived entities Russell said that they have the similar metaphysical status as those of sensations. He seemed now to be less interested in epistemology. As a result he presented a number of inductive inferences (1948) to justify inferences to unknown events from known events. His acceptance of the theory of causal perception provided a surer ground for the unperceived entities. Accordingly, in the causal network of events those which come at the end of the chain have epistemological certainty. Since we know the intrinsic character of these events we can infer the structural similarity of other events (unperceived).

At this stage Russell took a more scientific approach and renamed his neutral entities as "percepts" (or "events" in the wider sense to include unperceived entities). Einstein's theory of relativity and Whitehead's construction of "points" helps Russell to arrive at a notion of an "event". Although he accepted some of the analysis of events furthered by these two men, Russell also analysed them in his own way.

Despite his new approach, Russell still faced the question: How do we have knowledge of the external world? Since percepts or sensations are not knowledge by themselves, then one cannot have knowledge of the external world. In 1959 he could not but speak his mind that there is a duality in any form of knowledge. This duality (the act of knowing and the object known) had to be re-introduced. What he did was to replace the term "acquaintance" with an undefined term "noticing". But he did not introduce "sense-data" which is knowledge by acquaintance. In place he introduced the term "sensational cores". They seem to provide relatively certain knowledge than sense-data, which are truly certain in Russell's philosophy.

In 1948 Russell declared that an event is not simple but a complete bundle of compresent qualities and relations. The sensational cores which belongs to the percept gives us immediate knowledge of the object. For instance when a shade of blue occurs it does not occur as a mere quality. It occurs along with hardness, the thickness, a particular shape, so related that it is instantly "noticed". It is this analysis I argue that is covertly dualistic.

In the next chapter I will discuss the general function of Russell's theory of matter and mind, in the light of my analysis of its detailed epistemology and ontology. As a neutral monist Russell's main aim was to show that "the traditional separation between physics and psychology, mind and matter, is not metaphysically defensible,"

rather "the two will be brought to together, not by subordinating either to the other, but by displaying each as logical structure composed of ... "neutral stuff". [*The Analysis of Matter*, p. 10].

Chapter 6.

Russell On Neutral Monism: Matter And Mind.

... physicist assure us that there is no such thing as matter, and psychologists assure us that there is no such thing as mind. This is an unprecedented occurrence. Who everheard of a cobbler saying that there was no such thing as boots, or tailor maintaining that all men are really naked?

Russell, "What is the Soul?" in
Let the People Think, (1941).

The word "mind" and "matter" are used glibly, both by ordinary people and by philosophers.... My own feeling is that there is not a sharp line, but a difference of degree; an oyster is less mental than a man, but not wholly un-mental.

Russell, *An Outline of Philosophy*, (1927, p. 209).

Introduction.

This chapter will consist of three sections. The first section will deal with Russell's theory of construction. This will be followed by an elaborate discussion of his theory of matter. The second section will consist of a discussion of his theory of mind as explained in terms of neutral entities. In the third section an attempt will be made to show that although neutral monism has its own drawbacks it is certainly not a form of physicalism. A comparison will be made between a particular form of physicalism called anomalous monism.

Section I**6.1. The Theory of Construction.¹**

In accepting neutral monism Russell argued that mind and matter are simply constructions out of very basic entities. [See 5.7.2] These basic entities are called percepts and are therefore considered as the ultimate constituents of the external world.

1. Russell's theory of logical construction is amplified in his various philosophical discussion. Here I will try to restrict my discussion only to his application of the "logical construction" in order to explain his analysis of mind and matter in terms of neutral entities.

Unlike Russell, James considered the world as pattern. In his philosophy the basic entities includes both universals and particulars. Beside the patches of colours, odours etc. the given he also included the existence of physical objects. In his *Radical Empiricism* James argued that two persons can perceive the same object. Because of this there was no need of constructing physical objects. [See 3.2.7]. But for Russell no two views are same. More over he did not postulate physical objects at the same level as the neutral entities. Russell accepted the method of construction in order to explain physical objects and mental phenomena.

Before we discuss his theory let us see how Russell arrived at the notion of neutral entities.

Ontological Reduction.

In chapter one I have shown why the neutral monists rejected the concept of "substance" and instead accepted the notion "stuff". They generally reason that the traditional analysis of substance raises certain difficulties. Substance as substrate, in the analysis of Descartes and Locke, does not emphasise its distinction from accidents and properties. In such an analysis substance remain unknown. What we know are the properties that inhere in the substance.

The replacement with the concept the "stuff", neutral monist argues, provides a better understanding of the relation of matter and mind to the stuff of the world. As a result two problems are solved: (1) ontological, and (2), epistemological. Ontologically the "stuff" is not any hidden unperceivable *Ding-an-sich*. Epistemologically one can have immediate knowledge of the basic elements which underpin both psychology and physics. Accordingly they argue that the stuff of the world is simply a "collection of entities".

In the preceding chapter we have seen that by accepting the empiricist's starting-point Russell arrived at the theory of neutral entities. These entities, such as patches of colours, shapes, sounds, are simple and are known in perception. They are simple in the sense that they occupy a small finite duration in time and a small extension in space. This space-time occupation does not entail that they have parts. In other words "simples" are devoid of spatio-temporal structure.

Russell arrived at this theory through his denunciation of Hegelian absolutism, the theory of internal relations and his early acceptance of Moore's dualistic realism (act-object distinction). The simples or neutral entities are the result of "the justification of logical atomism", inspired by Wittgenstein, and the "purpose embodied in the maxim called Occam's Razor", that it diminishes the risk of error if one assumes fewer entities. Russell explained his justification of analysis by saying that "you can get down in theory, if not in practice, to ultimate simples out of which the world is built, and those simples have a kind of reality not belonging to anything else." [*The Philosophy of Logical Atomism*, p. 142]. He called these simples logical atoms. This doctrine of logical atomism is given in a series of lectures in 1917-18. There Russell says:

[T]he atoms that I wish to arrive at as the sort of last residue in analysis are logical atoms and not physical atoms. Some of them will be what I call "particulars" - such things as little patches of colour or sounds, momentary things - and some of them will be predicates or relations and so on. The point is that the atom I wish to arrive at is the atom of logical analysis, not the atom of physical analysis. [*Ibid.*, p. 37].

These logical atoms, that reality is composed of are not further analysable. The atoms could be reached through two approaches. Russell used the empirical argument, in the spirit of Hume, whereas Wittgenstein used an *a priori* argument. [*Ibid.*, "Introduction", p. 4-7].

Russell applied this "newly developed logic" to metaphysics and the theory of knowledge in order to establish empiricism on a firmer basis. This is described by Pears in the following way:

Previous empiricists, from Hume to J.S. Mill, had relied on a theory of mind which stood on the shifting sands between philosophy and psychology. Russell wished to replace this theory with something more robust. His new theory would be concerned with the expression of thoughts rather than with their psychological structure, and so would make everything open to view amenable to scientific treatment. [*Ibid.*, "Introduction", pp. 7-8].

As a result Russell arrived at his theory of neutral entities which is discussed in chapter five. The neutral entities are not only epistemologically certain but ontologically identical. They are "subjectless given". They are not constructs but are the constituents which explains both mind and matter. In Russell's philosophy mind

and matter are constructions out of the simple subjectless neutral entities. Now let us see what Russell meant by construction.

Logical Construction.

In discussing Russell's theory of logical construction we will identify two uses of the notion of "construction". They are: (1) epistemological, i.e. to explain how physics is knowable;² and (2) ontological, i.e. the entities which are constituents are "genuine"³ entities and the constructs are "logical fictions". Both the problems will appear simultaneously in our discussion.

Before we go into further detail we must mention that Russell's analysis of "logical construction" from 1912 to 1920 reflects the epistemological problem, i.e. to close the gap between physics and perception.⁴ This is the phenomenalistic period which I have discussed in chapter four. It is in the period 1921-1927 Russell laid much stress on the ontological problem i.e. neutral entities are the primal stuff and what we call mind and matter are simply constructions.

It is believed that constructions have lost some of their significance in the later period when Russell considered that the world is constituted by a multitude of events many of them grouped around "centres". [See 6.2.2.]. We shall see that during the logical atomism period, constructions made it possible to substitute classes of sense-data for external objects. Since Russell has admitted external events it is thought that constructions can serve no such radical purpose for which it was initially accepted. But as we go along we shall see that construction enable us to substitute statements referring to classes of entities in place of statements referring to an entity, namely material object or scientific entity.⁵

Russell's effort but failure to close the gap between physics and perception in 1912 made him accept that "the whole conception of the world of physics as a *construction* rather than an *inference*".⁶ He regarded this method of construction as "the supreme

2. Fritz in 1952 suggested that Russell's "epistemological purpose of construction is to determine in what manner statements referring to unperceived entities may be justified, especially those concerning material objects,...." [P. 176-77]. This is the epistemological use of the construction.

3. Cf., Sainsbury, *Russell*, p. 236.

4. See *My Philosophical Development*, p. 10. Russell confirmed that since 1910-1914 he was concerned with problem that how we knew physical world, i.e. a relation of perception to physics.

5. Cf., Fritz, C.A., "Russell's Philosophy of Science", p. 162-3.

6. *Our Knowledge of the External World*, p. 8. Russell suggested that he has been made aware of this by Whitehead. This has been refuted by Sajahan Miah in his "The emergence of Russell's logical

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maxim of scientific philosophising" (*Mysticism*, p. 115), and is a form of Occam's Razor.

In his *The Problems of Philosophy*, Russell explained that physical objects are constructs out of sense-data. But sense-data has an ambivalent position (see Chapter One, Dualism in Russell) - i.e. dependent on physical object and sensation (act-acquainted-object). The existence of an inferred physical object is assumed to infer the existence of entities (sense-data) which are evidences of a physical object, which is a logical construction. Russell used the term "inference" equivocally. For instance a physical object which is a construct is an inference from sense-data which are known. But to have an epistemological access to sense-data Russell tacitly accepted the existence of physical objects which are not there and is simply an inference. The presence of sense-data can only be inferred by the presence of physical objects. Moreover in his *Mysticism and Logic* Russell argued that sensibilia (which has similar status as those of sense-data) are also inferred. But such inference does not make the neutral entities constructs. By arguing thus Russell complicated the notion of "construction" and "inference". As a result he brought circularity in his explanation of sense-data and physical objects.

Fritz in his *Bertrand Russell's Construction of the External World* noted this "circularity" (p. 177-8). He believed that the inclusion of unperceived events in the very inference which Russell was trying to justify, makes his construction circular. I have already mentioned that such apparent circularity is part of a programme known as *Bootstrapping*. [See, Chapter Seven]. Russell's main contention here was to show that what we call sense-data are the actually given entities in acquaintance and the inferred entity, the physical object (say table) is construction. Here we can pass from perception to physics simply by inference.

He also applied his principle of construction versus inference for the ontological purpose, i.e. to explain both matter and mind. This view can be seen as a shift from his earlier explanation of construction. Following Whitehead's "important heuristic maxim", in his *The Philosophy of Logical Atomism* Russell said:

When some set of supposed entities has neat logical properties, it turns out, ... that the supposed entities can be replaced by purely logical structures composed of entities which have not such neat

construction of physical objects" (Russell, vol. 7, No. 2, 1987-88, pp. 11-24. Russell in his *My Philosophical Development* acknowledged that the question of construction which he has developed in *Our Knowledge* "was already very much in my mind in 1911" (p. 121).

properties. In that case, in interpreting a body of propositions hitherto believed to be about the supposed entities, we can substitute the logical structures without altering any of the detail of the body of propositions in question. This is an economy, because entities with neat logical properties are always inferred.... (P. 161).

After such explanation Russell said that the principle may be stated in the form: "Wherever possible, substitute constructions out of known entities for inferences to unknown entities" (*Logic And Knowledge*, p. 326). The above quotation suggests that inferred entities have "neat" properties which are the mark of a "logical construction" (cf., *Logic And Knowledge*, pp. 329-330). Russell said that matter has two neat properties (1) two pieces of matter cannot be at the same place; (2) one piece of matter cannot be in two places. "Experiences in the substitution of constructions for inferences makes one suspicious of anything so tidy and exact" (*ibid.*, p. 329).

Russell distinguished the constructs from the constituents.⁷ Accordingly he argued that the constituents, i.e. the neutral entities have no such neat properties. An immense number of such entities coexist in a little region of space-time. In them we do not find any property as "impenetrability" but endless overlapping of the events in a part of space-time. Therefore they are not constructs but simple. But physical objects are constructs. With an analogy Russell explained that portion of matter cannot be considered as the building blocks out of which the world is built. The blocks are events, and the fragment of matter are portions of the structure to which we find it convenient to provide separate attention. [*Ibid.*, p. 329].

Russell said that "construction *versus* inference" can also be applied in order to explain the mental occurrences. He explained:

The subject, and the relation of a cognition to what is known, both have that schematic quality that arouses our suspicions. It is clear that the subject, if it is to be preserved at all, must be preserved as a construction, not as an inferred entity.. .[Pp. 329-30]

But Russell is slightly apprehensive whether the "subject" is sufficiently to be worth constructing. Russell agreed with James that the relation of cognition to what is known is not straightforward. "William James was right in drawing attention to the complexity of "knowing". [*Ibid.*] But as we go along we shall find that Russell

7. Status of Percepts (5.7.2). Here, following Russell, I have shown that although Russell's final analysis suggests that a percept is complete bundle of compresent qualities it is simple and not a construct.

explained the complex mental phenomena as constructions out of neutral entities. [See 6.3.1.2].

Russell also said that "wherever possible, logical constructions are to be substituted for inferred entities". He used his constructions as "substitutes"⁸ for "unknown" entities. To call construction "substitutional" is motivated by his concern to deal with the epistemological problem. Russell explained:

The method by which the construction proceeds is closely analogous in these and all similar cases. Given a set of propositions nominally dealing with the supposed inferred entities, we observe the properties which are required of the supposed entities in order to make these propositions true. By dint of a logical ingenuity, we then construct some logical function of less hypothetical entities which has the requisite properties. This constructed function we substitute for the supposed inferred entities, and thereby obtain a new and less doubtful interpretation of the body of propositions in question. [*Mysticism*, pp. 115-6]

In explaining the above passage Sainsbury, in his *Russell* said that for Russell (when the programme of logical construction was in its heyday) constructions were meant to be substitutional (p. 237). We know that in his phenomenalist phase Russell brought two kinds of inferred entities, i.e. percepts of other and unperceived entities (sensibilia). He provided similar metaphysical status to all known and inferred entities. These data are real and therefore "verifiable" (see Chapter Four). Although they are unperceived the relation between the sensible to the sense-datum is "like that of a man to a husband" (*Mysticism*, p. 110). In his *Our Knowledge of the External World* he only included the "hard" data as verifiables, whereas "soft" data remain non-verifiable (p. 89). But we know that mind and matter are also inferred entities. But they are not "verifiable" in the sense the sensibilia are verifiable. But it should not be thought that sensibilia are constructs like those of mind and matter. Mind and matter are constructs but not in the sense of being "substitutional". Fritz warned:

We must be careful in interpreting statements in which Russell speaks of "substituting", or "replacing", entities by constructions that the real nature of a construction be kept in mind, and avoid attributing too literal a meaning to "substitute".

In Russell's theory of neutral monism the ultimate stuff is simple. Mind and matter are complexes which are composed of simple neutral entities. This is the ontological use with which his theory of construction deals. We know that prior to his

⁸ Cf., Sainsbury, p. 237.

commitment to neutral monism Russell showed considerable interest in the epistemological use of construction. I have discussed as how in his phenomenalist phase attempted to justify and close the gap between physics and perception. He emphasised that "the objects which are mathematically primitive in physics, such as electrons, protons, and points in space-time, are all logically complex structures composed of entities which are metaphysically more primitive, which may be conveniently called "events" (*The Analysis of Matter*, p. 9).

In our discussion of Russell's theory of mind and matter as construction we will find that he emphasised on the *ontological* use of construction. Ontologically the neutral entities which explain mind and matter as complexes are the "genuine entities". Mind and matter is logical constructions and therefore "fictions".⁹ This is because the entities which are constructed ontologically depend on the "simples", which are the element of their construction. Simples are given, and the construction could not exist without the simples.

According to Sainsbury such dependence is "asymmetric". The sense which Russell invoked was constructions are "non-empty" classes, and these classes could not exist without there members. [P. 239]. Sainsbury exemplified his criticism in the following way: He said that a father might have existed without his son, but the son could not exist without him having existed. This asymmetric relation of ontological dependence does not make the son a fiction. We have already mentioned that Russell's construction is circular and such criticism is the result of apparent circularity. More over we should not simply consider the criterion of asymmetric relation of dependence. Russell's fictions are simply collections from different points of view. He held,

"classes or series of particulars, collected together on account of some property which make it convenient to be able to speak of them as wholes, are what I call logical constructions or symbolic fictions". [*Mysticism*, p. 97].

Fritz argued that Russell's use of the word "fiction" seems "more dubious":

"Fiction" can convey the impression that, for example, objects described, and material objects, do not exist as entities. [p. 217].

9. Cf. Sainsbury on this issue, p. 237-8; Fritz (1952), p. 217.

To make Russell's interpretation more plausible Fritz explained this in the following way. Material object is a "fiction" because at first sight it appears to denote some entity. But when analysed we find that is not the case. They are symbols (such as descriptions, material objects) "which have a certain convenience in language and logic, but are convenient symbolic devices only; they do not denote any constituent of the world" (p. 217).

Fritz' explanation corresponds with what Russell said in his *The Philosophy of Logical Atomism*:

You find that a certain thing which has been set up as a metaphysical entity can either be assumed dogmatically to be real, and then you will have no possible argument either for its reality or against its reality; or instead of doing that you can construct a logical fiction having the same formal properties to those of the supposed metaphysical entity and will fulfil all the scientific purposes that anybody can desire [*Logic and Knowledge*, p. 272; also see Sainsbury, p. 283].

By metaphysical entity Russell meant those things which are supposed to be part of the ultimate constituents of the world, but not the kind of things that are empirically given, such as a chair (physical object).¹⁰

From the preceding analysis it is clear that Russell's main interest in his theory of construction was its ontological use. Keeping this in view we will see how Russell explained matter and mind as constructs out of neutral entities.

6.2. Matter In Terms of Neutral Entities.

In his phenomenalist phase (1912-1920) Russell explained the construction of material objects and matter in terms of appearance mainly to justify that physics is true. He said that

"the only justification possible must be one which exhibits matter as logical construction from sense-data - unless, indeed there were some wholly *a priori* principle by which unknown entities could be inferred from such as are known. It is therefore necessary to find some way of bridging the gulf between the world of physics and the world of sense" [*Our Knowledge of the External World*, p. 106].

10. Sainsbury suggested that according to Russell it is "not that classes of sense-data are fictions, but that sense-data-transcending physical objects are fiction in that they cannot be known to exist" (p. 238).

In chapter four I have said that Russell dispenses with the physical object in order to have epistemological access to it via sense-data. Physical objects are inference and are knowledge by description. But in Russell's construction we know that there are unknown entities which are not physical objects but entities having supposed metaphysical status as those of known entities and are therefore substitutional. I have discussed why and how Russell arrives at the notion of sensibilia in discussing his phenomenalist phase. In this chapter I will be mainly concerned with his construction of material objects in terms of appearance or aspects from a neutral monist point of view. This is because in 1921 Russell in his *The Analysis of Mind* said that he has presented his theory of matter in terms of neutral entities in *Our Knowledge of the External World* (chapter III & IV) and *Mysticism and Logic* (Essays VII & VIII). [P. 11, cf., Footnote].

But this theory came under attack especially by Stace ("Russell's neutral monism") and Ayer (*Russell and Moore*). They regard his theory as more of phenomenism. This is rejected by Lockwood. He argued that Stace and Ayer "under-estimate the shift in Russell's thinking which took place between 1914 and 1919" ("What Was Russell's Neutral Monism?", p. 145). This period was simply "constitutive" and Russell was a quasi-phenomenalist (see my discussion in chapter four). Russell in his "Reply" admitted that he no longer agreed with the view advocated on the above two occasions partly for reasons Stace puts forward against them. But in his *The Analysis of Matter* "there is a fuller and more careful statement of theories not very different from those of *The Analysis of Mind*" (p. 707). In his later analysis as a neutral monist he employed a similar method of construction but in terms of "events", accepting a more scientific approach. His discussion about the construction of matter is more metaphysical than epistemological. For this purpose I will discuss the issue in two separate sections.¹¹

11. In discussing Russell's theory of matter I will basically follow Fritz. He has wonderfully presented Russell's theory of matter in his *Bertrand Russell's Construction of The External World*. Also cf. Ahmad, M. Following Fritz he has also developed an account of Russell's theory of matter. But I totally disagree with his final conclusion where he considered mind and matter as emergent. According to him mentality and materiality are "emergent properties" belonging to different groups of events, but not to single events. As we have seen that to Russell as well as James a single "event" or "experience", in isolation, can be both mental and physical at the same time. In explaining this I have considered that the supposedly neutral entities, both in James and Russell, are covertly dualistic. [See Chapter Three and 5.6.]

6.2.1. Material Objects as "Collection of Particulars".

In his explanation of material objects as collection of particulars Russell maintained that the data which constitute the external world can be obtained by perception. They come to us through the senses. For instance visual data of different shapes and colours can be gathered through the sights we see. Similarly the audible data from the sounds we hear and the tactual data from the touch and so on. Russell includes not only one's own sensations but also the sensations of other people and sensibilia. These data are immediately given to us and are correlated in various ways by which we know the material objects of common-sense and of physics.

The sensations or percepts belonging to different senses form a "world" depending on each particular sense. For instance the sensations of sight are given as spatial sight space, and those of touch in touch space. At any given moment each individual has a set of sensations through his different senses. This momentary set of percepts of each individual give him a momentary world view. Thus each individual lives in a private world which contains its own spaces from different senses. These spaces of sight, touch and so on are correlated with the various spaces of other senses. Such correlation, according to Russell, is learned by experience in childhood.¹² [Similar view has been maintained by Max Born in his "Reflections of a physicist". p. 123].

According to Russell the momentary set of sensations of each individual is the "private world" or a "perceived perspective". A perspective, to which a given sensation belongs, is defined as "the set of particulars that are simultaneous with this sensation" (*The Analysis of Mind*, p. 128; *Mysticism*, p. 104). Any two particulars which are either "successive" or "simultaneous" "is to be understood as a direct simple relation, not the derivative constructed relation of physics" (*Mysticism*, p. 105). Russell avoided any reference to a perceiving subject in his definition of perspective because beside "perceived perspective" there are "perspectives which are not perceived by any one" [*Ibid.*, p. 104]. The "private world" is the only perceived "perspective". Beside there may be number of "unperceived perspectives" quite similar to those of perceived perspectives. [*Our knowledge*, p. 95]. The complete collections of all the particulars that are directly simultaneous with a given particular an individual has through his life will be defined as "biography". "Those biographies that are not lived by any one are called "official"." [*Mysticism*, p. 105].

¹² *Our Knowledge*, p. 118; *Mysticism*, p. 117, *The Analysis of Matter*, p. 252; cf. Fritz, p. 144.

Unlike unperceived perspective, the private world is the only perspective of which one can be certain. Russell also accepted the belief that like one's own others must have a private world of their own and also an unperceived world. But two people at the same time can never visualise the same world. This is because no two perspectives belonging to the same individual from different places or two individuals from the same place will be exactly the same, yet there is sufficient similarity. Two people when they perceive a table, for instance, are said to have similar perspectives due to which they can use the same words to describe the object. The changes of perspectives are also due to a change of positions and different physiological and psychological conditions (see 5.7.). The only possibility for them to have the same visual data is to be exactly in the same position in space and having identical physiological conditions, which is not possible. The similarity of perspectives of two individuals can be obtained by "testimony" (*Ibid.*, p. 116; Fritz, p. 145). The belief in "the minds of other people" does not belong to the data which are certain but it is a natural belief "which systematizes a vast body of facts and never leads to any consequences which there is any reason to think false... therefore [there is a]... good reason to use it as working hypothesis" (*Our Knowledge*, p. 103). [We will later see that in *The Analysis of Matter*, Russell developed this idea in a more scientific way. There he brought in the concept of induction and the causal theory of perception.]

The perspective of an individual will change with the continual changes in his bodily state or position. For instance walking around the object, provides him a sequence of perspectives of changing shapes and sizes of the table. We can compare the particulars of two perspectives to find out the "nearness" and "farness". If the particulars of one perspective are similar to the particulars belonging to other perspective then two perspectives are near. If the corresponding particulars are not similar then it is said to be intervened by other series of perspectives between the two series of perspectives compared. Hence the two perspectives compared are "far" from one another. The correlation of similar particulars of different perspectives provides the basis upon which a "material object" can be defined. Russell said:

By the similarity of neighbouring perspectives, many objects in the one can be correlated with objects in the other, namely with the similar objects. Given an object in one perspective, from the system of all the objects correlated with it in all the perspectives, that system may be identified with the momentary common-sense "thing". [*Our Knowledge*, p. 96; quoted in Fritz, p. 147].

Thus a particular of a "thing" is a member of the system of particulars which is a thing at that moment. Applying the similar method of construction Russell as a neutral monist said that a piece of matter, known empirically, is not a single existing thing, but a system of existing things. For instance in the above example we have come across that when a number of observers simultaneously see the same table, they all see something different. In such a case Russell considers "the" table as the neutral object between different observers. But the table is not "real" either though it is the common cause of all the appearances the table presents to different observers. Russell casts doubt on the notion of "cause" and discards it as unreliable (*The Analysis of Mind*, p. 98). According to Russell the table itself is a construction of particulars and therefore cannot be real. The only thing which is real are the neutral particulars and the table is simply a "fiction". We can "secure neutrality" on the basis of equal representation. Hence we should take the whole set of these sensations or particulars belonging to different individual and correlate them as a single object, the table. Thus the table which is neutral as between different observers is the collection of all those particulars which is called the "aspect" of the table from different points of view. [*Ibid.*, p. 98]. It is in this sense all the aspects of the table are "real" (neutral), whereas the table is a merely logical construction. [Cf., *Our Knowledge.*, p. 96].

The set of particulars (perceived and unperceived) which constitute one thing at one time makes a "momentary thing". The "particulars" and the "momentary things" are guided by separate laws.

Thus a momentary thing is a set of particulars, while a thing (which may be identified with the whole history of the thing) is a series of such sets of particulars. The particulars in one set are collected together by the laws of perspective; the successive sets are collected together by the laws of dynamics. [*The Analysis of Mind*, p. 126].

From the preceding analysis we know that each individual's percepts or sensations determine their own space. Thus the private space of an individual is constructed from the correlation between the "spaces" (space of sight, space of touch etc.) of his different senses. Similarly by correlating these private spaces and unperceived perspective the public space of physics is constructed. The material object belongs to the public space and therefore is not restricted to one individual.¹³ He explained the construction of public or perspective space in the following way.¹⁴ For instance we can take a penny which appears in a number of different perspectives (see Chapter

13. *Ibid.*, p. 98; *Mysticism*, p. 119.

14. *Ibid.*, p. 98; *Mysticism*, p. 118-9; *The Analysis of Matter*, p. 208. Also see chapter four.

Four). For instance we are seeing what we call "penny", in some perspectives the penny appear, say, larger and in some smaller, in some it looks circular and in other perspectives it appears elliptical of various shapes and sizes. This will occupy a large part of the field of vision than the corresponding percept in another perspective. These appearances of the penny can be collected in according to shapes and sizes, on the basis of *similarity* and *continuity*. We can collect all the perspectives which has a round percept of the penny. These can be arranged in a straight line, ordering them according to the size of the percept of the penny. Similarly we can form another straight line of perspective in which the penny appears to be of certain thickness. In this way we can collect the appearances of the penny in several straight line. If all these lines are prolonged they will meet at a certain place, i.e. in a certain perspective. This perspective is a spatial unit or point in perspective space. The point of intersection of different lines is defined as "the place (in perspective space) where the penny is". [*Our Knowledge*, p. 98; *Mysticism*, p. 120; Fritz, p. 150].

One may say that particulars, which constitute a "thing", exist continually only at a position from which it is actually observed but from other points it would be discontinuous. To this Russell's reply was:

The "thing" of common sense may in fact be identified with the whole class of its appearances - where, however, we must include among appearances not only those which are actual sense-data, but also those "sensibilia", if any, which, on grounds of continuity and resemblance, are to be regarded as belonging to the same system of appearances, although there happen to be no observers to whom they are data. [*Mysticism*, p. 114].

But the above account brings in some conflict between what common sense regards as one thing, and what physics regards an unchanging collection of particles. Two questions arise: "By what principles shall we select certain data from the chaos, and call them all appearances?" [*Our Knowledge*, p. 113]. Can continuity and resemblance explain the thing as consisting of successive appearance?

According to Russell similarity is not a sufficient condition. For two different things may present any degree of likeness up to exact similarity. Continuity is also an insufficient criterion, i.e. are not necessary but hypothetical. By accepting continuity we can sensibly pass from one drop of the sea to another drop. But continuity should be a necessary condition if two appearances must be classed as the appearance of the same thing. Therefore it is desirable to define a drop, and to distinguish a current within the water. A class of appearance belonging to one thing, according to Russell,

should fulfil two laws, i.e. the laws of perspective and the laws of dynamics respectively.¹⁵ In doing so a series of particulars of one thing will behave with regards to the laws of physics, "in a way in which series not belonging to one thing would in general not behave. If it is to be unambiguous whether two appearances belong to the same thing or not, there must be only one way of grouping appearances so that the resulting things obey the laws of physics" (*Our Knowledge*, p. 115). Accordingly Russell lays down the following definition: "*Things are those series of aspects which obey the laws of physics.*" [*Ibid.*, pp. 115-6; cf., Fritz, pp. 152-3].

In the example of the penny we have seen that every particular is associated with two places in perspective space at the same time.¹⁶ In the perspective space first, the place where the thing is, and second the place where the perspective is. In his *The Analysis of Mind* he called these two places the "active" and the "passive" places respectively (p. 301). But he specifically said that these are simply names and have nothing to do with the notion of "activity" (p. 130). We can collect all the particulars actively at a given place, or the particulars passively at a given place. For instance in the case of photograph of a star, the active place is the place where the star is, while the passive place where the photographic plate is. [*Ibid.*; cf., Ahmad, M., *op. cit.*]

This is how Russell assigned to a material object a place in the perspective space. Similarly different parts of our body acquire positions in perspective space. Therefore there is a meaning in saying that percepts or sensations are inside our head, because our perspective is located in part of the place in perspective space that our head belongs.

Russell said that there is a limit to the closeness we get to an object. The perspectives having a large aspects of the penny can be said to be nearer the penny than those which have a smaller percept. If we get closer to the penny where the object is touching the eye, there will be no particulars, "the eye sees not itself". "As a result when the centre is occupied by a percipient, it nevertheless contains no member of the group, not even an ideal member A group that is to say, is hollow: when we get sufficiently near to its centre it ceases to have members."¹⁷ To this A.O. Lovejoy remarked "all material things, then, in Mr. Russell's world, are built around holes". [*The Revolt Against dualism*, p. 245].

15. *Our knowledge*, p. 115; *The Analysis of Mind*, p. 125-6.

16. *The Analysis of Mind*, p. 130; *Mysticism*, p. 120; *Our Knowledge*, p. 100.

17. *The Analysis of Matter*, p. 211-12. Also cf., Fritz, *op.cit.*, pp. 150-1.

Russell thus provided the definition of "physical thing" as the class of its appearances. But, he thought, this can hardly be taken as a definition of matter. Because matter is something other than the whole class of appearances of a thing. In his *The Analysis of Mind*, Russell said that the appearances of a thing changes from different places, partly due to laws of perspective and partly due to an intervening medium. [P. 106]. The difference between the "material object" and the "matter" does not lie in the procedure of construction but in the aspects included in the construction (cf., Fritz, p. 153). The construction of "things" exhausts all appearances of the object from every point of view from varying distances, and through all kinds of intervening media.

But since matter is independent of our sense-organs, and also of the intervening medium Russell in his *Mysticism and Logic* defined matter as the group of aspects taken at as small distance from the object as possible:

The *matter* of a thing is the limit of its appearances as their distance from the thing diminishes. [*Ibid.*, p. 121; cf., *The Analysis of Mind*, pp. 106-7; cf., Fritz, p. 153].

This definition of matter as logical construction is "invented because it gives a convenient way of stating causal laws" (*The Analysis of Mind*, p. 300). The causal laws of physics differ from the causal laws of psychology. The difference is that in physics the causal laws connect a particular with other appearances in the same piece of matter, whereas in psychology the connection is made with other appearances in the same perspective. In other words physics group together particulars having the same "active" place and psychology groups together those having the same "passive" place. "Some particulars, such as images, have no "active" place, and therefore belong to psychology."¹⁸

Now we are in a position to evaluate his theory of construction of material objects. Before we proceed further it is necessary to remind ourselves that the main objective of Russell's theory of neutral monism was to abolish dualism of mind and matter. But that does not mean that he denied physical objects such as chairs and tables. What he denied was that chairs and tables exist as a single permanent object. In his theory chairs and tables are simply constructions or logical "fictions" out of more simple elements called neutral entities. These neutral entities equally explain mind and matter.

18. *The Analysis of Mind*, p. 301. See Chapter Five for the discussion on images. Following the behaviourist principle Russell provided a physical basis to images; also cf., Ahmad, M.

In his explanation of material objects Russell not only intends to stick to neutral entities but also to the entities which are "verifiable" in order to establish physics on sound epistemology. He was in fact doing two things: (1) entities are metaphysically single kind and, (2) epistemologically certain and viable. Russell did it through his conception of "construction".

The question that arise is how far is Russell successful. Did he stick to his promises? In his *Our Knowledge of the External World*, he took the opportunity to explain physical objects in terms of "hard" data only because the "verification is possible if physical objects can be exhibited as functions of sense-data" (*My Philosophical Development*, p. 79). But Russell knew such an attempt would establish "physics upon a solipsistic basis". So he gave up the attempt to construct "matter" out of experienced data alone. In order to provide a harmonious world picture which fitted physics and perception he accepted the sense-data of other people and sensibilia. Thus instead of putting forward, as Stace says "phenomenalism" (see Schilpp, p. 369), Russell's theory of this period turned out to be "quasi-phenomenalism". [See Chapter Four].

In his correlation of hard data (only those which are perceived) he brought in the belief of unperceived data through inference. To assert that a given sensation is a member of the class of correlated particulars is an inferred belief and is the result "from the evidence of a considerable number of beliefs". [Fritz, p. 155]. This is in a way true. Russell's initial approach has been less sophisticated, i.e. accepting the principle of continuity and similarity he arrived at the notion of unperceived entities, whose metaphysical basis has been provided without the knowledge of their intrinsic qualities. Such a claim is questionable. How the unperceived entities have similar metaphysical status as those of known and verified entities? Moreover the knowledge of unperceived entities are possible through the existence of the physical objects which are themselves supposed to be the grounds for the existence of the physical objects, thus involving circular arguments.

A similar criticism is made by Stace. He argued that "to construct matter out of verifiabiles only, turns out to be nothing but a fraud" (Schilpp, p. 379). To this Russell in his "Reply" said that the term "verifiabiles" has wider implications. The acceptance of causal laws by science allows it to believe in things which cannot be observed, as does common sense. An entity "may be said to be "verifiable" when it

has been inferred in accordance with the recognized canons of scientific method" (p. 708).

Regarding the qualities, Stace pointed out that Russell's theory was "open to Berkeley's criticism that it is impossible to separate primary and secondary qualities. The unperceived aspects has the primary qualities but not the secondary" (p. 369). Stace suggested that this objection was remediable. It was not that Berkeley thought that primary qualities cannot exist without the secondary qualities but that they cannot exist without having some other qualities. To say that a physical object has no characters other than shape, size etc. is to make it equivalent to a region of empty space. Berkeley thought that in order to make "something" it must have some other character like colour, for instance. This can be met by supposing that the unperceived particulars not only have primary qualities but also "intrinsic qualities" which, though unknowable, correspond to perceived secondary qualities. To this Russell's reply was that not only secondary qualities are subjective so are the primary qualities. "I regard both as subjective in the sense that neither can exist except in a region where there is an organism with sense-organs and a brain." ["Reply", p. 709]. This subjectivity is also present in the photographic plate.

In explaining matter in terms of neutral entities alone Russell thought that he had done away with the dualism put forward by Descartes and his followers. In his *The Analysis of Mind* he said,

"the dualism of mind and matter, ... cannot be allowed as metaphysically valid... we seem to find a certain dualism, perhaps not ultimate, within the world as we observe it. *The dualism is not primarily as to the stuff of the world, but as to causal laws.*" [p. 137, my italics].

One of Russell's commentators, Morris Weitz, viewed his theory of neutral monism as "causal dualism".¹⁹ We know that in order to explain his theory of images, which exclusively belong to mind, Russell accepts the notion of "mnemic causation", an action at a distance. [See Chapter Five]. But following the behaviourist principle he rejected mnemic causation as "too wide", which is not only confined to living organisms. So mnemic phenomena are due to the modifications of brain structure.

We know that neutral monism arose against the dualism of substances and not about causal laws. Their (the neutral monists) main aim was to show that the primary stuff

19. "Analysis And The Unity Of Russell's Philosophy", in Schilpp, p. 78.

which explains mind and matter is not of two kinds but is of a single kind. When we judge neutral monism we have to see whether they have successfully dispensed with Cartesian dualism and accepted only a single kind of neutral entities. Russell, as a neutral monist, accepted sensations as the only neutral entities which explain both mind and matter. But in his explanation of matter he thought that sensations are not enough. But there are occurrences "which do not form part of any "experience" belong only to the physical world" (*The Analysis of Mind*, p. 25). These other occurrences, which are not neutral, are guided by physical laws only. This means that these occurrences are physical and cannot explain mind. Thus Russell's construction of matter depends not only on neutral entities but also on physical entities, hence making it dualistic in Cartesian style.

6.2.2. Material Objects as "Collection of Events".

Russell's failure to stick to a neutral and single kind of entity led him, in 1927²⁰, to explain the construction of material objects in terms of "events". In order to provide an adequate world view he included in his construction perceived entities, entities belonging to other people and the entities which are not data to any mind. We know that he also included images in his construction. According to Russell images have a physical basis in the brain. The mnemonic effect is not only present in the mental phenomenon but also present in the physical object. Russell argued that the difference between mind and matter is simply a difference of degree. For instance the magnetized steel looks just like the steel. The only difference is that in the case of matter mnemonic phenomena are less frequent than in the case of living organisms. It is because the behaviour of the living organisms is bound up with the persistence influence of the past. [*The Analysis of Mind*, p. 78].

All these entities he now considered as being neutral. This theory is a modification of his early theory where he accepted quasi-phenomenalism. The early theory is "constitutive" (cf., Chapter Four). We can also call the present theory a more mature and refined version of neutral monism. The early theory he presented in 1914-1921 turned out to be metaphysically dualistic (physical objects are constructions out of sensations and unperceived entities) and epistemologically uncertain (unperceived entities are not data to any mind), as far as physics is concerned.

20. The theory is presented in *The Analysis of Matter* (1927), *An Out line of Philosophy* (1927), *Human Knowledge* (1948), *Portraits From Memory* (1956) and *My Philosophical Development* (1959)

In order to make his theory more acceptable Russell's main aims were:

- (1) to make the unperceived events accessible to establish physics on firmer ground;
- (2) to show that unperceived events are in fact neutral and are both epistemologically and metaphysically same as perceived neutral events;
- (3) to bridge the gulf between perception and physics; and
- (4) to show that neutral entities can explain both mind and matter.

We will discuss these issues together.

Before we proceed further it is important to note that although Russell initiated several modifications in his later theory he used the similar method of construction as explained above. Our analysis will show that the similarity between our percepts and their external causes is seen as similarity of structure. Russell did not lay much emphasis on the use of construction in his later analysis of mind and matter in terms of neutral entities.

As a preliminary, Russell in his *The Analysis of Matter*, accepted the ontology of "events" as neutral entities. This does not mean that he discarded "sensations" or "appearances" in his new analysis. He accepted them as "percept", the sub-set of events. Percepts are more than mere sensations. This I will discuss later. Events now designate all particulars including those that are not perceived.

There is another shift from his earlier analysis. Earlier, and also in his later analysis, Russell justified his acceptance of the unperceived particulars by enlarging one's experience in terms of the "evidence of testimony" (*Mysticism*, p. 116; *The Analysis of Matter*, p. 206). Russell reasoned that if we confine the pieces of matter to human brains this becomes phenomenalism, or one ought to say that this is solipsism. In order to avoid Berkeleyan metaphysics Russell accepted non-mental events (events which are not data to any mind) in his explanation of physics. [*An Outline of Philosophy*, p. 301]. "If we have once admitted unperceived events, there is no very obvious reason for picking and choosing among the events which physics lead us to infer." [*The Analysis of Matter*, p. 325].

The departure from the above analysis is due to his fully-fledged acceptance of the causal theory of perception. I say this because Russell accepted the causal theory of perception as early as 1912 in his *The Problems of Philosophy*. He said that there is a "simple hypothesis", i.e. "the common-sense hypothesis that there really are objects

independent of us, whose action on us causes sensations" (p. 10). M. Bradie pointed out that this is "a clear commitment to a causal theory of perception"²¹. He also said that Russell developed this causal theory of perception which he abandoned in his "constructivist" phase, but only to return to it after abandoning the notion of sense-data. Russell, in fact, never abandoned the causal theory of perception. Although Russell substituted belief for the inferred entities he accepted the causal theory of perception in order to explain the data which can never be present to any mind. In what we call "seeing the sun", we start from "a common-sense acceptance of our seeing, physics has been led step by step to the construction of the causal chain in which our seeing is the last link...." [*Mysticism*, p. 101]. What we observe in the period when he accepted sense-data is a hesitation in his acceptance of the term "cause", which has a different implication. "Any set of antecedents from which the event can theoretically be inferred by means of correlations might be called a cause of the event. But to speak of *the* cause is to imply a unique-ness which does not exist." [*Ibid.*, p. 102].

In 1927 Russell had no doubt whatsoever regarding the acceptance of the causal theory of perception. He said:

I have been surprised to find the causal theory of perception treated as something that could be questioned. I can well understand Hume's questioning of causality in general, but if causality in general is admitted, I do not see on what grounds perception should be excepted from its scope. ["Reply", p. 702].

The acceptance of the causal theory of perception provided him with sufficient justification not only for accepting the unperceived entities belonging to others but also those which cannot be data to any mind. [See Chapter Five]. This theory gave him better ground in his understanding of the various correlations of events and a metaphysically more probable world view. This theory disproved the idea that there is a single cause, i.e. a permanent material substance. The permanent material substance is still a construction of correlated percepts and events which are continuous with them.

In his later analysis material objects are constructions of correlated percepts belonging to oneself, to others, the unperceivables and the images, which has a position in the brain. Russell accepted the scientific approach to make his theory genuinely explanatory. [See Chapter Seven]. This time he explained external world in terms of

21. "Russell's Scientific Realism", 1988, p. 197.

"causal lines" and on the basis of "similarity of structure". He laid the foundation in 1927 (*The Analysis of Matter*) which culminated in 1948 (*Human Knowledge*).

Let us see how he explained that percepts and unperceived events are similar. Russell argued that the main reason why he accepted the unperceived entities in the construction was that the structure of the perceived and unperceived entities are similar or "semi-similar". [See Chapter Five.]. The assumption that the structural properties of the perceived and unperceived events are similar follows from the maxim "same cause, same effect" together from the inverted form "different effects, different causes".

Russell explained that the knowledge which physics provide about an event is purely abstract. Apart from certain logical characteristics of its structure we have no knowledge about its intrinsic character. Moreover physics cannot prove that the intrinsic character of the physical world differs from that of the mental world. Thus in both physics and psychology we find that mental and physical events form one causal whole. Therefore we can say that they consist of events having similar structure. [Cf., *An Outline of Philosophy*, pp. 306-7]. Despite this, we can still assume that the stimuli causing us to hear notes of different pitches form a series depending on the character which corresponds causally with pitch.

Thus the similarity is shown in relation between the percepts of the private space which correspond to the objects belonging to the public space.²² If a percept is in between two other percepts, the corresponding object will have same relation. From this we can infer that the properties of the unperceived entities are their logical and mathematical properties because "when two relations have the same structure... all their logical properties are identical". [*The Analysis of Matter*, p. 251].

From his previous analysis we are now in a position to say that Russell fulfilled two of his aims. First, one can have access to the unperceived events (events belonging to other people) if one accepts the causal theory of perception. At the same time Russell solved the mystery that since events have similar structure the unperceivable events which never becomes a data can also be said to have identical logical properties. Second, the structural properties of the perceived and unperceived events are similar. On the basis of this we can say that they are metaphysically same. The distinction

22. *The Analysis of Matter*, p. 252; also cf., Fritz, op. cit. (1952), p. 171.

between the events and the percepts, the subset of events located in the brain, are simply epistemological. [*Human Knowledge*, p. 224; cf., below]. Russell said:

We know the intrinsic character of the mental world to some extent, but we know absolutely nothing of the intrinsic character of the physical world. And in view of the nature of the inferences upon which our knowledge of physics rests, it seems scarcely possible that we should ever know more than abstract laws about matter. [*An Outline*, p. 307].

Since similarity between our percepts and their external causes is seen as a similarity of structure, Russell now declared that the world is constituted by a multitude of events grouped around "centres". They have "lines" or "chains" of events radiating outwards from them which intersect with lines from other events. He explained that by means of laws of perspectives²³, together with the changes in our percepts which are connected with the perception of bodily movement, we can form the conception of a space in which percipients are situated. In this space all percepts belonging to one group can be ordered about a centre. This we can call physical object. One should not consider the centre as a point. In Russell's philosophy scientific objects are still constructions. He identified the centre as a volume which can be as small as electron or as large as a star. [Cf., *The Analysis of Matter*, pp. 216-7; also Fritz, "Russell's Philosophy of Science", p. 162].

This interpretation seems some what puzzling. Puzzling because we know that an electron is a construction. Russell insisted that physics which deals with such concepts as "instants", "points", "electrons" etc. are all complexes because they are analysable into percepts which have spatio-temporal position. The neutral entity is simple and are not capable of analysis as electron or points can be analysed. [See 5.7.2].

Russell thus proceeded to provide a more accurate world view which complies with modern physics, i.e. in terms of electrons and positrons. [In Chapter Seven I will show that Russell's reliance on science, particularly on physics is to formulate theories that are genuinely explanatory. His theory of neutral monism is not based on material assumptions but the consequence was this that material inputs were hypothesis. See 6.5]. The electrons have a smooth mathematical and logical properties

23. In his earlier analysis of matter Russell said that the causal laws of physics differ from those of psychology only by the fact that they connect a particular with other appearances in the same piece of matter, rather than with other appearances in the same perspective. [*The Analysis of Mind*, p. 301]. Russell's later analysis suggests that the sort of laws which we have called "perspectives" can explain physical objects. [*The Analysis of Matter*, p. 323].

as their structure. But that does not imply that electrons are the ultimate stuff of the world. Electrons are constructions out of neutral events. [*Ibid.*, p. 386]. Since causal theory of perception locates percepts in our heads it is peculiar on Russell's part to say that our brain consists of electrons. He confined himself to the older theory of the electron. [*Ibid.*, p. 321].

Russell said that "who ever accepts the causal theory of perception is compelled to conclude that percepts are in our heads, for they come at the end of the causal chain of physical events leading, spatially, from the object to the brain of the percipient. We cannot suppose that, at the end of this process, the last effect suddenly jumps back to the starting point, like a stretched rope when it snaps" (*The Analysis of Matter*, p. 320). From this Russell concluded that what the physiologist sees when he examines a brain is in the physiologist, not in a brain he is examining. The brain which the physiologist examines included among its content, while its owner was alive, the owners percepts, thoughts and feelings. Since it also consisted of electrons (a grouping of events), Russell inferred that if an electron is in human brain "some of the events composing it are likely to be some of the "mental states" of the man to whom the brain belongs.... Thus a percept is an event or a group of events, each of which belongs to one or more of the groups constituting the electrons in the brain. [*Ibid.*; also quoted in *Moore and Russell*].

Ayer in his *Russell and Moore* said that according to Russell "everything that we perceive is inside our own head" is a "startling conclusion" which Russell draws (p. 123). In explaining the above quotation Ayer warned:

[T]his is not the concession to physicalism that it might appear to be, since the suggestion is rather that electrons have qualities of percepts than the percepts have the qualities which are commonly attributed to electrons. [*Ibid.*, p. 123; see 6.5.].

Russell clarified his inclusion of electron in the construction of matter in the following way,

"we must find some reality for the electron, or else the physical world will run through our fingers like a jelly-fish." [*Ibid.*, p. 319].

From Russell's explanation it is clear that since electron is located in the human brain it is also composed of "mental states" such as memory, belief and so on. We know that such mental states are complexes of percepts and images. Since brain consists of

electrons it includes among its construction both percepts and images. Russell said that "mnemic phenomena is exemplified in memory and other kinds of knowledge, "but we cannot, on this ground, erect an absolute barrier between mind and matter.... inanimate matter ... shows analogous behaviour- e.g. if you unroll a roll of paper, it will roll itself up again" (*An Outline of Philosophy*, p. 306). By providing such an explanation Russell closed the gap between mind and matter by suggesting that both are constituted out of percepts, sensibilia and images. While discussing Russell's theory of mind we shall see that perspective space, which is a view of the world from a certain point, includes among its construction not only images and percepts but also sensibilia. [See "Minds In Terms of Neutral Entities"].

It is clear "that an electron at an instant is a grouping of events.... Obviously it includes all the events that happen where the electron is" (*ibid.*, pp. 320-21). Russell distinguished electron from a point. He explained that a point is a group of events and has a definite position in space time. A point in one biography has two properties: "(1) Any two members of the group are compresent; (2) No event outside the group is compresent with every member of the group". [*ibid.*, p. 295]. Two events are compresent in the sense that they overlap in time (*Ibid.*, p. 294).

Following the older theory Russell regarded an electron as not one point but a group of points which "will save circumlocution to speak of the electron as a point".²⁴ He further said that if we consider an electron to be a point then "it is a material point" (*The Analysis of Matter*, p. 321). A material point differs from a point in empty space-time in that we can recognise a series of earlier and later material points are all parts of the history of one electron. With this definition of electrons Russell tried to settle the problem of "hollow centre", i.e. "that events occur, usually, in groups arranged about centres" (*ibid.*, p. 322). Now Russell said that "these centres may be taken to be the place where there is matter.... The centre is "where the piece of matter is,.... But as to what are the actual events at the centre, we know nothing except what follows from the fact that our percepts and "mental states" are among the events which constitute the matter of our brains" (*ibid.*,; cf., A.O. Lovejoy, *The Revolt Against dualism*. He has carried out an elaborate discussion on Russell's concept of "hollow centre"; also cf., Ahmad M.).

24. *The Analysis of Matter*, p. 321. Russell observed that in Heisenberg's theory the electron is neither a point nor of finite size.

In his *Human Knowledge* Russell tried to explain his theory only in terms of one kind of entities. We shall see later that he initiated a change in his theory of perception. As a result the epistemological distinction between sensation and image lost their earlier significance for which they were introduced. In 1948 percepts became the only neutral entities which constitutes both mind and matter. Following James Russell declared that the difference between mind and brain is not a difference of quality, but a difference of arrangement. [*Portraits From Memory*, pp. 147-48].

The preceding analysis puts Russell in a stronger position to claim that what the physiologist sees when he looks at a brain is part of his own brain and not the part of the brain he is examining. Russell said that the percepts in the brain of the physiologist are causally connected with the percepts of the brain he is examining. "Seeing the brain" he is examining, consists of the existence, in the region occupied by the physiologist's brain, of softness, of a grey patch causally connected with the brain under examination. According to Russell, in the brain the physiologist is seeing there are quantum transitions which lead to the emission of photons. These photons travel across the intervening space and hit the eye of the physiologist. They cause disturbance which travels along the optic nerve to the brain of the physiologist. It is then that the physiologist has the experience which is called "seeing the other man's brain" (*Portraits From Memory*, p. 151).

It was in 1948 Russell attempted to explain the construction of material objects in terms of percepts alone. The method of construction was similar to that he set in his *The Analysis of Matter*. The percepts which are situated in a causal line have "identical structures".

Russell explained that in a causal sequence the quality of an event may change but the structure remains constant. This change is due to both physical and physiological condition. [See Chapter Five]. Since mind and matter are arrangements of events, Russell said that it can be explained in terms of "causal lines" (*ibid.*). "Causal line" is a temporal sequence of percepts so related that the knowledge of the one can lead to the inference of the others what ever may be happening elsewhere. For instance when I see a table there are causal lines from its parts to the eye and the brain where the "seeing" takes place. What is perceived is the first term in a causal line that terminates at a sense-organ. The identity of structure in a causal series of events lead to the assumption of a common causal origin. Russell explained that "when a group of complex events in more or less the same neighbourhood and ranged about a central

photons. But later it was found that the equations were the same whether light consisted of waves or of particles and that all the verifiable consequences were the same. Both the claims are equally true and "the reason is that the physical world can have the same structure, and the same relation to experience" (*Ibid*).²⁶

Russell's whole attitude towards the construction of material objects and matter out of neutral entities pivots around a single consideration: *the empirical verifiability of physics*. In his *Our Knowledge of the External World* Russell constructed material objects out of known entities such as "sense-data" alone (p. 89). Although this solved the immediate problem of verifiability of physics "will not carry us very far towards the establishment of a whole science" (p. 90). As a result Russell introduced unperceived entities in *Mysticism and Logic* and then elaborated in *The Analysis of Matter*. He justified the existence of the unperceived entities by accepting the causal theory of perception; thus rejecting Berkeleyan metaphysics which eventuates in solipsism and fail to produce a picture of reality in accordance with physics.

Russell argued that there are some who would deny that physics need say anything about what cannot be observed. He in fact pointed his argument against the phenomenalist. But physics demand continuity, where continuity is incompatible with phenomenism. Russell declared:

The essential business of physics is the discovery of "causal laws",... if true, enable us to infer something about a certain region of space-time from something about some other region or regions. ["Reply", p. 701].

This led Russell to say "an honest acceptance of physics demands recognition of unobserved occurrences" (*ibid*.).

But inferences to the knowledge of external world does not only depend on the justification of data (events) but also several principles of non-deductive inference. Accordingly in *Human Knowledge* Russell introduced five "postulates" of scientific inference from percepts to material objects and unperceived events (also see *My Philosophical Development*, "Non-Demonstrative Inference"). The first postulate is designed to replace Newton's first law of motion and the common sense notion of permanence as "quasi-permanence". Given any event at any neighbouring time we find that there is at any neighbouring place an event having a similar structure (p.

26. Also cf., Wilson, T.A., "Russell's later theory of perception", p. 28.

photons. But later it was found that the equations were the same whether light consisted of waves or of particles and that all the verifiable consequences were the same. Both the claims are equally true and "the reason is that the physical world can have the same structure, and the same relation to experience" (*Ibid*).²⁶

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506). A "thing" is not a something permanent but a series of events which compose it at one moment are not the same but have similar a structure.

Second there is a causal chain of events such that from one or two members of the series something can be inferred about the structure of all the members. Causal chains are "causal lines" as explained above. This postulate, according to Russell, is the most important of all five because it enables us, "from partial knowledge, to make a partial probable inference" (*My Philosophical Development*, p. 150). Everything in the universe has some effect upon everything else, and since we do not know everything for certain we can at least tell approximately and with probability.

Third the chains of events are spatio-temporally continuous and therefore there is no action at a distance. Each member of the causal lines have a similar structure and are causally contiguous. "[W]hen you see a given person on a variety of occasions you do not doubt that he has had a continuous existence during the times when you were not seeing him." [p. 510].

Fourthly when a number of events having a similar structure are grouped together around a centre and are contiguous, they all belong to causal lines and have their origin in a complex event of the same structure at the centre. The "complex central event" is the physical object as explained above. These four postulates of events which explain the spatio-temporal structure of external world are already found in *The Analysis of Matter*.²⁷

The fifth postulate is of analogy. According to this when two classes of observed events, *A* and *B*, occur, there is a reason to say that *A* causes *B*. But even if one of them is not observed then the existence of either *A* or *B* can be inferred.

These postulates serve to justify the knowledge of physics as regards unperceived events. Russell claimed that the postulates are so designed that they are "intended to justify the first steps towards science, and as much of common sense as can be justified" (*Human Knowledge*, p. 513). This I think should be considered as positive approach because he ingeniously fuses both common sense and science to produce a harmonious world picture acceptable to both scientists and ordinary people. In justifying the postulates Russell concluded:

27 Cf., Fritz., *op. cit.*, p. 193.

I think... that we may be said to "know" what is necessary for scientific inference, given that it fulfils the following conditions: (1) it is true, (2) we believe it, (3) it leads to no conclusions which experience confutes, (4) it is logically necessary if any occurrence or set of occurrences is ever to afford evidence in favour of any other occurrence. I maintain that these conditions are satisfied. If, however, any one chooses to maintain solipsism, of the moment, I shall admit that he cannot be refuted, but shall be profoundly sceptical of his sincerity. [*Ibid.*, p. 515].

6.2.3. Conclusion.

From the preceding discussion it is clear that by declaring events as the ultimate constituents of the world in his *The Analysis of Matter* and the *Outline of Philosophy* Russell adopted neutral monism. He fulfilled most of the short falls by "fuller and more careful statement of theories" not different from *The Analysis of Mind*. But this adoption was firmly established in his *Human Knowledge* and brought into alignment with the James's theory of neutral monism.²⁸ Although Russell did not discuss it as "neutral monism" his metaphysics was mainly as that presented in *The Analysis of Matter*.²⁹ Events are simple but they are not unanalysable. They are bundles of "complex compresent qualities and relations". The qualities and relations forms the structure of the events, which have no spatio-temporal existence. Such assertion question: Are events neutral? Before we discuss this issue let us see how Russell explains the construction of mind and "mental states", such as belief, memory, desire, will etc., in terms of neutral entities.

28. Cf., William, T.A., *op. cit.*, p. 40. See Chapter Two on James's theory of neutral monism.

29. See Fritz, *op. cit.*, p. 195.

Section 2.

6.3. Mind In Terms of Neutral Entities.

Introduction.

In discussing Russell's early commitment to neutral monism in chapter four I have suggested that in 1912 Russell produced a relative dualism and made a significant move to diminish the complete dualism between the mental and the physical. There has been a substantial departure from Descartes. Sense-data are the result of matter and sensation (function of mind) and introspective-data are the result of consciousness and introspection (function of mind). This left the status of "data" to be both mind oriented and relational, hence debarred to be neutral. Russellian data depends heavily on mind, and as a result creates Berkeleyan problem. [See Chapter Four].

The above departure from Cartesianism is also the result of his acceptance of Moore's dualism of act and object in perceptual experience.³⁰ Russell's early account of mind was a mixture of both Cartesian and Humean analysis of mind. In short, he accepted, following Descartes, that the acquaintance with the sense-data reveals the fact that there is something called "I" which sees, for instance, that there is a red patch called the sense-datum (*The Problems*, pp. 26 ff.). But this "I" is not permanent but "quasi-permanent". Introspection or self-consciousness reveals that we are not acquainted with a "more or less permanent person" (p. 28) but "we always seem to come upon some particular thought or feeling" (p. 27). But on the whole he accepts the notion of "consciousness" as the distinguishing feature of mind as against matter.

This view about the analysis of "mind" had been maintained through out his phenomenalist phase, despite the fact that his views on "matter" underwent considerable change in between 1912-1918 (see above). Sense-data are physical and are the ultimate constituents of matter. But sense-data could support only the theory of matter, and the theory of mind remains unsupported during the above period. On the basis of such analysis of mind Russell undertook to write a critique on neutral monism as expounded by Mach, James and the new realists (see Chapter Four).

In order to close the gap between his theory of mind and theory of matter Russell has to show that there is a single kind of entities which explain both mind and matter and

30. Quinton A., "Russell's Philosophy of Mind" in *Pears Collection*, p. 83.

those entities are neutral in nature. As a result there is no "substantial" distinction between the neutral entities but only that of arrangement and of context. We have discussed his theory of matter in terms of neutral entities. Now let us see how Russell explains the construction of mind in terms of neutral entities

6.3.1. Mind as "Assemblage of Sensation and Images".

Russell extensively discussed his theory of mind, as a neutral monist, in his *The Analysis of Mind*. There are subsequent discussions in several of his later books but not extensive as 1921. These discussions are spread out in his *The Analysis of Matter*, *An Outline of Philosophy* (Part 1 and 3), *Human Knowledge* (two chapters, "The Science of Mind" and "Mind and Matter"), *Portraits from Memory* ("Mind and Matter"), and *My Philosophical Development* ("Consciousness and Experience").

In his *The Analysis of Mind* Russell under took two opposite views in explaining mind. His first view was to analyse away consciousness as a knowing subject. In doing so he rejected the dualistic criteria of mind. His second view was to explain mind in terms of sensations and images together with behavioural psychology. Earlier he accepted the existence of "consciousness" as a separate entity to explain its relation to objects. Now he said that all forms of mental phenomena are simply complexes of neutral entities. Let us consider both the views, which are in a sense radical because he wanted to adopt James's theory of "radical empiricism" according to which there is no such thing called "consciousness". There is only one stuff and that is "pure experience", and the distinction between the knower and the known is simply contextual. I will begin as to how Russell discarded consciousness as an entity and will discuss how he explained mind in terms of neutral entities.

6.3.1.1. Refutation of Consciousness as an Entity.

Russell, convinced by James and his American counterparts, rejected the relational view, which distinguishes between our "seeing" and the thing "seen", on the ground that there is no such thing as "consciousness" (*ibid.*, p. 24). The dualism of the existence of two different kinds of entities, material and mental, can be dispensed with if one admits that what is sensed can equally belong to both psychology and physics (*ibid.*, p. 25). The particulars given in sensation are neither mental nor physical but can be grouped in two ways, i.e. according to the laws of physics and psychology. Apart from this the acceptance of neutral monism also resulted in his

reading of behaviouristic psychology.³¹ As a result Russell arrived at the "stuff" which is neither mental nor physical but more "primitive than either" (*ibid.*, p. 10). That stuff is "sensation". In its entirety the sensations, alone, cannot explain mind and matter. Beside they require "images" which are mental and belong exclusively to mind and "unperceived entities" which are physical and belong only to the physical world. [*ibid.*, p. 25].

In order to bring his theory closer to that of James, Russell rejected dualistic criteria of mind (see Chapter Five) by discarding several of the beliefs he had accepted earlier about the analysis of mind, which ends up in his acceptance of consciousness as a separate entity beside matter. Such criteria are mainly intentionality and subjectivity. In short Russell rejected the view that psychical phenomena consists of "acts" directed to "objects" as proposed by Brentano. By rejecting the theory of intentionality Russell claimed that "act" is unnecessary and fictitious and cannot be discoverable empirically. Arguing against the notion of "subjectivity" Russell claimed that it is not a peculiarity of mind because it is also discoverable in the photographic plate.

Russell also rejected the view that mental entities are in time and the physical entities are in space. Accepting the results of the theory of relativity Russell declared that the *data of physics and psychology are spatio-temporal*. Russell had this advantage over James.

One of the basic aspects upon which Cartesian dualism lies is that mind is non-spatial and matter is spatial. This distinction between the spatiality and non-spatiality arise from the consideration that mental states and events have no location and cannot be characterized as having shapes and sizes.³² For Descartes mental events are only in time. This makes his theory of interactionism difficult, for how can a mental, non-spatial, event interact with physical, spatial, event?

But Russell adopted the view that events, whether mental or physical, are spatio-temporally located. Accordingly Russell located the percepts in the brain which explains both mind and matter. Since time and space are so much less distinct "it has become difficult to hold that mental events, though in time, are not in space" (*The Analysis of Matter*, p. 384).

31. *The Analysis of Matter*, pp. 9-10; cf., Eames, E.R., *Bertrand Russell's Theory of Knowledge*, p. 102.

32. Cf. Feigl, *op. cit.*, p. 406.

Similar remarks have been made by Robert Weingard in his article "Relativity And The Spatiality of Mental Events". He emphasized,

[M]ental events to be part of the network of temporal relations that physical events bear to each other, they must be part of the space-time network of relations, for it is simply not plausible to suppose there is, in addition to space-time, network of purely temporal relations for the mental events to belong to. [P. 284].³³

Weingard used a space-time diagram (and the modus ponens argument) to establish the spatio-temporality of mental events. Basing his idea on such an assertion Lockwood provided a graphic representation of the location of mental events. This he did on the basis of identity theory. Gibbins is critical of both Weingard and Lockwood arguments. In his "Are Mental Events In Space-Time?" Gibbins argued that the diagram Weingard produced "presupposes that mental events are in space-time" (p. 146). He further argued that there is obvious "circulatory" in the Lockwood-Weingard thesis, and then pointed out,

"Or so Bertrand Russell put it, with uncharacteristic caution in 1926 (see *The Analysis of Matter*, ... p. 384)." [P. 147. I have quoted the passage to which Gibbins refer. See above].

The circularity in Russell's argument is part of bootstrapping, which I shall discuss in Chapter Seven. Both Weingard and Lockwood argued their case keeping in view the identity hypothesis of mind-body relation.³⁴ But Russell's aim was to show that spatio-temporal location of the events make them neither mental nor physical. It is the way of interpretation of the events leads to such distinction as mental and physical. Therefore mind and matter are inference out of the known neutral events, such as sensations and images, which are located in the brain.

The spatio-temporal location of events which constitute both mind and matter makes interaction more plausible. But Russell was not an interactionist. In his *An Outline of Philosophy*, Russell admitted that it will be seen that the view he had been advocating there is no difficulty about interaction between mind and matter. He explained:

33. Also cf., Lockwood, "Einstein And The Identity Theory", p. 25 [footnote].

34. Lockwood immediately rebutted the charge of circularity both in his explanation and Weingard's explanation, in his article "Einstein, Gibbins And The Unity Of Time". He argues that instead of presupposing they appeal by way of arguing "(P1) that special relativity is correct and (P2) that mental events are in time... [therefore] any event that is in space-time is also in space... Weingard and I take this to follow logically, from premises P1 and P2.... Perhaps Gibbins thinks that the argument will not go through unless tacit appeal is made to the additional premise: that mental events are in space-time; but if so I am at a loss to see why" (pp. 148-9).

A sensation is merely one link in a causal of physical causation; when we regard the sensation as the end of such a chain, we have what would be regarded as an effect of matter on mind; when as the beginning, an effect of mind on matter. But mind is merely a cross-section in a stream of physical causation, and there is nothing odd about its being both an effect and a cause in the physical world. [P. 156].

But the truth is if any Cartesian accepts this then it is easy to cash interactionism on a Russellian assertion. For Russell the spatio-temporal location of the events has provided him the solid ground for the explanation of the relation of mind and matter as construction of neutral entities. [See Chapter Four].

Thus by rejecting the dualistic criteria of mind and by accepting a behaviouristic account Russell dispensed with the consciousness as a specific character of mind. But "consciousness" has not been analysed away.³⁵ Thus it should not be thought that Russell re-introduced consciousness as an entity. the entities which constitutes mind has nothing "conscious" about them, but "consciousness", as awareness, exists when sensations and images are related in a certain way and forms a complex.

6.3.1.2. The Analysis of Mental States.

In order to explain his theory of mind, in 1921, Russell followed the similar method of construction as that of matter (see above). The mental world which explains the awareness of one self and the external world, beside sensations also, requires images as a part in its construction. In introducing the concept of "images" Russell criticised the behaviouristic psychology, propounded by Watson, for rejecting introspection as a source of knowledge. In a letter he wrote "the Behaviourists... say images are small movements of the tongue and throat silently pronouncing words. This is obviously ROT"³⁶. He said that introspective data is concerned with localization. For instance the images of private sensations can be localized where the private sensations would be. Similarly the images of words in the mouth is located in the mouth. Since the physical world does not include all that we are aware of, we must admit introspection as a source of knowledge different from sensation. [See chapter five under "Images as Entities"].

35. See Quinton. *op. cit.*, p. 99; Dorward, *Bertrand Russell*, p. 30.

36. Wood, A., *Bertrand Russell: The Passionate Sceptic*, p. 105.

Sensations are the basis of our knowledge, but they are non-cognitive in themselves and are therefore "non-mnemic elements in a perception". [See Chapter Five]. Images not utterly different from sensation by their "intrinsic natures", are in fact "vague copies" of sensations (*The Analysis of Mind*, p. 145) and therefore "are just as truly part of the actual world as sensations are" (*ibid.*, p. 148). The only difference lies in their causes and effects. Sensations have only "physical causes" but have "both physical and mental effects" (*ibid.*, p. 151). Whereas images have "mnemic causes", and might have physical cause, from which "all their effects ... follow" (*ibid.*). According to Russell the mnemic causations are action at a distance and are responsible for different classes of mnemic phenomena, such as acquired habits, associations, memory etc. (*ibid.*, pp. 78-92). Following Semon, Russell gave the name of "mnemic phenomena" "to those responses of an organism which ... can only be brought under causal laws by including past occurrences in the history of the organism as part of the causes of the present response" (*ibid.*, p. 78). The mnemic causation is the *proximate* cause and not the ultimate cause of the mnemic phenomena.

We know that according to Russell "aspects" or "happenings", which are similar and simultaneous, can be collected in two ways. In the first collection all the aspects emanating from common centre (say a star) at different places are grouped together. This grouping of particulars is called physical objects. In the second group all the happenings (say of different stars) appear in one place are collected. Russell called this "perspective". [See Chapters Four, Six; *The Analysis of Mind*, pp. 129-30]. A perspective is constituted out of both sensation and sensibilia. A perspective is a possible, but not yet actual, momentary perceiver. A perspective taken through out a period of time is called a biography, and is not a life. A perspective turns into a momentary perceiver when it is correlated with images, which has mnemic causation. This when considered through out a period of time constitutes a biography of an individual. "The particulars forming one perspective are connected together primarily by simultaneity; those forming one biography, primarily by the existence of direct time-relations between them." [*The Analysis of Mind*, p. 296]. [We have seen above how biography is also an affair of physics]. Accordingly "subjectivity" is the characteristics of perspective, the characteristic of giving the view of the world from a certain place. He also called the two places of collections as "active" (the place where the star is) and "passive" (the place where the perspective is). [*Ibid.*, pp. 130, 301; also cf., Chapter Five.] Physics collects aspects actively at a given place, and psychology collects aspects passively at a given place. We have seen that Russell later

said that aspects of both physics and psychology are collected passively and thus abolishing the distinction between active and passive places. [See above].

Apart from the above explanation Russell also explained mental life on behaviourist lines. He emphasised the importance of animals (comparative psychology) and of the insane and hysterical (psycho-analysis). [*The Analysis of Mind*, p. 10]. The comparative psychology has revealed that what is true of animals is also true of men. For instance learning involves the acquisition of habits. We can explain this by putting a hungry cat inside the cage and placing the food outside the cage. The door of the cage can be opened by lifting the latch. The cat makes various moves to come out of the cage. At last, by accident it lifts the latch and reaches its food. If the experiment is repeated day after day the cat straight away goes to the latch and lifts it at once. "It is essentially similar processes that we learn speaking, writing, mathematics, or the government of an empire." [*Ibid.*, p. 52].

Thus Russell recognized that the mental life can be explained as a complex of sensation and images together with introspection and also can be interpreted behaviouristically. In the light of the above discussion let us see how he analyses various mental phenomena.

1. Desire and Feeling.

Russell held that a mental occurrence of any kind, such as desire, feeling and so on may be a cause of a series of actions. Such a series of actions is called a "behavioural-cycle". This consists of voluntary or reflex movements tending it to cause a certain result. The property which causes such a cycle is "discomfort". Russell said that desire is a behavioural-cycle caused by discomfort. The stimulus which causes desire is an impulsion from behind not an attraction from the future. [*The Analysis of Mind* p. 66]. Desires are "blind tendencies to certain kinds of activity" (*An Outline of Philosophy*, p. 231).

"The primitive non-cognitive element in desire seems to be a push, not a pull, an impulsion away from the actual, rather than an attraction towards the ideal." [*The Analysis of Mind*, p. 68]. Certain sensations and other mental occurrences have the property of discomfort which causes such bodily movements as are likely to lead to their cessation. When discomfort ceases we have sensations possessing a property which we call pleasure. For example above we have seen the discomfort caused by

hunger led the cat to learn the situation and open the door of the cage to reach the food and eat it. When the cat reached the food and had eaten it, its discomfort ceased and the sensation became pleasurable. Russell said that it was a mistake to think that the animals had this situation in mind throughout, when in fact they have been continually pushed by discomfort. [*Ibid.*, p. 68]. Similarly in human beings the desire is due to discomfort without involving any conscious effort. If the experience is repeated one becomes conscious of the object and the way of realization. In the case of the cat the repeated experiment led the cat to reach level of explicit conscious desire. Russell held that even in such case we are still pushed from behind. [*An Outline of Philosophy*, p. 230].

2. Emotion.

Emotion, Russell said, was essentially complex. It is evident that our problem of the analysis of the emotion is bound up with the problem of their physiological causation. In explaining his views Russell discussed the modern views on the causation of emotion called the James-Lange theory, presented by James in his *Psychology* (vol. ii, p. 449), and the experiments of Sherrington and Cannon. [*The Analysis of Mind*, pp. 280-4]. James regarded that an emotion consists of a confused perception of the viscera. While Cannon and Sherrington argued that an emotion involves a confused perception of its external stimulus. [*Ibid.*, p. 283].

Following James and Sherrington Russell declared that "an emotion in its entirety contains dynamic elements, such as motor impulses, desires, pleasure and pains.... [It is] a certain kind of process, consisting of perceptions and (in general) bodily movements" (*ibid.*, p. 284). Desires and pleasures and pains are properties of this, not a separate items in the stuff of which the emotion is composed. Russell declared:

The ingredients of an emotion are only sensations and images and bodily movements succeeding each other according to a certain pattern. [*Ibid.*].

3. Will.

Will, according to Russell, "is a voluntary movement. [*Ibid.*, p. 284]. Russell explained that according to James only distinctive characteristic of a voluntary act is that it involves an idea of the movement to be performed, made up of memory-images of the kinesthetic sensations. More over no movement can be made voluntarily unless

it has previously occurred involuntarily. Russell considered this view as correct. [*Ibid.*, p. 285]. For instance the process in which a child learns control over fingers and toes is at first involuntary. After some experience of involuntary movements, the child discovers how to think of a movement and then make the movement, which becomes pleasurable. Similarly in adult life, a deliberate movement is one which we think of before we make. [*An Outline*, p. 231]. "Thus will seems to add no new irreducible ingredient to the analysis of the mind." [*The Analysis of Mind*, p. 286].

4. Perception.

Before his commitment to neutral monism Russell used the term "perception" synonymously with "sensation". As opposed to "sense-datum" the word "sensation" was used either for the act alone or for the complex "act-acquainted-with-object".

In discarding consciousness as an entity Russell declared that neutral entities such as percepts or sensations are non-cognitive. Sensation such as a patch of colour is not knowledge. But sensation is a source of knowledge which gives rise to knowledge through its psychological effects. Accordingly he explained that mnemonic phenomena will have to be added to sensation to make up what is called the "perception". This shows that sensation is simply a theoretical core in the actual experience; the actual experience is the perception. [*The Analysis of Mind*, p. 132].

Following James Russell rejected the view that there is any relational character about what occurs in us when we perceive. In order to explain his position Russell quoted Henry Head who argued that "sensation, in strict sense of the term, demands the existence of consciousness" (*ibid.*, p. 288). Russell argued that if we accept this we are mistaken. "Sensation is the sort of thing of which we *may* be conscious, but not a thing of which we *must* be conscious." [*Ibid.*] There is no such entity called "consciousness". Perception is a complex of sensations and images, both of which are intrinsically same. That means images like sensations are non-cognitive. The question is: How do we explain knowledge?

Russell explained his position in the following way. the first thing that we notice is that consciousness must be of something. Keeping this in view he admitted that there was awareness or consciousness, but that is simply a relation of an image or a word to an object. Accordingly he said that when a sensation is followed by an image which is a copy of it, it may be said that "the existence of the image constitutes consciousness

of the sensation, provided it is accompanied by that sort of belief which, when we reflect upon it, makes us feel that image is a "sign" of something other than itself" (*The Analysis of Mind*, p. 289). Mere imagination does not involve consciousness of anything unless some element of belief is added. Russell explained:

If images alone constituted consciousness of their prototypes, such imagination-images as in fact have prototypes would involve consciousness of them; since this is not the case, an element of belief must be added to the images in defining consciousness. the belief must be of that sort that constitutes objective reference, past or present. An image, together with a belief of this sort concerning it, constitutes... consciousness of the prototype of the image. [*Ibid.*, p. 289].

But a further addition is required when we pass from consciousness of sensations to consciousness of objects of perception. Accordingly Russell said perception will consist of sensation, together with associated images, with the belief in the existence of an object to which sensation and images are referred. The belief will not in any present existence but will be of the nature of an expectation. For instance, when we see an object, say a table, we expect certain sensations to result if we proceed to touch the table. Russell declared: "Perception, then, will consist of a present sensation together with expectations of future sensations." [*Ibid.*, p. 290].

Sensation itself is not an instance of consciousness, although the immediate memory by which it is succeeded is. Russell said:

A sensation which is remembered becomes an object of consciousness as soon as it begins to be remembered, ... but while it exists it is not an object of consciousness.... The essential practical function of "consciousness" and "thought" is that they enable us to act with reference to what is distant in time or space.... This reference to absent objects is possible through association and habit. Actual sensations, in themselves, are not cases of consciousness, because they do not bring in this reference to what is absent. [*The Analysis of Mind*, p. 292].

The above passage clearly reflects that a sensation in its immediacy is not knowledge. A sensation is only a knowledge when it begins to be remembered. We know that against Behaviourism Russell introduced introspection as a source of knowledge. But the analysis of the above passage shows that it is only in retrospection that we have knowledge of the sensation. Such knowledge or consciousness involves memory, i. e. the influence of past experience on present reactions. In his *Portraits From Memory* Russell explained that when we see something we cannot say that it is a knowledge. It

becomes knowledge when we say to our self that there it is. [Cf., *ibid*, p. 143]. This is the consequence of his abandonment of the view that "sensation" or "percept" is a relational occurrence in which subject is "aware" of an object. In accepting neutral monism Russell became persuaded of the rightness of James's view. James argued that there is no subject-object distinctions in "pure experience", the neutral entity. The distinction, within the flux of the experiences, is generated only when one experience is contrasted with the next experience. That is to say that it is in appropriation and in retrospection we have knowledge. [See Chapter Two].

But in 1959 Russell was dissatisfied with James's account of knowledge. He argued that when a dog sees a rabbit, for instance, we can hardly suppose that it says to itself, "I am having a visual sensation which probably has an external cause". If we accept this view then we can say what occurs in the dog when it "sees a rabbit" has only an indirect and causal relation to the rabbit. Russell considered this view as "odd". [Cf., *My Philosophical Development*, p. 104].

In his re-examination of consciousness or knowledge Russell in his *My philosophical Development* argued that new problems arose because of the abandonment of "sense-data" (p. 101). Before their abandonment sense-data were held to be absolutely certain, self-evident and precise. I have discussed this in chapter five under the heading "The Analysis of Sensations". In short, the problem in question is that since sensations are non-cognitive then what is meant by "empirical evidence". If one has no knowledge of one's sensations one cannot have knowledge of the external world. But there is duality in every form of knowledge. As a result he re-defined such words as "awareness", "acquaintance" and "experience", and replaced "acquaintance" by "noticing". The term "noticing" is a matter of degree. A loud noise is sure to command attention so is a very faint sound. Following this Russell said that every empirical proposition is based on one or more sensible occurrences that were noticed when they occurred. Such occurrences are "known" when they are noticed. By saying this he provided a "relative certainty" to sensations. Similarly we have seen that James departed from his initial commitment that all experiences are non-cognitive by themselves. The "feeling" (or an "experience") is "dumb" and "helpless" and can neither name or classify and therefore there is no knowledge. But his departure is clearly felt when he says that from the cognitive point of view a feeling is "most positively and definitely qualified inner fact" and therefore it is no "psychically zero". [See Chapters Two and Three].

5. Memory and Imagination.

Memory, according to Russell introduces us to knowledge in one of its form. It is a complex mental phenomenon. He argued:

[E]very thing constituting a memory-belief is happening *now*, not in the past time to which the belief is said to refer. It is not logically necessary to the existence of a memory-belief that the event remembered should have occurred, or even that the past should have existed at all. There is no logical impossibility in the hypothesis that the world sprang into being five minutes ago, exactly as it then was, with a population that "remembered" a wholly unreal past. There is no logically necessary connection between events at different times; therefore nothing that is happening now or will happen in the future can disprove the hypothesis that the world began five minutes ago. Hence the occurrences which are *called* knowledge of the past are logically independent of the past; they are wholly analysable into present contents, which might, theoretically, be just what they are even if no past existed. [*The Analysis of Mind*, pp. 159-60]

In his analysis of memory Russell considered several stages. "True recollection comes at the end of a series of stages." [*An Outline of Philosophy*, p. 203]. The stages are as follows:

(i). *Images*. Images are vague copies of sensation and are "mnemic phenomena", in the sense that their occurrence is a result of past experience according to the law of association. But images which copies a past occurrence only constitute a recollection when it is felt to be a copy. [*ibid.*].

(ii). *Familiarity*. The characteristics by which we distinguish the images and perceptions is the feeling of familiarity that accompanies them. This leads us to judge that we have remembered the familiar part rightly and the unfamiliar part wrongly. [*Ibid.*, p. 204; *The Analysis of Mind*, p. 151].

(iii). *Habit Memory*. Russell rejected this sort of memory because it does not involve any recollection of past occurrence. "This sort of memory is mere habit, and is essentially like knowing how to walk although you cannot remember learning to walk". [*An Outline of Philosophy*, p. 204].

(iv). *Recognition*. This has two senses. In the first sense this involves no knowledge about the past, and is only an associative habit. For instance in seeing a dog one may say to oneself "there is a dog" without recalling any case where a dog has been seen.

Secondly, there is knowledge of the past in the slightest sense. Such recognition consists in belief, which may be expressed in the words: "This has existed before." [*Ibid.*, p. 204; *The Analysis of Mind*, p. 170].

(v). *Immediate Memory*. The region between sensation and true memory is called "immediate memory". When a sense-organ is stimulated, it does not at once return to its unstimulated condition. It goes on for a short time. For example, when we see a flash of lightning, our sensation lasts longer than the lightning as a physical occurrence. At the beginning of the occurrence we have sensation and then there is a process of gradual fading of sensations. Russell, following Semon, called this "akoluthic" sensations.³⁷ When the fading is completed we arrive at the image, the copy of sensations. This period between the sensation and the image is the "immediate memory", which provides the experience of succession. The short time which is present during the process of fading is called the "specious present". Everything is sensibly present to us at this period. In other words the events that occur throughout this short time can be perceived together. For instance when we move a hand from left to right there is a "felt degree" of movement in which we can distinguish earlier and later in the specious present. We can have the idea "earlier", and can mean by "past" "earlier than this", where "this" is what is actually happening. In the specious present the entire process is sensible. Thus immediate memory is important in our knowledge of temporal succession. [*The Analysis of Mind*, pp. 174-5; *An Outline of Philosophy*, pp. 204-5].

(vi). *True Recollection*. In "true" recollection we remember, for instance, what we had for breakfast. This occurrence involves two questions: (1) What is the present occurrence when we remember? (2) What is the relation of this present occurrence to the past event which is remembered? Of these two questions the first concerns the psychologist and the second belongs to the theory of knowledge. [*The Analysis of Mind*, p. 173; *An Outline*, p. 205-6].

Regarding the first, what is happening is now; the recollection involves either images or words, where the words may be merely imagined. Russell pointed out that whatever may be happening now, the event remembered is not happening. The event which occurs when we remember is different from the event remembered. Thus images, although accurate copies of the past, are not enough to constitute recollection. There must be some feeling which makes us refer the images to a past prototype.

37. *The Analysis of Mind*, p. 175; *The Analysis of Matter*, p. 254.

As to the relation of the present happening to the event remembered, Russell said that if we recollect correctly, the several images will have the same kind of resemblance of quality which images can have to their prototypes, and their structure and relations will be identical with those of their prototypes. It is the similarity of quality and identity of structure between the complex image and previous perception the correctness of memory consists of. [*An Outline*, p. 207].

Russell concluded that the causation of memory is wholly associative. [*Ibid.*, p. 208]. Something in the present is in agreement with something in the past, which calls up the context of the past occurrence in the shape of images or words. When attention falls upon this context, we believe that it occurred in the past and we have then an act of recollection.

This shows that some sort of belief involves memory. Russell distinguished memory from imagination. The essence of imagination is the absence of belief to together with a novel combination of known elements. In memory the combination of elements is not novel. A proper memory does not involve a re-arrangement of elements derived from past experience. On the contrary it restores such elements in the pattern in which they occur. This, according to Russell is the vital difference between memory and imagination. [*Ibid.*, p. 202].

In analysing Russell's account of memory Ayer pointed out that Russell is right when he argued that the occurrences which are called knowledge of the past are logically independent of the past. They are wholly analysable into present contents which might, theoretically, be just what they are even if no past has existed. [*Russell and Moore*, pp. 119-20; *The Analysis of Mind* p. 159-60]. Ayer concluded:

"that no noncircular justification of memory can be given. We check one memory-belief against another, and against historical records, our reliance on which itself depends in part on memory-beliefs, but it is vain to ask for a general proof that memory is trustworthy."³⁸

In his *Bertrand Russell* Ayer said that Russell's account resembles induction, and he treats it as one form of inductive inference. [P. 90].

38. *Ibid.*, p. 90; *Russell and Moore*, p. 120.

6. Belief.

Russell considered belief as the "central problem" in the analysis of mind; because it is the most "mental" thing we do. Beliefs gives us knowledge and error; they are the vehicles of truth and falsehood. [*The Analysis of Mind*, p. 231].

Similar to the analysis of "act-content-object", Russell said, belief contains three elements, namely (a) believing, (b) what is believed and the (c) objective. Russell noted that the objections to act are not valid against the believing in the case of belief "because the believing is an actual experienced feeling, not something postulated, like the act" (*ibid.*, p. 233).

Russell said that we must distinguish between believing and what is believed. What is believed, i.e. the content of the belief, is complex and may consist of words only, or of images only, or of a mixture of the two, together with one or more sensations. The contents believed may be different in different cases, namely, Caesar crossed the Rubicon or that two and two makes four, but in all cases the believing is the same. [*Ibid.*, p. 233].

Now the question is: What makes a belief true or false? According to Russell the truth or falsehood of a belief depends not upon present thing but upon the actions performed. [*Ibid.*, p. 232]. In order to explain this Russell said that what makes a belief true or false will be called a "fact", and the particular fact that makes a given belief true or false will be called "objective". The relation of the beliefs to its objective will be called "objective reference". Thus Caesar's actual crossing of Rubicon is the objective fact and the reference of the belief is the relation between the belief and the actual crossing. It is this objective fact that makes the belief true or false. The truth or falsehood of a belief does not depend upon anything intrinsic to the belief, but upon the nature of its relation to its objective. The intrinsic nature can be treated without reference to what makes it true or false. [*Ibid.*, p. 232].

We have seen above that Russell rejected Meinongian "act" and said that believing is an actual experienced feeling. He said that there are at least three kinds of belief, namely (i) memory belief, (ii) expectation and (iii) bare assent. [*Ibid.*, p. 250]. Each of these is constituted by a certain feeling or complex of sensations, attached to the

content believed. Russell illustrated this with an example. For instance, I am believing, by means of images, that it will rain. Here we have two interrelated elements, namely the content and the expectation. The content consists of images of the visual appearance of rain, the feeling of wetness, and so on, interrelated as the sensations would be if it were raining. Thus the content is a complex fact composed of images. Exactly the same content can enter into memory "it was raining" or the assent "rain occurs". Here the difference of these cases from each other and from expectation does not lie in the content. The difference lies simply in the nature of the belief-feeling.

But Russell does not analyse the "belief feeling" but is not prepared to say that they cannot be analysed. [*The Analysis of Mind*, p. 250]. Because he left "belief-feeling" unanalysed Russell was subjected to criticism.

Tully in his "Russell's Neutral Monism" argued that despite Russell noted that the theory of behaviourism "belongs logically with neutral monism" he preferred to analyse the concept of belief in terms of specific belief-feeling. "i think it suggests the hold which a certain introspectionist orientations had on Russell's thinking." [P. 215]. Although Russell accepted behaviouristic principles to make his theory plausible, we know that he preferred introspection as the valid source of knowledge.

Laird, in his "Concerning The Human Mind", argued that in Russell's threefold schema (act-content-object, where "feelings" are substituted for "acts") the "act" is neither sensation nor an image but an "actual experienced feeling", "I submit that he is peopling the "mind" with stowaways whose very existence he began by denying" (p. 313). A Similar criticism is made by Dorward in his "Critical Notices: Bertrand Russell, *The Analysis of Mind*". He is of the opinion that the subject is introduced under the cover of what Russell called the "belief-feeling" and until this has been analysed and turned inside-out "I shall continue to believe that within it is concealed something which is neither a sensation nor an image...." (p. 94).

Russell, in his "Reply" to Laird, insisted that he rejected the Ego as particular in *The Analysis of Mind*. He argued that desire, pleasure-pain and belief did not "involve an observable subject". Regarding this he said it is a matter as to which opinions differ, and as to which it is very difficult to advance any arguments. But Russell said that it is necessary to explain the difference between *you* and *me*. [P. 699]. He said that there are a number of causal connections between the mental occurrences which we

regard as belonging to one person, which do not exist between those belonging to different people. To these a relation must be added. This relation will hold between any two simultaneous contents of a given mind, and also between any two events which overlap in physical space-time. For instance let N be the relation "remembering or remembered by". Then "I" means "anything compresent with any member of the ancestry of *this* with respect to N.... In defining "you," I must substitute for *this* some inferred entity.... The inferred entity must not be a member of I [or "me"]" (*Ibid.*, pp. 699-700).

6.3.2. Conclusion.

In his analysis of mind in terms of neutral entities Russell did two things in 1921. Firstly he analysed away the dualistic criteria of mind in order to show that there is no separate entity called consciousness. In doing so he criticised the doctrine of "intentionality" held by Brentano and his followers. He also showed that subjectivity is not a peculiarity which belongs to mind but also to matter. More over mental events like physical events are in space and time. Secondly he analysed the mental phenomena in quite similar to those of the behaviourists. Russell admitted that he was "a trained observer, with an analytic attention, knowing the sort of thing to look for" "viewing a man from the outside" (*The Analysis of Mind*, pp. 298, 255, respectively). It is not his belief, according to him, but his bodily movements, that we observe. But this does not mean that he rejected consciousness in his philosophy. Consciousness is a complex notion, involving beliefs as well as mnemonic phenomena. Although he admires the method, Russell said that the behaviourist philosophy fails to explain the introspective data, the images, which plays a role in our analysis of knowledge. "I do not myself believe that the analysis of knowledge can be effected entirely by means of purely external observation" (*ibid.*, pp. 230, 157).

The main motive of Russell's theory of neutral monism was to adopt James's theory and explain mind and matter by using a single expression, in which he failed. Instead matter and mind are both constructs out of three different entities, namely sensations, images and sensibilia. Perhaps Russell never abandoned the basic objection (the non-relational characteristic of neutral entities) he had raised against the neutral monism of James and Mach.³⁹ Russell's position, as regards mental phenomena, in *The Analysis of Mind* has been summarised by E.R. Eames in the following way:

39. Cf., Quinton, A., *op. cit.*, p. 96.

In the case of memory, and belief, and truth and falsehood, Russell ... maintained a realist and relational view in which the referent, the remembered, believed about, and asserted object is outside of the memory, belief, and assertion.⁴⁰

Russell's metaphysical dualism resulted because of the uneasiness in explaining the relation of the knower and the known exclusively in terms of neutral entities. We have seen that he amalgamated sense-data and sensibilia into sensation, the non-cognitive element in perception. But sensation alone cannot explain mental phenomena in terms of cognition. Russell had to introduce images, which have mnemonic causes, that give rise to mnemonic phenomena to explain the "awareness", a mental function. Though mind and matter may have similar metaphysical elements as constituents they differ in their causal laws. In his *The Analysis of Mind* Russell introduced physical causal laws and psychological causal laws. This is because there is a fundamental differences between physics and psychology. "Physics treats as a unit the whole system of appearances of a piece of matter, whereas psychology is interested in certain of these appearances themselves." [P. 104]. This means that psychology is concerned with actual particulars whereas physics is concerned with systems of particulars. So physics groups together particulars having the same "active" place while psychology groups together those having the same "passive" place.

It was in 1927 Russell declared that mind and matter are arrangements of events or percepts. Let us see next how his theory of mind has been affected by such an assertion.

5.3.3. Mind as "Assemblage of Percepts".

I have mentioned above that in his later books Russell undertook very little discussion about the philosophy of mind. The only extensive discussion he undertook was in his *An Outline of Philosophy*, and Human Knowledge ("The Science of Mind"). In the main he adhered to similar theory of mind as *The Analysis of Mind*. In a brief review of his theory of mind, contributed to C.W. Morris' *Six Theories of Mind*, Russell had written that "there are things in *The Analysis of Mind* which I no longer care to defend" (p. 134). But he did not mention what those things are. He discussed various mental phenomena as complexes of sensations and images not different from 1921.

40. *Bertrand Russell's Theory of Knowledge*, p. 103

There is no entity called consciousness and mind is a complex structure consisting of mental phenomena.

In his *The Analysis of Mind*, Russell rejected the relational theory of mind. There is no subject and object distinction in perception. He argued that consciousness is not a criterion of mind as distinguished from matter. Consciousness is too "complex and accidental" and "too narrow" and therefore is not a "universal characteristic of mental phenomena"; mind is a matter of degree, chiefly exemplified in number and complexity of habits. [*The Analysis of Mind*, pp. 292, 295, 308]. As regards mnemonic causation Russell said that it is "too wide". [*Ibid.*, p. 295; see Chapter Five]. Subjectivity is not a distinguishing character of mind because it is equally present in matter. [*Ibid.*, Lecture VII, pp. 295-6; see above and also Chapter Five of the thesis]. As regards these characteristics there is no difference between mind and matter.

Although in 1921 Russell maintained that "physics and psychology are not distinguished by their material" (*ibid.*, p. 307) we find that both mind and matter differed in two respect: (1) the entities which constitute them, and (2) the causal laws which collect particulars into two groups, making one mental and the other physical.

Sensations belonged to the mental and the physical but images, which are action at a distance, belonged exclusively to mind, and sensibilia to matter. We have seen above that perspectives are constructions not only of images and sensations but also sensibilia. Anthony Quinton explained this in the following way:

Mentality, therefore, whether introspective or behavioural, all reduces to the three kinds of neutral elements. The introspectable is just sensations and images; the behavioural is reducible to sensations and sensibilia. ["Russell's Philosophy of Mind", p. 96].

In discussing the construction of matter we have also come across the fact that the matter of the brain is not only constituted out of sensations and sensibilia but also of images. While discussing the construction of mental phenomena Russell, in 1927, held that images have a position in the brain and that mnemonic phenomena in mental events are due to the modification of the body by past events. [*An Outline of Philosophy*, p. 306; *The Analysis of Matter*, p. 320; see Chapter five, "Images as Entities"]. As a result the constituents of both mind and matter are the same. We know that it is the strict programme of the neutral monist is to explain mind and matter only in terms of a single kind of neutral entities. Russell's commitment to three types of entities left his theory different from James' and Mach's versions. In 1927

Russell declared that events are the neutral entities and therefore the ultimate stuff of the world. [See above and also Chapter Five].

The only distinction between mind and matter lies in causal laws. Earlier we have seen how James maintained that in the physical world the neutral entities are "stably" and "stubbornly" connected but in the mind their connections are loose. By this he meant that physical laws are stable and the psychological laws are not rigid. The point is James accepted two kinds of laws to distinguish between the mental and the physical. [See sections 2.6.2, 2.6.4.2. Compare this with Davidson's "anomalousness" of the mental. See below].

Similarly in his *The Analysis of Mind* Russell clearly stated that the dualism is not as to the stuff of the world but as to causal laws. [P. 137]. He explained:

A causal law applicable to particulars would count as a law of physics if it could be stated in terms of those fictitious systems of regular appearances which are matter; if this were not the case, it would count as a law of psychology if one of the particulars were a sensation or an image, i.e. were subject to mnemonic causation. [P. 306].

Such assertion led Morris Weitz to conclude that "Russell is a causal dualist". ["The Unity of Russell's Philosophy", p. 78]. We know that both Mach and James maintained that dualism in the world is not of entities but of laws. This is generally accepted by the neutral monists.

Russell as a neutral monist gave importance to both physical causal laws and psychological causal laws. Before we proceed further it is necessary to point out that in 1921 Russell said that causal laws are important because physics groups particulars in an "active" place and psychology group particulars in a "passive" place. Sensations or percepts are the only part of the physical world that we know otherwise than abstractly.

In Russell's later philosophy the distinctions between the two causal laws is motivated by his epistemological consideration. Since he gave up the "act-object" distinction it became imperative for him to explain knowledge. Russell emphasised the importance of physical laws but argued that "there certainly is knowledge in psychology which cannot ever form part of physics" (*An Outline of Philosophy*, p. 300). This difference between physics and psychology, according to Russell, is analogous to that between a

postman's knowledge of letters, i.e. the movements of many letters, and the knowledge of the recipient of letters, i.e. who knows the contents of few. [*Ibid.*, p. 300].

Following James, Russell accepted the method of introspection as the essential source of knowledge. In doing so he explained the importance of psychology as a science in his *Human Knowledge* ("The Science of Mind"). What is empirically verifiable is not "pure physics" in isolation, but also psychology. "Psychology ... is an essential ingredient in every part of empirical science." [*Ibid.*, p. 63].

Russell was critical about certain school of psychologists who maintain that "introspection" is not a valid scientific method. He was in fact pointing his argument against the behaviourist. Accepting introspection as a valid method Russell distinguished between "private" and "public" data. Based on our knowledge Russell said that the "publicity" of our world is "inferential" and what we know directly are "mental events", i.e. the private data. [Pp. 67, 245].

Such a distinction should not be thought of as a metaphysical distinction but rather one of degree and is the results of introspection. Metaphysically there is no distinction between events which constitute mind and matter. The distinction between private and public data is epistemological. Russell warned:

[T]he "mental" and the "physical" are not so disparate as is generally thought. I should define a "mental" occurrence as one which some knows otherwise than by inference, the distinction between the "mental" and "physical" therefore belongs to theory of knowledge, not to metaphysics. [*Ibid.*, p. 224].

This epistemological distinction between "mental" (private) and "physical" (public) events remain in his neutral monism. Russell also introduced "unconscious" mental events, making a distinction between "conscious" mental events. This suggests that Russell introduces entities having different metaphysical status. Such a distinction can be rendered untenable by a suggestion that the behaviour could be modified by means of sensory stimuli of which the subject is not aware. Experiments have been carried out as early as mid century, for instance by Suslowa, 1863⁴¹, to demonstrate whether such changes in behaviour is possible. Normally it is proved that when a sufficient stimulus is presented to a subject a visual or auditory sensation is bound to occur. In order to have proper response a stimulus must have "sufficient intensity and duration

41. Murch, Gerald, M., *Visual And Auditory Perception*, p. 319.

to evoke response" (*Visual And Auditory Perception*, p. 16). Otherwise it would be difficult for the experimenter to elicit the proper response if the subject fails to identify the stimulus. So the stimulus could be of two types, according to intensity and duration. They are supraliminal and subliminal. If the subject verbally identifies the stimulus, it is called supraliminal, and if he fails to do so, it is called subliminal.

Experiments have been carried out by Lazarus and McCleary (*ibid.*, p. 320) to show that subliminal stimulus does bring about changes in behaviour. They presented ten nonsense syllables to a group of subjects, five accompanied by electric shock and five without the shock. After each presentation of each syllable they measured the galvanic skin response. Finally subjects showed outstanding reduction in skin resistance when a shock syllable was presented and no change occurred when a syllable, without shock, was presented. At the next stage they set out to test the subliminal effect. This time the subjects were presented with the ten syllables, having low intensity and less duration, without any shock. At this low level although the subject failed to identify the stimulus verbally, the results showed that the subject displayed a change in galvanic skin response. Lazarus and McCleary concluded that some unconscious process allowed the discrimination of the shock syllables, although the conscious verbal awareness failed.

Apart from this a test on subliminal perception was carried out by the New York advertising firm. They claimed that advertising messages flashed subliminally on the screen during a movie in a public theatre, had brought about increase in sales. They carried out the experiment by flashing the message on the screen, "Buy Popcorn" or "Buy Coca-Cola", for three milliseconds every five seconds. The firm claimed a 56-percent increase in Coca-Cola and 18-percent increase in the demand for popcorn. But later it was proved that subliminal advertising does not work. [*Ibid.*, p. 321].

The most successful experiment was carried out by Dunlap (*op. cit.*, , p. 322) in 1900. Subjects were shown two horizontal lines and were asked which was shorter. While they were thinking about the lines, the closed and open end lines of Muller-Lyer figure were subliminally shown to the subjects. As a result it was found that subjects reacted to the line with inward angles shorter than the line with outward angles. This experiment was successfully replicated by Pyle (1907) and Kennet (1962). Subliminal perception shows that the difference between conscious and unconscious percepts are not surely external causes, as Russell thought. [*The Analysis of Matter*, p. 385]. Unconscious mental states could be of events compresent with

certain with both mental and physical events, quite similar to that of conscious mental states. Thus, not only conscious mental states are percepts, having causal relations to external stimulus, so are unconscious mental states. I think this makes Russell's theory to consider all mental states, conscious and unconscious, to be constituted out of percepts.

From the above consideration it becomes clear that percepts or sensations constitute mind and also constitute the matter of the brain. Russell explained the distinction between physics and psychology in the following way. The nerves and brain are matter. Our visual sensations when we look at them are members of the system constituting irregular appearances of this matter, but are not the whole of the system. According to Russell:

Psychology is concerned... with our sensations when we see a piece of matter, as opposed to the matter which we see. [*The Analysis of Mind*, p. 301].

He explained that when a sensation is used to verify physics, it is used as a sign of a certain material phenomenon, i.e. of a group of particulars of which it is a member. But when sensation is studied by psychology, it is taken away from the group and put into a different context, where it causes images or voluntary movements. "It is ... this different grouping that is characteristic of psychology as opposed to all the physical sciences, including physiology...." [*The Analysis of Mind*, p. 302].

From the metaphysical point of view psychology and physics deal with the same neutral entities. Now the question arise what is a mind? We know like matter mind is a group of percepts causally related. In explaining mind Russell spoke about two marked characteristics of mind. They are physical and psychological. [*An Outline of Philosophy*, p. 297]. In the physical way a mind is explained "as the group of mental events which form part of the history of a certain living body" (*ibid.*, pp. 297-9). In the psychological way a mind is explained as that "it consist of all the mental events connected with a given mental event by "experience"" (p. 298). Russell said that mental events have not only mnemonic causes but also mnemonic effects. Thus he concluded, percepts, the subset of events, are located in the brain, and have certain peculiar causal properties, particularly "they give rise to knowledge-reactions, and that they are capable of having mnemonic effects which are cognitions" (*An Outline of Philosophy*, p. 297).

6.3.4. Conclusion.

From the above discussion it is clear that not only images but percepts have mnemic effects because they have certain peculiar properties. Images, which have mnemic causes, are the subject matter of psychology. Sensations, though subject to both the causal laws, physical and psychological, did not have mnemic effects. But by 1948 the distinction between sensations and images lost its epistemological importance, and had been reduced to technical terms.⁴² They are analyzed from the point of view of psychology and physiology. Instead of three kinds of neutral entities, Russell regarded percepts to be the only kind of neutral entities. Thus endorsing a single expression to explain material objects perceived and the actual perceiving which make up the content of mind. Percepts are the neutral entities, which are metaphysically certain and epistemologically justifies both physics and psychology. Russell arrived at this position by effecting a change in his theory of perception. I shall discuss this shortly.

We know that at the later stage of neutral monism Russell covertly introduced the subject and object distinction by replacing sense-data with sensations having different properties. [See Chapter Five]. Before their abandonment sense-data were absolutely certain but after abandonment they were relatively certain. The term "awareness" was replaced by "noticing" and "sense-data" by "sensational cores". In 1927 Russell declared events as the ultimate stuff and in *Human Knowledge* suggested that an event is a bundle of compresent qualities. These qualities, both mental and physical, provide a neutral basis to an event. It is through the physical characteristics of the percepts that we discover the "causal skeleton of the world". But when a percept occurs it is "noticed" and known. [See chapter five, "Events as neutral entities"]. Since percepts have peculiar causal properties Russell maintained:

It is perfectly possible for an event to have both the causal characteristic of physics and those of psychology. In that case, the event is both mental and material at once. [*Portraits Form memory*, p. 152]

42. Cf., Wilson, op. cit., p. 41; Morris, *Six theories of Mind*, p. 137 (there Russell says, sensations and images are "merely names" for neutral particulars), *Human Knowledge*, pp. 51-6, 124-5.

6.4. Russell Declared Allegiance With James.

In declaring that "the event is both mental and material at once" Russell brought his theory close to that of James. Earlier we have seen how Russell struggled to establish neutral monism, and use a single expression to identify the neutral entities. Percepts are the neutral entities of Russell's matured philosophy.

Russell closed the gap between his version of neutral monism and that of James's by bringing a change in his theory of perception. For James there is no dualism in perception, and he explicitly denied the act and object distinction in perception in his article "Does 'Consciousness' Exist?". Elizabeth Ramsdon Eames summarised this position saying that James,

"raised the question of the reality of an entity which had been considered to be one pole of the dualistic relation of knower and known, subject and object, inner and outer. James' suggestion was to replace these dualisms with a position in which there is one experience which, taken one way, can be considered subjective, ideational, and inner, but taken another way, it can be considered objective and external. This position is monistic in that it eliminates the necessity for supposing two kinds of reality, and two different kinds of terms in the knowledge relation. The new position is neutral in that it is weighted neither toward idealism nor materialism" (*Bertrand Russell's theory of Knowledge*, p. 100).

Thus James avoided the metaphysical dualism of mind and matter in Cartesian style. The inherent tension within the theory could not avoid the epistemological dualism of subject and object. Since metaphysically the neutral entities are of a single kind James implicitly introduced both mental and physical qualities or elements and internal relations within the neutral datum, making the theory covertly dualistic. This issue has been discussed in detail in chapter three, with a preliminary discussion in chapter one, section 1.2.3.

We have seen that Russell's version of neutral monism differed from James and the American New Realists, because he maintained a causal theory of perception, and thus distinguished sensations from images in terms of their different causal origins. [See above; also E.R. Eames, p. 102]. He also admitted sensibilia which come under physical causal laws. But by 1948, as we have seen, that distinction between sensation and image has lost its epistemological importance and therefore is reduced to technical terms. We are thus left with percepts, the neutral entities. Russell's arrival at this

position is due to the change in his theory of perception.⁴³ Historically, according to Russell, there have been two types of theories of perception: empirical and idealist. In empirical theory, some continuous chain of causation leads from the object to the percipient, and what is called "perceiving" the object is the last link in this chain. In idealist theory, when a percipient happens to be in the neighbourhood of an object a divine illumination causes the percipient's soul to have an experience which is like the object. [*Human knowledge*, p. 211].

The idealist theory, according to Russell, originates in Plato and culminates in Leibniz. This theory rules out any interaction between mind and matter and emphasises only the parallel developments thus leaving them asunder and unrelated. [*Ibid.*]

There also lies a difficulty with the empirical theory. By supplementing belief they assert that to every state of the brain there corresponds a certain state of the mind and vice versa. If causation is regarded as an invariable sequence or concomitance, as the empiricist do, then the correspondence of brain and mind tautologically involves causa! interaction. The whole question of dependence is then explained whether mind causes brain or brain causes mind. [*Ibid.*, p. 212].

The other problem associated with the empirical theory is stated by Russell thus:

Every empiricist holds that our knowledge as to matters of fact is derived from perception, but if physics is true there must be so little resemblance between our percepts and their external causes that it is difficult to see how, from our percepts, we can acquire knowledge of external objects. The problem is further complicated by the fact that physics has been inferred from perception. [*Ibid.*, p. 213].

Russell accepted that physics is true. He intended to prove it by pointing to the fact that every physical theory which survives the test of time goes through three stages. In the first stage, the theory is a matter of controversy among specialists. In the second stage, the specialists agree that it is the theory that best fits the available evidence. In the third stage, it is the new evidence will unlikely replace the theory but may modify it. Russell accepts those parts of physics which has reached the third stage as probable to be used as arguments for philosophical speculation. [*Ibid.*, p. 214]. He considered two working hypotheses from the seventeenth century and three twentieth-century modifications to physics.

43. For the detailed analysis of Russell's later theory of perception see T.A. Wilson, *op. cit.*

The first hypothesis is that causal laws in the physical world need only take account of matter and motion. It was thought that physics should not take into account the qualitative difference of the particles, the subject matter of chemistry, but only study their position in space. Russell thought that since the modern theory of atoms has reduced chemistry to physics, this has extended the scope of the hypothesis that different particles differ only in position. [*Ibid.*, pp. 214-5].

The second working hypothesis of the seventeenth century is the "independence of causes". The hypothesis generally states that when a body is subject to several forces, the result of their acting at once for a given length of time is the same as would be the result of their all acting by turns, each for a given length of time. Though quantum theory of atoms has abandoned it, Russell thought that this hypothesis holds good over a wide field, especially as the basis of the mathematical methods employed in traditional physics. On this ground he was willing to accept the hypothesis although he was not sure whether it holds universally. [*Ibid.*, pp. 215-6].

The present century modifications of physics for Russell are: first, instead of two manifolds of space and time we have four-dimensional Einsteinian manifold of events; second causal laws do not suffice to determine individual events, but only statistical distributions; third, change is discontinuous. The second and third, according to Russell, apply to microscopic phenomena, while the physical occurrences, such as speaking, associated with mental events are macroscopic. From this he deduces that if a human body works in accordance with physical laws then it will be correct to use the laws of physics to determine what a man will say and what will be the large-scale motions of his body. [*Ibid.*, p. 216].

After asserting his reason for regarding physics to be true, Russell explained what he meant by "percept". He takes the common-sense approach and says that a percept is what happens when, for instance, I see something or hear something or believe myself to become aware of something through senses. By using the example of the sun Russell said that the sun is always there but it is only seen sometimes. For instance when one shut the eyes or look in a different direction one sees the sun sometimes. All the occasions on which one sees the sun have a certain resemblance which enables one in infancy to learn to use the word "sun". Some of the resemblances between different occasions of seeing the sun are in the person. But there are other resemblances, such as brightness, roundness, and heat, which do not depend on the

person. Common sense considers these to be the properties of the object called the "sun". When there is a relationship between these properties and human beings common sense holds that the human being "perceives" the sun. [*Ibid.*, pp. 218-9].

It is at this point that physics intervenes and assures that the sun is not "bright" as the common sense considers. According to physics it is a source of light-rays which have a certain effect upon eyes and nerves and brains, and if these effects are absent then there is nothing that can be called "brightness". Moreover the physical sun inferred existed eight minutes ago. Therefore we cannot identify the physical sun with what we see, although the sun we see is the reason for believing in the physical sun.

To infer the existence of an object, e.g., the sun, Russell thought that we must determine the location of percepts in the causal chains of physics. He took the example of "hearing a noise". A percept such as hearing a noise has a series of antecedents which travel in space-time from the physical source of the noise through the air to the ears and brain. The experience called "hearing the noise" is simultaneous with the cerebral term of the physical causal chain. If "hearing of the noise is to fit the physical causal chain then it must be connected with the same region of space-time as that of physical events. This applies both to the hearing of the noise and the noise as heard. The only region of space-time with which the noise has any direct connection is the hearer's brain. The same argument applies to all things seen or heard equally. In the example of the sun it applies to both "seeing the sun" and "the sun".

Russell arrived at this view following James, who rejected dualism in perception. He wrote:

The dualistic view of perception, as a relation of a subject to an object, is one which, following the leadership of William James, empiricists have now for the most part abandoned. The distinction between "seeing the sun" as a mental event, and the immediate object of my seeing, is now generally rejected as invalid, and in this view I concur. [*Human Knowledge*, pp. 220-1].

We have seen that James's metaphysical monism was mainly due to his rejection of epistemological dualism. Since there is no such thing as consciousness the distinction between the knower and the known, the subject and the object are due to retrospection and appropriation. [See Chapter Two]. But he failed to hold to his commitments. I have argued that James's neutral monism is covertly dualistic.

Russell committed a similar mistake. By rejecting the dualistic view of perception he arrived at a theory of neutral monism quite similar to that of James. Percepts are the only neutral entities which explain mind and matter. A percept is noncognitive but is obviously the source of knowledge. Russell did not stick to this because, he thought, that there is duality in every form of knowledge. In his *My Philosophical Development* he re-introduced the duality of the act and object, the knower and the known. [See chapter Five under the headings "Sensations as Neutral Entities", "Events as Neutral Entities"]. A percept is analysable. It is a bundle of qualities and relations. The elements within a percept is such that when it occurs it is noticed and known. We have seen his earlier dualism (see Chapter Four) is more or less Cartesian in nature. There he distinguished between sensation and sense-data, between act and object. By rejecting Brentano's theory of intentionality he accepted the radical realism of James. With this came his rejection of perceptual dualism. But then he re-introduced the dualism implicitly in his theory making his theory covertly dualistic.

Percepts, the neutral entities, are covertly dualistic and are not physical. Their position in the brain does not mean that what we call mental events are physical events. Anthony Quinton, in his "Russell's Philosophical Development", in considering the neutral monism phase of Russell's philosophy, said that "Russell is fundamentally a materialist" (p. 8). It appeared to be a materialistic theory, but this was a misunderstanding. What I say is its a bit of unconscious piece of bootstrapping (see Chapter Seven). It was not based on materialist assumptions - the consequence was simply that materialist inputs were hypothesis. Neutral entities are not physical entities. This I shall discuss next.

Section 3.

6.5. Neutral Monism Vs. Physicalism.

In declaring that mind and matter consist of neutral entities, Russell suggested "that the events that make up the living brain are actually identical with those that make the corresponding mind" (*Portraits From memory*, p. 147; Quinton, "Russell's Philosophy of Mind", p. 108).

In explaining the above quotation Quinton argued:

What Russell has done is to superimpose on the sense-datum theory of perception the conclusion that since the proximate causes and effects of the immediate objects of perception are in the brain those objects must be there too. [P. 108].

According to Quinton Russell's explanation shows that events are mental if they are mnemically related to other events. The mnemically related events occur "only where there is brain". Since mentality of an event comes to be defined as its forming the part of the history of a living brain, Russell comes close to the identity theory of mind and brain propounded J.J.C. Smart (*Philosophy and Scientific Realism*, Chapter 5), D.M. Armstrong (*A Materialist Theory of the Mind*). [Cf., p. 108].

I shall argue against such supposition that Russell was an identity theorist like Smart and his followers. In doing so I shall compare with a recent theory proposed by D. Davidson in his *Essays on Actions And Events*. Davidson's theory differs from the physicalists theory in respect of mind. He discussed the "anomalousness" of the psychological realm. This I shall discuss in the next section.

In order to prove that Russell was not a physicalist I shall begin my investigation by upholding Russell's analysis as proposed in his *Portraits from Memory*, in the chapter "Mind and Matter".

Russell held that a mind and a piece of matter alike are to be considered as series of groups of events. The events that are grouped to make a given mind are the very same events that make the corresponding brain. Thus mind and brain do not differ in quality but differ only in arrangements.

With an analogy Russell exemplified that the difference between mind and brain are similar to the difference between arranging people in geographical order or in alphabetical order, as done in the Post Office directory. Similarly, the context of a visual sensation for physics is physical, and outside the brain. But the visual sensation for psychology is quite different. For instance the visual sensation is that of a telegram saying that you have lost your job. As a result a series of events will take place in your mind in accordance with the laws of psychological causation, and it may be some time before there is any physical effect, such as throwing arms and legs, or screaming. [*Ibid.*, p. 148].

Is mind dependent on brain? Russell's answer to such a question was that corresponding to the mental event, for instance memory, there is "some physical

modifying of the brain, and mental life must be connected with physical properties of the brain tissue" (*ibid.*, p. 148). This is because an event has both the "causal relations characteristics of physics and those characteristic of psychology", which makes it "both mental and material at once". As a result the ancient question of the dependence of mind on brain and vice versa is "reduced to linguistic convenience". In cases where we have more knowledge about the brain it will be convenient to regard that mind is dependent, but in cases where we know more about mind it will be convenient to regard the brain as dependent. "In either case, the substantial facts are the same, and the difference is only as to the degree of our knowledge." [*ibid.*, p. 149].

This brought him close to the physicalist theory of mind and body identity. Physicalism (see Chapter One), popularly known as identity theory, is a form of reductive materialism. In its simplest form, the identity theorists claim that mental events are identical with brain events. Similar claims have been made by Russell. But his interpretation is different from the physicalists. He arrived at it by saying that the brain is composed of thoughts because the percepts, the neutral entities, are located in the brain. In saying this he has neither abandoned neutral monism nor accepted physicalism.⁴⁴ As we know, percepts are the neutral entities in Russell's philosophy, they are in space and time. [See Chapter Five, also the discussion on mind]. And because they are in space they have a location. Russell's acceptance of the causal theory of perception suitably locates them, both sensibly and spatially, in the brain.⁴⁵ Percepts are the mental events and are not metaphysically different from the physical event. The "causal skeleton of the world" is to be sought in physics. "The physical world, it seems natural to infer, is destitute of colour." [*The Analysis of Matter*, p. 133]. Percepts, located in the living brain, are the only part of the physical world that we can know without the help of any inference. For Russell, "the gulf between percepts and physics is not a gulf as regards intrinsic quality, for we know nothing of the intrinsic quality of the physical world, and therefore do not know whether it is, or is not, very different from that of percepts" (*ibid.*, p. 264). The difference between the physical and the mental events is simply epistemological, but metaphysically they are similar. For instance let us suppose that we are seeing a glowing gas. Since there is similarity between percept and the physical event, "the shape of the percept corresponds to the shape of the region in which the upheavals are taking place.... The

44. Cf. Lockwood, *op. cit.*, p. 154.

45. See, Chapter 5 "Location of Neutral Entities".

colour of the percept corresponds to the amount of energy lost by each atom in an upheaval" (*ibid.*, p. 339).

There are certain basic differences between Russell's theory and the physicalist theory. Firstly, for Russell the entities which compose mind and matter are neutral and not physical. The entities of the physicalist are material. Secondly, these entities, whether in the brain (the "mental") or out side the brain (the "physical") are identical. But that does not mean that mental states are identical with the physical states as the physicalist argues. According to the physicalist, mental states *are* physical states. For instance pain, a mental event is identical with C-fibre a brain event. Russell spoke of the identity of events and not brain and mind. Thirdly, for Russell since brain and mind are constructs and are composed of identical entities, it is logically possible that there could be disembodied mind. In physicalist philosophy mind cannot possibly have a separate existence because mental events are the reduction of the physical events. More precisely, each type of mental state corresponds and is identical with some type of brain state or central nervous system. What follows is that mentalistic and physicalistic terms do not refer to two different things or events. It rather describes the same thing or events. But in Russell's philosophy although an event can be mental and physical both at once, it is quite possible for events to be arranged either according to laws of physics or laws of psychology. Russell said:

There would be disembodied mind if there were groups of events connected according to the laws of psychology, but not according to the laws of physics. We readily believe that dead matter consists of groups of events arranged according to the laws of physics, but not according to the laws of psychology. [*Portraits From Memory*, p. 149].

Fourthly, the physicalist claim that their argument lies on the scientific world view. As a result they regard the explanatory power of neurophysiology and physics as the ultimate. Russell clearly distinguished the importance of both psychology and physics. [See above]. He spoke of two sorts of causal laws, one physical and the other psychological. According to him "a piece of matter is a group of events connected by ... the causal laws of physics. A mind is a group of events connected by ... causal laws of psychology" (*Portraits From Memory*, p. 152).

We have noted that Russell's theory of identity is the identity of "constituents" and not the identity of mind and body. As a result Russell's theory avoids most of the objections proposed against the physicalist theory.

Kripke⁴⁶ has said that all identities are essentially rigid and necessary. He contrasts this with "contingent" by which he means that it is true but not necessary. Let us represent symbolically a particular "pain" sensation and corresponding "brain state", i.e. the C-fiber stimulation, as P and C respectively. For Kripke pain P is a name; and if something is a pain it is essentially so and therefore is a rigid designator. Thus, according to Kripke, the identity of pain with the stimulation of C-fiber, if true, must be necessary. But according to the identity theorists the identity between mental and bodily events are not "meaning identity", i.e. identity between two synonymous general nouns. The identity they claim is neither logical and necessary but rather contingent and empirical. David Lewis, in his paper "Mad Pain and Martian Pain", argued that pain is a matter of contingency because it depends on what causes what. Therefore all our concepts and ordinary names of mental states are "non-rigid" and "contingent". As against this Kripke argued that to prove contingency on the basis of "causal role" "amounts to the view that the very pain I now have could have existed without being a mental state at all." [P. 147].

Russell's theory is not vulnerable to the above objection. The distinction between the mental event and physical event is simply based on how neutral entities are located. Since neutral monism is a metaphysical and non-reductionist theory, the entities (mental and physical) are necessarily identical. The group of entities become mind and matter when treated in two differing causal network. In such cases the identity between mind and matter are therefore contingent and not necessary.

There is again an objection that on the basis of the physicalist theory how one can explain the "raw feel". Against this the physicalist, especially Smart, tried to answer by saying that the so called mental concepts like "feels", "sensations" are in fact not committed to either mind or body. They are simply "topic-neutral". Such states of "feeling pain", "seeing colour" etc. arise within the organism due to a given stimulus and are simply a typical kind of behaviour. Therefore there is no "inner" mental sensation but simply certain behaviour patterns like peeling, scratching etc.

One may argue that Russell analysed various mental phenomena in terms of behaviour. This is true, but at the same time Russell has introduced the method of introspection as the true source of knowledge. [See above]. He spoke about the

46. "Naming and Necessity"; Lockwood, op. cit., pp. 154-5; see chapter 1.

privacy of "introspective data", such as "sensational cores" and "belief feeling", rejected by the behaviourist.

One simple argument proposed against identity theory is that if mental events can be reduced to physical events then why and how can a subject report about his mental occurrence without having the slightest knowledge about the physical occurrences of the brain. Russell's theory or any neutral monistic theory is capable of avoiding this difficulty. For the neutral monists mental states are not brain states therefore there is no need to know the corresponding physical occurrence of the brain.

The above discussion illuminates the fact that Russell is a "neutral monist" and not a "physical monist". His theory is capable of avoiding most of the difficulties faced by the physicalist theory. In this respect Russell's theory is more preferable than physicalism. But before we finally evaluate Russell's theory let us consider a mind and matter theory propounded by Donald Davidson. Davidson who believed in the physicalist ontology that mental events are identical with physical events but admitted:

I have resisted calling my position either materialism or physicalism because, unlike most materialists or physicalists, I do not think mental properties (or predicates) are reducible to physical properties (or predicates), nor that we could, conceptually or otherwise, get along without mental concepts. ["Replies to Essays", in *Essays on Davidson*, 1985, p. 244].

6.5.1. A Comparison With "Anomalous Monism".

On the assertion and denial about various questions concerning ontology, and identity Davidson provided a fourfold classification of theories of the relation between mental and physical events:

On the one hand there are those who assert, and those who deny, the existence of psychophysical laws; on the other hand there are those who say mental events are identical with physical and those who deny this. Theories are thus divided into four sorts: *nomological monism*, which affirms that there are correlating laws and the events correlated are one (materialists belong in this category); *nomological dualism*, which comprises various forms of parallelism, interactionism, and epiphenomenalism; *anomalous dualism*, which combines ontological dualism with the general failure of laws correlating the mental and the physical (Cartesianism). And finally there is anomalous monism, which classifies the position I wish to occupy. ["Mental Events", pp. 213-4].

Davidson did not view himself either as materialist or as physicalist, but did not deny that the position he occupies, i.e., anomalous monism, "resembles materialism in its claim that all events are physical" (*ibid.*, p. 214). Saying this he argued for a materialist monism.⁴⁷ Davidson held that mental events enters causal relations with the physical events. A causal relation instantiates a strict law. To take Davidson's example, for instance, *m*, a mental event, caused *p*, a physical event, then *m* and *p* instantiate lawful regularities. Since there are no psychological or psychophysical laws about the mental then *m* must fall under a physical law. Therefore mental must have a physical description; which is to say it is a physical event. "So every mental event that is causally related to a physical event is a physical event." ["Mental Events", p. 224]. Although he accepted the basic physicalist claim, he rejected one of their essential thesis "that mental phenomena can be given purely physical explanations" (*ibid.*, p. 214). This is because anomalous monism allows the possibility that not all events are mental, but insisting that all events are physical. Davidson left the possibility that there are some events which are mental.

He explained why he called his position anomalous monism. "Monism, because it holds that psychological events are physical events; anomalous, because it insists that events do not fall under strict laws when described in psychological terms." ["Psychology as Philosophy", p. 231]. Davidson arrived at a version of monism by taking three premises together to support his theory. [*Ibid.*, p. 231]. They are first premise, that psychological events such as perceivings, rememberings, memory, and intentional actions are directly or indirectly caused by, and the causes of, physical events. The second premise is that the events are related as cause and effect in a closed and deterministic system of laws into which these events fit. The third premise is that there are no precise psychophysical laws, for psychological events cannot constitute a closed deterministic system. These three premises taken together connotes monism. Davidson emphasized that because the laws are not psychophysical, they must be purely physical laws. This means that when events are taken one by one the psychological events are describable in physical terms, i.e. they are physical events.

Since psychological or mental events are physical events, there are token identities but no type identities.⁴⁸ A type is a set of instances or token events which share some properties or descriptions. But in token identity every "instances" or tokens have the same properties. It is in this strict sense that Davidson argued for an ontological

47. Jaegwon Kim, "The Myth of Nonreductive Materialism", p. 34.

48. "Mental Events", pp. 212-15; "The Material Mind", pp. 253-4; "Psychology as Philosophy", p. 230; Smart, "Davidson's Minimal Materialism", p. 174; Simon Evnine, *Donald Davidson*, p. 61.

monism. To say that each individual, token mental event is also physical event, for instance, Salome's present belief that she is hungry and Sahir's present belief that he is hungry does not entail that there is a single kind of physical event such that the two beliefs are identical to a physical event of that kind. Salome's belief that she is hungry, a physical event, a certain state of her brain, is a different kind of physical event from the physical event to which Sahir's belief that he is hungry is identical.⁴⁹

To say that each instance or token mental events are physical events "does not seem to merit the term "reductionism"" ("Mental Events", p. 214). Thus his ontological monism is non-reductionist, unlike the physicalist. Reductionism, as Jaegwon Kim said, impose on us a "kind of cleansed and tidy picture that appeals to those obsessed with orderliness and discipline" ("The Myth of Nonreductive Materialism", p. 31). For Davidson the mental does not have the orderliness. He argued that there cannot be laws linking psychological states with physical states. By this he meant that there are no psychophysical laws presupposed by the physicalist, who provide a reductionist argument that each mental event are in fact physical. Davidson's argument depends on the view that there is no purely psychological laws. Thus the mental is nomologically irreducible.

Because there are no psychophysical laws and no psychological laws the mental events lack the degree of determinateness which must exist between the two events as a necessary condition for having a lawlike relation between them. Davidson argued for the anomalousness of the mental. He took three interdependent considerations to explain the anomalousness. The three considerations are: (i) The holism of the mental; (ii) the indeterminacy of belief and desire; (iii) the indeterminacy of meaning and translation.⁵⁰

(i) *The holism of the mental.* The holistic nature of the mental is such that it prevents the determinateness of psychological states. Psychological states lack stability and rigidity for which one cannot intelligibly attribute any propositional attitude to an agent. This was because Davidson argued:

There is no assigning beliefs to a person one by one on the basis of his verbal behaviour, his choices, or other local signs no matter how plain and evident, for we make sense of particular beliefs only as they cohere with other beliefs, with preferences with intentions, hopes fears, expectations, and the rest. ["Mental Events", p. 221].

49. Cf., Simon Evnine, *op. cit.*, p. 61.

50. "Mental Events", pp. 216-225; Smart, *op. cit.*, pp. 176ff.

Mental does not constitute a "closed system" therefore, according to Davidson, "too much happens to affect the mental that is not itself a systematic part of the mental" (*ibid.*, p. 224). There are no "serious" laws, like the statistical laws of physics, to the effect that "if a man wants to eat an acorn omelette, then he generally will if opportunity exists and no other desire overrides" (Psychology as Philosophy, p. 233).

(ii) *The indeterminacy of belief and desire.* The anomalous character of the mental also results from the "failure of definitional behaviourism" (*ibid.*, p. 216). Definitional reduction, according to Davidson, hinges upon the question of synonymy between definiens and definiendum. Such reduction is possible only if we find an open sentence couched in behavioural terms and exactly coextensive with some mental predicate. But this is not possible. Davidson said:

Beliefs and desires issue in behaviour only as modified and mediated by further beliefs and desires, attitudes and attendings, without limit. [*ibid.*, p. 217].

In such a case one cannot explain a particular behavioural description because a host of other desires and beliefs overrides making it impossible to represent a psychological state it was intended to represent. The failure is due to the holistic structure to the psychological domain. For example, as Davidson would say, what it is for a man to believe there is life on Mars. He produces a sound. This shows he believes there is life on Mars only if he understands English. The sound he produced was intentional. For every deficiency we add a new proviso, i.e. there is always need for an additional condition which is mental in character. ["Mental Events", p. 217]. An intentional action, which is a basic aspect of a belief and desire, is an action caused by those psychological states that rationalize it. These are "irreducible aspects of reason-explanations" ("Replies to Essays", p. 246). Davidson affirms: "Clearly this holism of the mental realm is a clue both to the autonomy and to the anomalous character of the mental" (*ibid.*, p. 217). The holistic structure hinders its having a nomological connections between the mental and the physical.

Davidson suggested that the predicates, namely "blue", "green", "grue", "bleen", also depend upon the criteria of suitability and unsuitability in order to enter nomological relations. Nelson Goodman, in his *Fact, Fiction and Forecast*, has suggested that predicates like "blue" or "green" can be supported by their instance or token; but predicates like "grue" and "bleen" remain unsupported by their tokens and therefore

are unsuited to laws. [Cf., *ibid.*, p. 59-83; "Mental Events", p. 218]. Following this Davidson said:

Nomological statements bring together predicates that we know apriori are made for each other- know, that is, independently of knowing whether the evidence supports a connection between them.... The direction in which the discussion seems headed is this: mental and physical predicates are not made for one another. In point of lawlikeness, psychophysical statements are more like "All emeralds are grue" than like "All emeralds are green". ["Mental Events", p. 218].

(iii) *The indeterminacy of meaning and translation.* In order to explain the indeterminacy of translation Davidson distinguished between heteronomic generalization and homonomic generalization to say that psychophysical generalization is heteronomic. A generalization is homonomic if its positive instances can be improved by adding further provisos and conditions stated in the same general vocabulary as the generalization itself. A heteronomic generalization is one whose instances may give us reason to believe that there is a precise law at work but in a different vocabulary than the generalization itself. The problem arises that the psychological domain is holistic and prevents the determinateness and stability of psychological states. The psychological generalization is heteronomous and it is their heteronomicity that prevents their becoming laws. In the absence of psychological laws the psychophysical generalization will lack the determinacy which is essential in forming nomological relations. Davidson said:

The heteronomic character of general statements linking the mental and the physical traces back to [the] central role of translation in the description of all propositional attitudes, and to the indeterminacy of translation. There are no strict psychophysical laws because of the disparate commitments, of the mental and physical schemes. It is a feature of physical reality that physical change can be explained by laws that connect it with other changes and conditions physically described. It is a feature of the mental that the attribution of mental phenomena must be responsible to the background of reasons, beliefs, and intentions of the individual. There cannot be tight connections between the realms if each is to retain allegiance to its proper course of evidence. ["Mental Events", p. 222].

Translation, as Davidson said, depends on "the constitutive ideal of rationality" (*ibid.*, p. 223). For a desire and belief to explain an action in an appropriate way, they must cause it in an appropriate way, through a process of reasoning that meets standards of rationality. But due to the holistic structure of the psychological domain and the mediation of the psychological states by a host of further beliefs and desires,

Davidson argued, "there is no hope of refining the simple pattern of explanation on the basis of reasons into [quantitative] calculus" (Psychology as Philosophy, p. 233).

The above considerations thus explain the anomalism of the mental. So far our analysis has shown that, according to Davidson, in the absence of psychological laws there cannot be psychophysical laws for the mental and the physical to have nomological relation. His argument gained ground from the fact that psychological realm is holistic. But Davidson arguments also suggested that the holistic interdependence also infest the physical realm.⁵¹ Davidson wrote:

The nomological irreducibility of the mental does not derive merely from the seamless nature of the world of thought, preference, and intention, for such interdependence is common to physical theory.... ["Mental Events", p. 222].

For most philosophers, for instance Quine ("Two Dogmas of Empiricism" and *World and Object*), holism is a thesis about the structure of theories in general. On the basis of this Klee argues Davidson's suggestion would lead to the idea that because of the internal indeterminacy there can be no physical laws for the same reason.⁵² Robert Klee tried to disprove the argument for the anomalousness of the psychological realm by showing that Davidson "misconstrues the role of *ceteris paribus* [translates as "other things being equal"] Clauses in psychological explanation" ("Anomalous Monism....", p. 1). Since there are good laws of nature in the physical universe then anomalousness of the mental cannot be valid.

Now the question arises: Is there any relation between the mental and the physical? Davidson's answer is affirmative. Totally committing himself to the idea of "non-reduction" Davidson injected the notion of "supervenience" to explain the mind-body problem. The idea of "supervenience" was first introduced by G.E. Moore in ethics. Moral properties, like being good, are not reducible, but are "supervenient" upon naturalistic properties. Like Moore Davidson argued that mental properties are not reducible to physical properties. He wrote:

Although the position I described denies there are psychophysical laws, it is consistent with the view that mental characteristics are in some sense dependent, or supervenient, on physical characteristics. Such supervenience might be taken to mean that there cannot be two events alike in all physical respects but differing in some mental respect, or that an object cannot alter in some mental respect without

51. Klee, R., "Anomalous Monism, *Ceteris Paribus* and Psychological Explanation", pp. 6-7.

52. *Ibid.*, p. 7.

altering in some physical respect. Dependence or supervenience of this kind does not entail reducibility through law or definition: if it did, we could reduce moral properties to descriptive, and this there is good reason to *believe* cannot be done.... ["Mental Events", p. 214].

The above quotation reveals that Davidson defined supervenience in two ways. But the two definitions suggests that they are far from equivalent.⁵³ In his "Replies to Essays" it is the first definition Davidson chose to explain⁵⁴:

The notion of supervenience, as I have used it, is best thought of as a relation between a predicate and a set of predicates in a language: a predicate *p* is supervenient on a set of predicates *S* if for every pair of objects such that *p* is true of one and not of the other there is predicate of *S* that is true of one and not of other. [P. 242].

Then he went on to say:

[S]upervenience as I have defined it here is clearly all I needed for the argument in "Mental Events", since what I was arguing for there was only identity of mental events with physical events. I wanted to emphasise that such ontological reduction does not imply that mental properties are physical properties, nor that there are causal or bridging laws relating events classed by mental properties with events classed by physical properties. [P. 243-44].

Davidson has injected supervenience to fill the twin requirements he set forth.⁵⁵ They are, first, the relation must be *nonreductive*, and second, the relation must be one of dependence. Kim argued:

But it has not been easy to find such a relation. The main difficulty has been this; if a relation is weak enough to be nonreductive, it tends to be too weak to serve as dependence relation; conversely, when a relation is strong enough to give us dependence, it tends to be too strong-strong enough to imply reducibility.⁵⁶

Davidson has argued supervenience to show the anomalousness of the mental. Kim found difficult to understand the relation of the mental to the physical, which if committed to supervenience might prove to be lawlike. He explained: "If *M* supervenes on *N*, each property in *M* which is instantiated has a general sufficient

53. Lewis, H. A., "Is the Mental Supervenient on the Physical?", p. 169-170.

54. Simon, E., *op. cit.*, p. 67-68.

55. Kim, *op. cit.*, p. 40.

56. *Ibid.*, p. 40.

condition in N ... I don't see how such generalizations could fail to be lawlike" ("Supervenience and Nomological Incommensurables", p. 153).

Let us now compare this with neutral monism which provides a nonreductive analysis of mind-body problem, like that of anomalous monism. The main point of difference between Davidson's theory of mental events and those of Russell's theory of mental events is that the former is physical and the later is neutral. I have explained above that Russell is not a "physicalist monist". But Davidson is basically a physicalist.⁵⁷ Mental events in his philosophy belongs to the same causal net-work as those physical events. Only that mentality does no causal work. [Kim, "The Myth of Nonreductive materialism", p. 35]. According to anomalous monism, events are causes or effects only as they instantiate physical laws. But mental events have neither physical laws nor psychophysical laws, and therefore make no causal difference. If mentality is causally irrelevant then, Kim argued, "it's difficult to see what point there is in recognising mentality as a feature of the world. I believe that if we push anomalous monism this way, we will find that it is a doctrine virtually indistinguishable from outright eliminativism" (*ibid.*, p. 35). The distinguishable feature of eliminative materialism is its denial of intertheoretic reduction. The reason for this denial is that the eliminative materialist's conviction that folk psychology is primitive and deeply confused conception of our internal activities.⁵⁸

Neutral monists argument for non-reduction is based on simple assertion. According to the neutral monist, especially Russell, events are neutral and are spatio-temporally located. Russell's commitment to causal theory of perception led him to say that events are spatially located in the brain. [See Chapter 5, "Location of Neutral Entities"]. But that does not make the events physical as the physicalist would argue. Nor does it make mental in Berkeleyan sense. Metaphysically the events are neutral. It is the epistemological consideration that distinguishes events as physical and mental. [See above]. The mental events are those that we know directly otherwise by inference. The difference between mind and matter does not consist in raw material of which they are composed, but in the manner of arrangement.

For Davidson non-reduction is due to the anomalousness of the mental. Simon points out that there is no need for the argument for anomalous monism to establish non-

57. His own assertion that mental events have the same description as physical events and that mental events are physical events makes him a physicalist; also see, Simon, E., *op. cit.*, p. 63; Smart regards Davidson's theory as "modest sort of physicalism", "Davidson's minimal Materialism," p. 174.

58. See for instance, Churchland, P.M., *Matter and Consciousness*, pp. 45-9.

reductive materialism. [Donald Davidson, p. 63]. He said that a mental event, being an event, must have spatio-temporal location, and therefore must be a physical event. Perhaps Simon is right. Davidson is not denying that mental events are physical events. What he is denying is that we cannot have a correlation between the mental and the physical because there are no psychological laws. If there are no laws for the mental how there can be psychophysical laws by which reduction can take place. There is no doubt that Davidson, being a physicalist, tried to point out that although mental and physical events have similar description there is no need to suppose that my having pain, e.g., can be reduced from a particular brain state. We encounter no such problem with neutral monism. In Russell's philosophy neutral events are located in space and time, and that their location does not make them mind and matter. These events constitute a piece of matter only when they are connected by causal laws of physics and a mind when connected by causal laws of psychology. Russell laid importance on causal laws of both psychology and physics. [See above]. If Robert Klee is right then there are physical laws as well as psychological laws and the question of anomalousness of the mental does not arise. Psychological laws may not be as rigid as the physical laws but that does not necessarily mean that mental events are nomologically independent. This is why James has said, neutral events can have both "stubborn" and "fluid" or less stubborn relations. For instance, physical fire, according to James, will consume a physical house. But mental fire is what won't burn real sticks or mental water is what won't necessarily put out even a mental fire. [See Chapter Two].

Because of the anomalousness of the mental Davidson brought in the concept of "supervenience" to show the mind-body relation. Kim has suggested that supervenience might prove to be lawlike and the stronger claim would lead to reducibility. Neutral monists, especially James and Russell, have accepted the causal laws. Russell accepted that the relations between the mental and the physical events is complicated because epistemologically the mental events are prior to physical events, which are supreme in the region of causal efficiency. But both physics and psychology treats the same event or group of events. Russell wrote:

If what is for physics a bit of my brain is really a group of events, my sensations and thoughts and feelings may be members of this group. If so, the difference between the physical and the mental will be one of logical: the unit for physics will be an assemblage of the units for psychology. ["Mentalism vs. Materialism", p. 121].

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Russell did not use the word "supervenience", and it is difficult to see how this notion is to be analysed in his philosophy. [Sainsbury, *Russell*, 1979, p. 239]. In explaining Russell's theory of construction we have said that according to Russell mind and matter are "fictions" rather than entities. They are fiction in the sense that what we know directly are the constituents (the neutral entities) and the constructs (mind and matter) are known through inference. Mind and matter are the constructed and complex entities and are therefore ontologically dependent on the simple entities of their construction. But fictional entities are not entities in the sense neutral entities are entities. Whereas "supervenient entities *are* entities" (*ibid.*, p. 239). Mental entities, according to Davidson, are entities in the same sense as physical entities are entities.

That mental events are supervenient on physical events means, according to Davidson, that there cannot be two events similar in all physical respects but differing in some mental respect. Davidson seems to commit himself to two types of events, bringing a kind of dualism to explain his nonreductive theory.⁵⁹ Mental events, according to him, are physical events because they belong to the same causal network. But they do not enter into causal transaction because the physical constitute a close system. Mental is not a closed system because "too much happens to affect the mental", and that there are no strict laws which can predict and explain mental phenomena. This anomalousness makes the mental "autonomous" and different from the physical domain and thus moves further in the direction of dualism. Kim said that "nonreductive materialism is not stable position. There are pressures of various sorts that push it either in the direction of outright eliminativism or in the direction of an explicit form of dualism" (*The Myth of Nonreductive Materialism*", p. 47). Because the physical domain is causally closed and the mental is causally open, and because there are no laws connecting the two domain, Davidson espouses explicit dualism.

6.6. Conclusion.

Neutral monism, as I have argued, although it may have certain inherent tension, is more plausible than anomalous monism in explaining mind and matter in terms of neutral entities. Both James and Russell argued for only one single kind of stuff, which is neither physical nor mental, but neutral. There are a plurality of neutral entities which enter into causal relations. There are both psychological laws and physical laws. It is through physics that we can establish the truth of the entities but it

59. Cf. Kim, "Psychophysical laws" and also "The Myth of Nonreductive Materialism", p. 36. Kim says that Davidson's views of the mental contain some "distinctly dualistic elements".

is through psychology that we justify their existence. It is due to the neutrality of the entities that we can say that an entity is in some senses both mental and physical at once. The epistemological consideration, (i.e. how do we know) left the entities having certain implicit qualities (both mental *and* physical) and relations. This I call *covert dualism*.⁶⁰ This dualism is not an explicit form of dualism, as suggested by Descartes, but is such that it paves the ground for both physical and psychological laws to act upon without any reservations. The neutral entities are spatio-temporally located and the possible problem of interaction can be easily dealt with, which is one of the arduous questions faced by the mentalist, the physicalist, the anomalous monist and the Cartesian dualist.

60. See sections 1.2.3., 3.2, 3.4, 5.1, 5.6.

Chapter 7.

Neutral Monism, Realism and Bootstrapping

"to have a good reason for holding a theory is *ipso facto* to have good reason for holding that the entities postulated by the theory exist."

[Wilfrid Sellars, *Science, Perception and Reality*, 1963, p. 91].

7.1. Introduction.

The purpose of philosophy is to formulate theories that are genuinely explanatory. Theories consist of hypotheses, which are backed up by evidence. The concept of "evidence" is central to the empirical investigation and observation. A theory of evidence will indicate what relationship has to exist between the observations reports and the hypotheses for the former to constitute evidence for the latter.¹ For a theory to be genuinely explanatory, according to W.C. Salmon, its hypotheses must be testable independently not only of the arguments and evidence which were employed in their formulation, but also of those arguments or events that the hypotheses are currently being used to explain.²

But philosophers are bound to face difficulties if the hypotheses that make up their theories are not supported by enough evidence. These difficulties become apparent when we attempt to go beyond direct observation and draw conclusions about the nature of the world beyond our perceptions.

In order to avoid the apparent difficulties we need to discover if there are any strategies that will allow us to make justifiable and testable inferences from the realm of experiences to the existence of those structures and objects that both lie beyond and cause our experiences. On this Raymond Tallis said,

"[e]mpirical observation may generate laws that correlate one type of experience with another; but can they take us "beneath experience" to its basis? It seems unlikely that experience can take us outside of the closed circle of experience to reveal that upon

1. Achinstein, Peter, ed., *The Concept of Evidence*, "Introduction", p. 1.

2. *Four decades of Scientific explanation*.

which experience in general, rather than particular experience - is based".³

An attempt has been made by Clark Glymour to provide an epistemological explanation to solve the difficulties. Glymour wrote that

"whether the foundation of all empirical belief was thought to rest on beliefs about phenomenal appearances or on beliefs about observable properties of observable things, the structure of the problem was the same: what relations between statements about phenomena, or observation statements, on the one hand, and statements about material objects or, respectively, about unobservable things or unobservable properties, on the other hand, permit statements of the former kind to confirm statements of the latter kind?"⁴

Glymour attempted to solve this problem by employing the bootstrap strategy to ground both our knowledge of the general and specific facts upon the same evidence. I shall discuss this shortly.

7.2. Neutral monism and circular arguments.

Neutral monism, a theory of mind and matter, owes its origin to Mach, who believed in the scientific investigation of the phenomena. His aim was to produce a genuinely explanatory theory of sensations. This challenge was taken against Descartes, who believed in two kinds of substances only known by their attributes. The neutral monists argued that the "stuff" which explains mind and matter is not a kind of hidden unperceivable *Ding-an-sich*. To arrive at a more plausible theory neutral monists had to test their hypothesis backed up by evidence.

Mach, James, Russell, the main exponents of the theory, tried to test the hypotheses that make up their theories with independent evidence. Mach, being a physicist, believed in the "economy of thought" and that the aim of science is to provide economical descriptions of phenomena. It is through scientific evidence, he argued, one can conclude that nature is composed of sensations as its elements. These

3. "A Critique of Neuromythology", p. 93 [pp. 86-109].

4. Glymour, C., *Theory and Evidence*, pp. 10-11.

sensations and their relations is studied in every branch of science. In his attempt to provide a conception of unified science Mach was led to the theory of neutral monism. [For detail see Chapter One].

James's thesis was supported by the scientific theories of his time. The principle of natural selection, the conservation of energy and the concept of "entropy" heightened the plausibility of his theory. James's main concern was to demonstrate the "spontaneous variation" of life and mind. "He extended the notion of spontaneous variation to the whole of nature, and proclaimed the view that the physical order was itself an effect of progressive selection."⁵ His reading of Mach's thesis of anti-atomism (see Chapter One) led him to believe that pure experiences are not "chopped up in bits". In nature there is no gaps and experiences are externally related having a stream like flow. For James atoms, the ether, and similar scientific entities are not to be thought of as perceptual realities. "They are fictions or metaphors whose purpose it is to enable us to *describe* the perceptual realities in terms of "functional variations". They are tools of thought ... the proof of which lies in their satisfying certain theoretical demands such as prediction, elegance, and simplicity."⁶

In science James saw the economical and useful description of fact. This method of science pushed him in the direction of empiricism. As a result James embarked in a world where "sensations" and "sensible objects" are described as homogeneous and continuous. There is no subject-object distinction in our perception, and that there is no such entity called consciousness. He rejected the dualism of substances and declared that reality is plural where pure experience forms a single basis to explain this plurality.

The "nightmare of entropy" which troubled the nineteenth century mind led James to say that materialism offers us no promise for the future. The physicist Clausius introduced the word "entropy" to refer to the fact that all thermal changes there is a certain loss of available energy.⁷ Thus *matter* cannot be the ultimate stuff to explain reality. "The universe continually grows in quantity by new experiences that graft themselves upon the older mass."⁸

5. Perry, *Thought and Character of William James*, vol. 1, p. 490.

6. *Ibid.*, p. 492.

7. Passmore, *A Hundred Years of philosophy*, p. 113.

8. *Essays in Radical empiricism*, p. 43.

James was interested in laboratory experiments and was aware of the physiological breakthrough during his time. He was under the influence of naturalistic school but did not rely on a particular science. Mach's influence on him and his knowledge of the scientific breakthrough of his time provided a better chance for his theory to be more explanatory. As Perry pointed out, a scientific theory was for James essentially a hypothesis, owing for its cognitive merit and its ultimate verification in terms of perceptual experience. Thus the method of science inclined him in the direction of empiricism.

This led James to accept an experiential theory of reality. According to this theory existence reveals its native quality in certain peculiarity authentic modes of apprehension, such as perception. It is with a positive experiential context James tried to fill the mind-body chasm.

Russell, exposed to the twentieth century scientific breakthrough, particularly in the field of physics, exploited science to justify his theory. His view of the world, as a neutral monist, resulted "from a synthesis of four sciences- namely, physics, physiology, psychology and mathematical logic" (*My Philosophical Development*, p. 12). Russell wrote:

Science is at no moment quite right, but it is seldom quite wrong, and has, as a rule, a better chance of being right than the theories of the unscientific. It is, therefore, rational to accept it.... [*Ibid.*, p. 13].

By grounding both our knowledge of the specific and general facts on same evidence the neutral monists, in general, produced various arguments which has been regarded as circular. [See 2.6.2., 5.6., 5.6.1., 6.1, 6.4., and Chapters Five and Six] I will argue that this apparent circularity of James' and Russell's analysis is really part of a sophisticated programme, now known as *Bootstrapping*.

The problem of the relationship between evidence and hypothesis raises the entire issue of realism, because it is important to determine what attitude philosophers should take to the hypothesis that there is a world beyond our perceptions, and what role they think such a hypothesis should play in the formulation of their theories.

7.3. Two Kinds of Realism.⁹

7.3.1. Metaphysical Realism.

The exponents of metaphysical realism take it for granted that the world exists more or less as we perceive it. They presuppose a correspondence theory of truth and accordingly hold that our perceptions are true and accurate as far as they represent the way that the world really is. But the relationship between what exists in perception and the external world cannot be independently tested. This is because our knowledge of the external world is derived from our perceptions, and this begs the question of the accuracy of these perceptions. Therefore metaphysical realism avoids the very possibility of there being any direct empirical evidence for the existence of such a world.

On the basis of this it is considered that theories based upon metaphysical realism cannot be regarded as satisfactory explanations. Ellis¹⁰ pointed out:

[T]he postulated of causes of the phenomena must be supposed to exist if the theory is to accepted as doing what it purports to do; and normally we should expect to be able to find independent confirmation of their existence from various sources. [p. 57]

The metaphysical realists would face the sceptical challenge even if we could grant that such a transcendental world existed. They would still have difficulty in satisfying us that our perceptions and representations of this world are accurate. According to Ellis:

We can investigate nature and develop a theoretical understanding of the world, but we cannot compare what we think we know with the truth to see how well we are doing. We cannot be assured that science has made progress toward its goal of discovering the true nature of reality. [p. 69.]

9. Cf. Laura J. Bennet, "Realism And Evidence In The Philosophy of Mind".

10. Ellis, B., "What Science aims to Do", pp. 48-74.

Ellis pointed out that this was not a merely contingent, state-of-the-art difficulty, but a necessary consequence of the metaphysical relationship between the world and our scientific theories about it. He said:

If even the perfection of human knowledge by human standards does not necessarily lead to truth, then the truth is essentially unknowable,[pp. 71-72.]

The way in which metaphysical realists frame their questions about the world prevents discoverable empirical data from constituting independent evidence in favour of their theory.

7.3.2. Scientific Realism

Like metaphysical realists the scientific realists believe in the existence of the external world. The difference is that they do not seek to justify the existence of an external world by reference to a correspondence theory of truth.

But this does not imply that scientific realists do not think that they have grounds for the existence of an external world. It is simply that the way the scientific realists set up the problem both allows for and demands confirmation that is not available to the adherents of the metaphysical realism. Scientific realists justify their acceptance of the external world using arguments from the possible best explanation. This argument is in itself a scientific hypothesis which states that the best explanation of why scientific theories are successful is that the world really is as they postulate it. Hence the scientific realists derive increased support for the hypothesis that the world exists through the existence of successful scientific hypotheses. If a theory fails to make successful predictions or to explain, then the theory should be abandoned, or at least revised. This is the basis of the bootstrapping methodology. Here the scientific realists put forward the relatively unconfirmed hypothesis that the world exists beyond our perceptions (together with some tentative pieces of evidence) as a foundation upon which to build other, more specific scientific hypothesis. If these hypotheses are then well supported by independently obtained evidence, then they in turn, provide further confirmation of the original hypothesis that the world exists beyond our perceptions.

Scientific realists regard their individual theories and the relationship of these theories with the world as empirically testable. Yet it is sometimes argued that all scientific

theories are empirically undetermined, since no matter how many of their consequences we examine, it will always be possible to construct rival theories which contradict them and yet succeed in explaining exactly the same phenomena.

Scientific realists claim to have a reply to the argument from empirical underdetermination. They maintain that such an argument can never be justified, since it is impossible to predict future theoretical developments which may yet enable us to distinguish between two theories that are currently empirically equivalent. Such evidence may not come from any direct consequences of either theory. In support of this claim Ellis pointed out that:

The point is a Duhemian one. Theories do not normally occur in isolation, and evidence for or against a theory can come from unexpected quarters. [p. 65.]

Evidence for or against the truth of a theory may include

"Values such as ontological simplicity, coherence, and explanatory power."¹¹

Churchland was right to point out that these criteria are values and not straightforwardly observable kinds of evidence. Nor are the criteria mentioned here an exhaustive list of the values which could be used to assess a theory.

Hence, the scientific realists criterion for the truth is more than one of correspondence to a transcendental world, and a rather more pragmatic one at that. Moreover they would refrain to claim that the true theory is simply equivalent to the best theory we have. The scientific realists do not insist upon the separation of truth from epistemic values, such as rationality, as the metaphysical realists do. However, this is simply one's own theoretical preferences. One should not generalise that what is rational for one person to believe is also rational to another.

However, the success of the scientific realist in escaping the difficulties of metaphysical realism is debatable since evaluative criteria like ontological simplicity and coherence may themselves incorporate implicit and untestable metaphysical assumptions.

¹¹ Churchland, P.M., "The Ontological Status of Observables: In Praise of the Superempirical Virtues", in *Images of Science*, p. 42.

7.3.3. The Bootstrapping Device.

The bootstrapping methodology has been regarded by scientific realists as a tool for deriving both specific and general views from the same initial evidence. This option is not open to the metaphysical realist, who assumes that the external world exists, but who cannot test his hypothesis because it takes the status of an *a priori* assumption.

The notion of "bootstrapping" is developed by Clark Glymour in his book *Theory and Evidence*. It is essential to note from the outset that bootstrapping is very complex methodology that can appear in a variety of different guises. Since it is itself merely a suggestion or model of how it may be possible to obtain support for general and specific hypotheses from the same initial evidence, it is hardly surprising that individual accounts and uses of the methodology will emphasize different aspects of the strategy and a variety of ways in which it is employed.

Moreover, since the strategy is a device for acquiring new knowledge on the basis of sound evidence, it blurs the traditional distinction between discovery and justification.

Glymour regarded his own variation of the bootstrap as deriving from theories of Reichenbach and Carnap. Both Reichenbach and Carnap sought a way of using evidence derived from our observations to confirm the individual hypotheses of a theory. Glymour writes that the Carnapian legacy within Glymourian theory is

"a stratagem for making the connection between evidence and theory: use some of the hypotheses to deduce from the evidence statements, instances of other hypothesis" [p. 62]

The Glymourian bootstrap strategy.

The following passage from Glymour's book will explain the substance of the bootstrap strategy.

"Hypotheses are tested and confirmed by producing instance of them; to produce instances of theoretical hypotheses one must use other theoretical relations to determine values for theoretical qualities; these other theoretical relations are tested in turn in the same way. Ideally, one might hope for bodies of evidence that permit each hypotheses to be tested independently." [*Ibid.*, p. 52.]

For Glymour, evidence did not confirm a hypothesis absolutely but only by comparison to an alternative theory. We begin, in the first instance, by using a hypothesis H_1 to confirm a hypothesis H_2 relative to a theory T (where T is simply a set of hypotheses $H_1 + H_2 + H_3 + \dots + H_n$, together with their supporting bodies of evidence, E_1 , E_2 , etc.). Thus far, there is nothing distinctive about Glymour's method, except the emphasis upon the fact that E_1 is only evidence for H_2 relative to T . Nor must it be possible for any evidence whatsoever to confirm H_2 . What is unique about Glymour's bootstrap method is that it can then be inverted so that H_2 and a fresh set of evidence E_2 can be used to confirm H_1 relative to T .

The interesting aspect of Glymour's method is that it enables us to pull ourselves up by the bootstraps simply by using relatively unconfirmed hypotheses to generate fresh information in the form of future hypotheses, which may then in turn be combined with new evidence to confirm the original hypotheses. In more general terms an overall world view may be combined with observational evidence to confirm a more narrow hypothesis, which can then be used in conjunction with further evidence to confirm the general hypothesis, again relative to the theory.

In two separate examples we will show how the Glymour bootstrap methodology may be used. The first is informal treatment of the use of method in the formulation of a theory about genius in composers. The second is more formal which consists of a justification of induction based upon the bootstrap strategy.

Example 1.

Let T be the whole theory of the nature of genius in classical composers.

Let H_1 be the unconfirmed hypothesis that all musical geni come from mainland Europe and E_1 be knowledge of the ages at which those mainland European composers musical promise. So E_1 might consist of:

- Bach - showed early promise
- Mozart - gave public performances aged 6
- Chopin - played in public aged 8
- Liszt - played in public aged 9
- Strauss(Richard) - composed at the age of 8

Given this, we may deduce the hypothesis H_2 , that musical genius often begins at an early age. If we then use this hypothesis H_2 together with the details of the birthplaces of these composers familiar to us (E_2), we can try to confirm the first hypothesis H_1 that all musical genius comes from mainland Europe. For example E_2 may consist of the following data:

Strauss was born in Germany
Liszt was born in Germany
Chopin was born in Poland
Mozart was born in Austria
Handel was born in Germany

Given that E_2 does contain this information, then it would appear that H_1 is confirmed relative to the theory T . However, for the bootstrap strategy to avoid circularity, we must be able to say what sort of evidence would count against H_1 . For example, if Purcell were to be included in E_2 , then H_1 would then need to be weakened to the hypothesis that "many musical geni come from mainland Europe". Similarly, we must be able to say what evidence E_1 would have to include for it to falsify hypothesis H_2 -- in this case, had we included Beethoven, who did not show much musical promise in his youth (despite his father's attempts to make it seem otherwise), H_2 would also need revision.

From the above information we could go on to use H_2 to formulate either another general hypothesis, H_3 , such as all musical geni played piano, or a more specific hypothesis H_4 , such as, if Purcell was a musical genius, then it is likely that he composed pieces at an early age. (H_4 is confirmed by further evidence E_4 -- Purcell did begin to compose when still a young boy). In this fashion, our initial hypothesis H_1 and evidence E_1 permit inference of both specific and general facts.

Example 2.

A formal example of the use of the bootstrap strategy in science is given in Hunt's examination of the question of induction.¹²

Hunt argued that the fact that only the existence of regularity can provide evidence for the view that there are necessary connections within our universe does not entitle

12. "Laws: Projectibility and Uniformity", pp. 241-246.

Hume to infer that there can be no empirical evidence for necessity. The problem of necessity simply reduces to the problem of induction. If we can empirically justify induction, then necessity exists, even if we cannot know the precise nature of this necessity. This is where the bootstrap method comes in.

Even though Hume can argue that inductive argument can least support the existence of a uniform world, it is not open to him to deny the very possibility that such a world exists. Let us consider this possibility our theory T . We can nominate this possibility a finite positive probability. This probability need not be very high. It therefore follows that we can assign all the hypotheses included in T ($H_1, H_2, H_3 \dots H_n$) an equal probability of >0 .

If induction is valid (call this hypothesis H_1), then it will provide true hypotheses on the basis of the evidence available. Therefore if the probability of T being true is also >0 , then the probability of induction being valid is also >0 . If evidence E_1 is available which builds the probability of a second hypothesis H_2 being true, given that the probability of induction being valid is >0 , then this in turn increases the possibility that nature is uniform and that induction is valid.

Once more, we are pulling ourselves up by our bootstraps since we are accepting that nature may be uniform and that induction may be valid in order to demonstrate these very conclusions. However, Hunt's argument avoids circularity because

"even though an inductive rule appears both as a rule of inference and as a conclusion, it is nowhere assumed as true but only, initially, as minimally probable" (Hunt, p. 243).

Besides, we can say what evidence would count against it. Hunt commented that

"[t]he emergence of evidence supporting induction is an empirical matter and if contrary evidence appears the probability of [induction being valid] will become low" (*ibid.*, p. 243).

Hunt's example signifies how just how profound and useful the bootstrap strategy may be if it can withstand the criticisms that have been levelled at the metaphysical realist with respect to the testability of the premises of his theories.

Keeping in view the above discussion I will consider how neutral monists apply the bootstrap strategy in order to avoid circularity in their arguments.

7.4. Neutral Monism and Bootstrapping.

Earlier we have seen how both James and Russell began their analysis of neutral monism by rejecting the traditional notion of "substance". They took the empiricist's starting point to press the point that observation reveals that the world consists of "sense-data". The decomposition of the perception of the world into sense-data in its crude form has happened to us in childhood. As James argued [See 2.6.1.], that experiences, the neutral entities, do not come to us "aboriginally stamped", rather "the baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as one great blooming buzzing confusion". Russell argued that the data which constitute the external world come to us through various senses. The sensations belonging to different sense form a world peculiar to that sense with certain spatial relations determined by those sensations. Thus each individual lives in a private world which contains its own spaces from different sense. These spaces of sight are correlated with the various spaces of other senses. Such correlation, according to Russell, is learned by experience in childhood. [See 6.1.1.].

Neutral monism rejects naive realism that the things are what they seem. It claims that what we are aware of in immediate perception are "sensations" or "percepts" or "pure experiences". Based on this neutral monist hypothesis we can see how observation supports scientific theories. Russell wrote:

We all start from "naive realism", i.e., the doctrine that things are what they seem. We think that grass is green, that stones are hard, and the snow is cold. But physics assures us that the greenness of grass, the hardness of stones, and the coldness of the snow, are not greenness, hardness, and coldness that we know in our experience, but something very different. The observer, when he seems to himself to be observing a stone, is really, if physics is to be believed, observing the effects of the stone upon himself. Thus science seems to be at war with itself: when it most means to be objective, it finds itself plunged into subjectivity against its will. Naive realism leads to physics, and physics, if true, shows that naive realism is false. Therefore naive realism, if true, is false; therefore it is false. [*An Inquiry into Meaning and Truth*, p. 13].

Following the above discussion let us say that the following are the neutral monist hypotheses, where H stands for hypothesis: H₁, "observation reveals that we are aware of sense-data", H₂, "things are not what they seem", and H₃, "naive realism is

false". If neutral monist hypotheses are true then we can see how observation supports scientific theories. So we are justified in believing science and science supports neutral monism. Therefore by bootstrapping neutral monism is rendered more believable.

The bootstrap strategy is the recent development in the philosophy of science. This strategy was not known to Russell and James. Their implementation of it was unconscious. Next I will consider how Russell and James applied this strategy to make their theories genuinely explanatory.

7.4.1. James and Bootstrapping.

In formulating neutral monist hypotheses James depended on the evidence of physiology, psychology and physics, especially of Mach. He also exploited the findings of the laboratory experiments during his time to support his theory.

James argued that there is no distinction between the mental and the physical and that what we call mental and physical are simply neutral experiences. The difference is simply contextual. In explaining the difference between the mental objects and physical objects James says that in mind extensions can be indefinitely located and that motion obeys no Newton's laws. It has been alleged that by appealing to other conceptions James initiated circular arguments. [See 2.6.2].

Observation reveals that physical objects determined by strict physical laws behave in a certain way. Mental objects also behave in a characteristic way. The difference is that the laws that determine mental objects are not as rigid as the physical laws. Thus physical fire will consume a physical house but one can play with mental fire without any effect. There is no difficulty in pure experience (neutral entity) entering into two sorts of relation. Therefore the difference between the mental objects and the physical objects are not between entities which compose the objects but between two kinds of laws. James claims to know the rigidity of physical laws by observation and claims the fluidity of psychological laws by introspection. This is also backed by more profound scientific evidence which helped James to arrive at definite conclusions.

A particular example of this alleged apparent circularity is his theory that there is no gap in pure experience and that it has a flow like a stream. This knowledge is derived from physiology. [See 3.2.3.]. In his psychology James argued against the theory

which considered consciousness as an epiphenomenon. He pointed out that the problem with the epiphenomenalism is treat the concept of "causality" as a one way traffic. Accepting Darwinism and the findings of physiology James argued that consciousness is active and selective. In order to provide the theory of consciousness James exploited the function of central nervous system and the brain. The activity of the sensory nerve and the motor nerve shows that the message to and from the brain is carried with out any spatial gap. The transmission to and from the brain is like a flow without any break. This led James to argue that consciousness is simply continuous without any gap. There may be interruptions or time gaps, but such break has no connection between what happens earlier or followed later. Consciousness is sensibly continuous and has a flow like a stream. [See 2.3.1.].

In his philosophy James rejected the theory of consciousness as an entity. Instead, he argued that there is no such thing as consciousness other then "pure experiences", the neutral entities. In a similar tone James concluded that there are only neutral pure experiences which explain mind and matter and has a flow like a stream. To test his hypothesis James considered the evidence E_1 , that the function of both the efferent and the afferent nerves shows the flow of activity with out any break between the brain and the nervous system, to support the specific hypothesis (in his psychology) H_1 , that there is no gap in conscious experience. But observation reveals that there is no such thing called consciousness. What we call consciousness is simply a function and that function is knowing. James argued that one cannot deny that there a function in experience which thought performs. This is the evidence E_2 . Accordingly he formulated the second hypothesis H_2 that there is no subject and object distinction in the stream of pure experience. The distinction which generates in the process of knowing is simply by appropriation or retrospection. Here James used E_1 as only evidence for H_2 . The uniqueness about bootstrap method is that it can be inverted so that H_2 and a fresh set of evidence E_2 can be used to confirm H_1 that there is no gap in conscious experience.

Now James could go on to use H_2 to formulate the general hypothesis H_3 that pure experiences are neither mental nor physical but neutral entities and that the subject-object distinction is only contextual, or more specific hypothesis H_4 , such as, the relations that connect experiences must themselves be experienced relation and therefore external. (H_4 is confirmed by further evidence E_4 -- the message carried by the sensory nerves to the brain is continuous. That is to say that when a later moment of one's experience succeeds an earlier one, the transition from the one to the other is

continuous. In other words in passing from one of my own moments to another the sameness of object and interest is unbroken.

H_3 is neutral monism through which E_1 is seen as evidence for H_1 , H_2 and H_4 are intermediaries which make the example complicated. In this way our initial hypothesis H_1 and evidence E_1 allow inference of both specific and general facts. For the bootstrap to avoid circularity, we must indicate what sort of evidence would count against H_1 , and also what evidence E_1 would have to include for it to falsify hypothesis H_2 .

The above discussion shows how Glymour's strategy helped James to pull himself up by the bootstraps by using relatively unconfirmed hypothesis to provide fresh information in the form of future hypotheses. This in turn combines with new evidence to confirm the original hypotheses relative to the theory.

7.4.2. Russell and Bootstrapping.

Ayer alleged:

This whole theory [neutral monism]... is very ingenious, but it is open to serious objections on the ground of circularity. [Russell and Moore, p. 62].

We have seen in Chapters Five and Six how Russell committed himself to circular arguments in making his theory of neutral entities more viable. For instance he argued that the world is composed of simple entities which are causally connected. Accepting this fact he justified physics by arguing that physical analogies to perception show that in most places at most times a vast assemblage of overlapping events is taking place, and that many of these events, at given place and time, are connected by causal chains with an original event which has produced offspring more or less similar to itself in a vast number of different places. [*My Philosophical Development*, pp. 14-15]. This led him to formulate the specific hypothesis H_1 that the events occurring in any given small region of space-time are not unconnected with events occurring elsewhere. As a next step Russell takes an approximation to perception and depends on the evidence E_1 -- a photographic plate exposed to a portion of the night sky takes photographs of separate stars (see Chapters Four, Five and Six for the same example). That observation shows that no minds are involved for we do not suppose that photographic plates have minds. Based on this piece of information Russell formulated the

hypothesis H_2 that the happening from the various stars to the various photographic plates does not consist of waves but of "little bundles of energy" called photons (*ibid.*, p. 13). Then he used H_2 together with the evidence E_2 that each star gets itself photographed, and can be photographed anywhere on a clear night to confirm the hypothesis H_1 that the events occurring in any given small region of space-time are not unconnected with events occurring elsewhere. Russell came to the conclusion that there must be something happening, at each place where it can be photographed, that is specially connected with it. From the above information Russell further deduced the specific hypothesis H_3 that events occupy a finite amount of space and time. This generated further evidence that the theory of relativity has abolished one cosmic time and one persistent space. Grounding the facts on specific hypotheses Russell confirmed the neutral monist hypothesis H_4 that there are single kind of entities which occupies a certain amount of space-time and is neither mental nor physical. Neutral monism begins as an approximation to perception which is supported by scientific discovery. Thus neutral monism justified physics and physics confirmed neutral monistic hypothesis as true making it more probable. By bootstrapping Russell rendered his theory more acceptable.

Consider a more specific example. The implementation of bootstrap strategy leads Russell to formulate the hypothesis H_1 that both physical and mental events are in space-time. [See Chapter Five]. By employing the method of construction Russell showed how physical and perceptual spaces are constructed. [See 6.1.1.]. The evidence E_1 is- the data which constitute the external world can be obtained by perception. They come to us through the senses. The sensations of sight are given as spatial sight space, and those of tactile in tactual space. These sensations from different senses, at any given moment, are correlated¹ in such a way that they provide a momentary world view, which according to Russell is the "private world", i.e. a momentary mind. Similarly a "momentary thing" is constructed out of set of sensations both perceived and unperceived. Given this Russell deduced the hypothesis H_2 , that both mental states and physical objects are in space and time. These constructions follow different laws. The physical laws explains the construction of momentary thing and the psychological laws explain mind. It is the way of arrangements that distinguish the mental and the physical. Thus the mind and matter are constructed out of sensations or percepts that spatially located and are in time. With the evidence E_2 that the theory of relativity places events in space and time, Russell confirmed H_1 that since time and space are so much less distinct it has become difficult to hold that mental events, though in time, are not in space. [See

6.2.1.1.J. Based on E_2 and H_1 Russell further deduced the hypothesis H_3 - that there is "neighbourhood" of events which consist of all events that are very near the given event. This generates further evidence E_3 - that events in the physical world have relations to each other which are the sort that have led to the notions of space and time. These relations are of order. This lead us to say that one event is nearer to a second than to the third. Thus the nearer two events are to each other, the more nearly they have certain relation. Based on this piece of information Russell formulated hypothesis H_4 - that the neighbouring events have certain relations. So evidence E_4 consists of neighbouring events have this relation with out limit as they are taken nearer and nearer together. By using the hypothesis H_4 and the evidence E_4 Russell pulled the hypothesis H_3 by its bootstrap.

Thus Russell lifted his theory by bootstraps in order to confirm the unconfirmed hypothesis by grounding in both special and general facts.

7.5. Conclusion.

The above discussion shows why James and Russell appeared to produce fatally circular arguments in explaining their versions of neutral monism. These arguments though circular are non-viscious. We have already seen how Hunt's argument avoids circularity. This he does by assuming that nature may be uniform and that induction may be valid in order to demonstrate the conclusions to be reached. Similar view has been held by Abner Shimony. The circularity is non-viscious, as he states, in the following sense:

"theory as a whole is open to critical evaluation in the light of experience, for the reciprocal support of a methodology and a scientific picture does not render it impregnable to criticism."¹³

In his "Braithwaite On Scientific Method" Shimony argued that the circularity need not be vicious if we properly choose the contingent proposition which serve the "suppressed major premise" (p. 657.). He pointed out that there are general propositions which we accept partly because experience somehow confirm their truth and partly because of instinct. For instance we can consider such vague proposition that the nature is uniform, and the proposition that other human beings have faculties like our own. Now if F is such a proposition, with the further property that the

13. Shimony, Abner, "Scientific Inference", pp. 159-60.

addition of it to the evidence gathered in experimentation helps in certain degree in confirming scientifically and practically important hypotheses. Thus based on the assumption *F* it is possible to use systematically gathered empirical evidence to build a body of well-confirmed scientific propositions. Among these scientific propositions some will concern fundamental physical facts about the world, and other will concern the psychological and physiological nature of human beings, and some will concern about the degree of accuracy of the instincts and unsystematic inferences of human beings. these results throw light upon the proposition *F*, which was instrumental in reaching them. If these results confirm *F*, then the foundations of induction will be inductively justified. This justification will not be considered as trivial *petitio principii* because the conclusions of the major sciences will not only depend on the initial assumption of *F*, but also upon empirical data which nature forces upon us. In case scientific results disconfirm *F* then alternatives has to be sought to rectify the method of inquiry. The fact that there is a possibility of disconfirmation shows that we have not "blocked the road to inquiry" by holding on to *F* unnecessarily. The circle not only shows to be non-viscious, but rather to be a natural consequence of the fact that being the products of nature human beings try to investigate nature as a whole. [*Ibid.*, pp. 657-8.].

The above discussion shows how one can avoid circularity by not holding on to certain premisses which need revision. James and Russell based their arguments on observation and well-confirmed scientific findings. They tried to pull themselves up by their bootstraps by using relatively unconfirmed hypothesis to generate fresh information in the form of future hypotheses. The later hypotheses in turn be combined with new evidence to confirm the original hypotheses.

For instance Russell accepted that physics is true. He intended to prove it by pointing to the fact that every physical theory which survives the test of time goes through three stages. In the first stage, the theory is a matter of controversy among specialists. In the second stage, the specialist agree that it is the theory best fits the available evidence. In the third stage, it is the new evidence is unlikely to replace the theory but may modify it. Russell accepted those parts of physics which has reached the third stage as acceptable as arguments for the philosophical speculation. [See 6.4.].

For James¹⁴ experience is the legitimate source of information about the world. But its limits are very strict. It is not possible, according to Van Frassen, to guarantee about

14. Frassen, Bas C. van, "Empiricism in the Philosophy of Science", in *Images of Science*, pp. 252-53.

the future on the basis of our experience. Experience only discloses to us no more than what has actually happened to us so far. But we have seen that it is science that led James to commit to experience. In his "A World of Pure Experience" James argued that the world is uniform but its unity is not fully experienced as yet. This is because the universe continually grows in quantity by new experiences that graft upon the older mass by helping the mass to a more consolidated form. The unconfirmed future hypotheses together with the new evidence are used to confirm the original hypothesis. By allowing flexibility and rejecting the concept of "blocked universe" James in fact committed himself to a more profound epistemology which science renders more believable.

As a result we have seen that both Russell's and James' arguments apparently gave rise to circularity. But in consequence it had been shown that James and Russell are more sophisticated than their critics for much of their argumentation is not fatally circular as had been supposed.

In the light of the above discussion James and Russell can be seen as early pioneer of scientific epistemology. This does not make their theory perfect, for I have argued (in Chapters Three, Five and Six) that they are covertly dualistic. However, this represents not only a major step in the philosophy of mind and matter but a major innovation in the method of philosophy.

Chapter 8

Conclusion.

Neutral Monism or Covert Dualism? Some Final Reflections.

8.1. Introduction.

This concluding chapter will be comparatively brief. I shall summarise the aims and findings of my argument.

8.2. Summary and Conclusions.

8.2.1. Aims of the Thesis.

As I have remarked in my general introduction to this thesis, my discussion of William James's and Bertrand Russell's theory of neutral monism had four central objectives. The first and the most fundamental of these was the examination of James's and Russell's versions of neutral monism. It was James's theory to which Russell reacted and finally adapted into his own philosophical programme.

This primary objective could only be achieved once an appropriate criterion for the examination of the versions of neutral monism had been selected. This means that any theory of neutral entities must consist of three parts. (1) A theory of neutral stuff must tell us the nature of neutral entities. That is, a neutral entity must not be either physical or mental or have any elements belonging to both. (2) A theory of matter must tell us what kind of relations which, when hold between a bundle of neutral entities, constitute that bundle as a set of a material object. (3) Similarly a theory of mind must tell us what kind of relations are those which, when they hold between a bundle of neutral entities, constitute that bundle as a mind or mental phenomena. There may be different versions of neutral monism depending on the distinctive answers they provide to these parts.

My remaining objectives related to the methodology employed by both James and Russell are discussed in chapters 2, 4 and 5. I argued that James and Russell accepted a limited form of dualism before their final commitment to neutral monism. This helped them to abolish epistemological dualism to a certain extent

and accept a metaphysical monism of neutral entities. I went on to render explicit their arguments in rejecting psychophysical dualism.

Phenomenalism as a methodology rather than a theory was adopted by the neutral monists. I have argued that neither James and Russell were phenomenologists.

Further I hoped to show that alleged circularity involved in James's and Russell's argument was part of much more a recently expounded methodology called bootstrapping which makes the circularities non-vicious. I argued that they tried to pull themselves up by their bootstraps by using relatively unconfirmed hypothesis to generate fresh information in the forms of future hypotheses. The later hypotheses in turn be combined with new evidence to confirm the original hypotheses.

8.2.2. Structure of my Arguments.

It would have been unwise to attempt an evaluation of neutral monism without a preliminary discussion of some of the major alternative theories along with their inadequacies. I therefore began chapter 1 with the key question "What there is?" in order to outline the fundamental aim of neutral monism, that is to provide an empirical sub-stratum to underpin physics and psychology. Keeping this argument in view I have discussed the development of the theories in James and Russell. In chapters 2, 4 and 5 I have discussed the earlier versions of neutral monism, both of James and Russell, and argued that the epistemological distinction between the knower and the known, subject and object had not been totally got rid of. This is because of inherent tension within the theories.

In chapters 3 and 6 I have argued that though James and Russell avoided dualism in Cartesian style they have implicitly introduced a dualism which I call *covert dualism*. For this purpose I have isolated several arguments to render that neutral monism is a clear case of covert dualism. The alleged circularity, which I discussed in chapter 7, in Russell's and James' argument may be due to more profound scientific epistemological commitment but this does not make their theory perfect. A summary of my main conclusions is given below.

8.3. Conclusions.

I contend that I succeeded in reaching all four of my primary objectives. It will be convenient to discuss my main conclusions in the order that they appear in the body.

I was able to show that James's early commitment to "phenomenism" has influenced both his psychology and metaphysics. James partly succeeded in discarding epistemological dualism by rejecting a relation of a subject to object. Although he accepted the hypothesis of "phenomena" as a neutral name (which can be viewed either as "feeling" or as "objective fact") to explain away the existence of the so called "Ego" in terms of stream like continuity of consciousness, it did not afford a proper foundation for his psychological discourse. Instead "phenomenism" and "commonsensism" brought much ambiguity in his philosophy and therefore led him to allocate different merits to the terms "thought" and the "thought's object". [See Chapter Two].

Further I showed that before his ultimate commitment to neutral monism James, in his "phenomenism", argued that the entire world, objective and subjective, at any actual time is a datum, and only, within that datum there are two parts, the objective and subjective parts. I therefore argued that James, in his radical empiricism, could not disentangle himself from this hypothesis and therefore argued for a theory which could be called covertly dualistic. Moreover his theory of knowledge inadvertently supported this. [Chapter Three].

Russell was familiar with James's thesis of neutral monism which led him in 1912 to close the gap between physics and perception. I argued that Russell's commitment to the relational theory of sensation left his theory "barely dualistic" as against psycho-physical dualism as his critics claimed. I have considered this move of Russell important as it led him to accept neutral monism.

Although Russell rejected the Brentano-Meinongian distinction between the act (the subject) and the object of the act, he was not satisfied with James's explanation that, for instance, what occurs in the dog when it "sees a rabbit" has only an indirect causal relation to the rabbit. As a result when he officially declared himself a neutral monist Russell proposed three distinctive types of neutral entities. They are sensation, a neutral entity, image, a subjective entity and

unperceived, a physical entity. My analysis had shown that his early theory is a sort of Cartesian dualism. [See Chapters Five and Six].

I have further claimed that one of Russell's motive was to bring his theory close to that of James. Russell, following James, rejected the dualistic theory of perception. In his later version he employed the inductive method and became less interested in the importance of epistemology for a metaphysical theory. I have however shown that Russell could not but had to re-introduced epistemological dualism in order to answer questions as to what is meant by "empirical evidence". I argued that like James's, Russell's theory also collapses into covert dualism, by admitting internal elements within the datum.

I have defended my claim that neutral monism is a case of covert dualism from such claims as phenomenalism and physicalism. I have argued that neither James nor Russell was a phenomenalist, although Russell's early version was a type of phenomenalism called "quasi-phenomenalism". In support of my argument I have distinguished between three types of factual phenomenalism in order to show that if Russell had accepted hyper-phenomenalism, i.e. only one's own sense-data exists, then his theory would have been degenerated into solipsism. If he had accepted pure phenomenalism then it would have been difficult to explain physics, since physics demands continuity. Moreover it was not in Russell's interest to develop a theory of phenomenalism. Since his motive was to develop neutral monism he accepted phenomenalism purely as a method. James was not a phenomenalist either. His views on objective reference and his regarding nature as a pattern rather than construction is a proof that his motive was purely to make the neutral entities accessible. [See Chapter Four].

The introduction of the identity hypothesis by Russell does not make his theory a physicalist. I have argued that Russell's identity is identity of "constituents" and not of the identity of mind and matter as the physicalist claim. As a result his theory avoids most of the objections proposed against the physicalist theory. [Section 6.4].

Since neutral monism is a non-reductionist theory I have compared with one recent non-reductionist materialism called anomalous monism. I have argued that while neutral monism may have inherent tensions, it is more plausible than anomalous monism in explaining mind and matter. Moreover I have shown that

for James mental laws are flexible but they are certainly not anomalous as Davidson claimed.

I conclude that bootstrapping strategy may have helped both James and Russell to lift the theory by its bootstraps in order to confirm the unconfirmed hypothesis by grounding in both general and specific facts. As I have shown, this has not made their theory perfect. But it has made the theory eminently plausible. Whether, ultimately, neutral monism can be developed into a wholly successful theory is a question beyond the scope of this thesis. What I have shown is that its development was a magnificent, complex but flawed effort. But its flaws are no more final than the difficulties faced by the other, more traditional theories of mind.

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