

**A PHILOSOPHICAL INVESTIGATION OF
THE PARANORMAL AND THE
FUTURE OF EXPERIMENTAL SCIENCE**

BY

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DOCTOR OF PHILOSOPHY**

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DEDICATION

This work is dedicated to my late dad Ben Anene Nwanegbo, who expected this honour over a decade ago before his transition. And to my mum too, Marie Nwanegbo-Ben, who ceaselessly sent text messages or call to ask "Have you finished? I know you have all the materials to write, how many copies are you binding? When are you defending?" All these and more when actually I hadn't finished a chapter.

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ABSTRACT

Issues bordering on experimental science and paranormal have been controversial and have been a problem in philosophy of science. Major discussions on the issue have been on the existence and activities of the paranormal and successes in experimental scientific discoveries. The paranormal consists of alleged occurrences or powers which if actual, cannot be explained by our current understanding of physics. The position of the experimental scientists is that the paranormal or extra sensory perception (ESP) such as telepathy and psychokinesis are fraudulent and pseudo-scientific. They assume that the experimental scientific method affords the only reliable natural means of acquiring knowledge as may be available about whatever is real. The method of this research is hermeneutic. This research posits that the propaganda for the experimental scientific method and political economy of science influences and hampers researches and investigation into the paranormal. It further states that the current experimental scientific position as the custodian of true knowledge is a misnomer. Also it indicates that investigation and interpretation of the paranormal acts will open up hitherto an unknown dimension of the nature of the universe that current understanding of physics has not been able to do. The work examines the paranormal in the light of some scientific theories and principles like the field theory, phenomena of resonance, uncertainty principle, and John Bells theorem. A careful perusal shows that all the parts of the universe are connected in an intimate way, a position previously claimed only by mystics without scientific proof. With this standpoint, the research recommends that there should be a re-examination of what constitutes empirical scientific endeavour in order to make way for an unrestricted method of investigation of the universe. If this is done, those things modern science cannot explain yet they occur and are classed paranormal can be explained. In that way a new and deeper science of the future explicating the universe will emerge.

TABLE OF CONTENT

i	Title Page	
ii	Approval Page	
iii	Certification Page	
iv	Dedication	
v	Acknowledgement	
vi	Table of Content	
vii	Abstract	

CHAPTER ONE

Page

1.0	Introduction	1
1.1	Background of the Study	1
1.2	Statement of Problem	8
1.3	Purpose of the Study	11
1.4	Significance of the Study	13
1.5	Scope of the Study	14
1.6	Research method	15
1.7	Clarification of concepts	17
1.8	References.	24

CHAPTER TWO

2.0	Literature Review	28
2.1	Introduction	28
2.2	Does the Paranormal Exist?	29
2.3	Are the methods of science the Basis for understanding reality?	45
2.4	Are paranormal arts Scientific?	57
2.5	References	66

CHAPTER THREE

3.0	The Paranormal and a new theory of the universe	70
3.1	Methods of Science	71
3.2	The mind and the Paranormal: A view at Psychokinesis.	
	74	
3.3	Is telepathy Possible?	81
3.4	Symbolic Elements in Paranormal acts.	90
3.5	Scientific dogmatism	94
3.6	Interconnection of Everything in the universe.	96

3.7 References.
101

CHAPTER FOUR

- 4.0 Evaluation of some scientific theories and their relation to the paranormal
106
- 4.1 Sensory and Psychic Space.
110
- 4.2 The Phenomena of resonance and telepathy.
116
- 4.3 Levels of information and communication.
119
- 4.4 The theory of relativity and John Bell's theory in relation to paranormal feats.
124
- 4.5 References.
132

CHAPTER FIVE

- 5.0 The political economy of experimental science and the paranormal.
134
- 5.1 The logic of open science and the case for the paranormal.
136
- 5.2 The growth of science in relation to economic and political interest.
144
- 5.3 Science as a political phenomenon.
147
- 5.4 Science as guess.
154
- 5.5 References.
162

CHAPTER SIX

6.0	An Evaluation of paranormal phenomena.	165
6.1	The paranormal: A new science	170
6.2	Summary, recommendation and conclusion.	181
6.3	References.	187
6.4	Bibliography.	189

CHAPTER ONE

General Introduction

1.1 Background of the study

Man is naturally an inquisitive being and in this era of growing empirical science, new marvels appear everyday.

The mysteries surrounding man can be noticed both in the

cities and traditional communities. Biologists are laying bare the secrets of inheritance through Mendelian genes, the chemical equilibrium of the body and the superb electrical instrument linking the whole body – the brain. Psychologists have been probing deeper into the complexities of mental states and we still have more to probe. For example, the nature of memory, everyman alive is remembering all the time, yet nobody knows how he does it, although there are plenty of theories to that effect. And we all sleep and dream and during the period of dreaming we feel our actions are physically real until we are awoken, this also cannot be explained.

Experimental research¹ has shown that at a distance, one human being could become aware of another's thought or feelings, this curious faculty has become known as telepathy. Why has this not been acclaimed as a momentous discovery? This is a question of great psychological and philosophical interest. It is true of course, that the faculty of extra sense or paranormal has little practical value for advocates of 'scientism' and of modern

experimental sciences. They postulate that it is unreliable. John Wellmuth defines 'scientism' as "a belief that science and the scientific method afford the only reliable natural means of acquiring knowledge as may be available about whatsoever is real"²

We take it for granted that every event has a cause which precedes it and that no event can have an effect before it has happened; also that for any event to influence another there must be some transfer of energy or force from one point to another. In the case of issues bordering on the paranormal, psychic energy or force is assumed or believed to be responsible for its physical reality and manifestation. Most of us, especially the scientifically oriented take it for granted that consciousness is more than an aspect of the physical process, that it is non-existent apart from a physical brain and that it can only become aware of its surroundings through the medium of a physical nervous system. These assumptions fit in with the whole body of information acquired through the natural sciences.

The paranormal (as against the normal or natural) is the realm of the unseen, a *psychic science* (This studies knowledge and issues that border on energies or forces associated with the mind) on its own which appears to have overwhelmed our rational thinking. An attempt to probe into it empirically has not been possible because no current empirical apparatus can venture into paranormal activities. We can only see or observe the effects but its causes have remained elusive.

In this era of advanced science and technology, it may be natural 'to revolt against the unknown particularly against an unknown which has in the past been labelled abnormal, supernatural, uncanny, and has been associated with fraud and superstition throughout the ages'³. However an investigation for clarity is necessary because it is an exclusive science or knowledge of its own.

Issues bordering on the paranormal and science have been of great interest to most philosophers. The reasons are that at one time or the other, we have been amazed or heard of

those bamboozled by powers in magical arts, miraculous activities within religious circles and paranormal arts by some individuals believed to possess innate powers.

In the same dexterity if not more, some defend scientific views with evangelical zeal and support wholeheartedly present day science with unquestionable dedication that is normally associated with religious fanaticism. In doing this, experimental scientists appear to have done a disservice to mankind in that they have failed to clarify the doubts and uncertainties surrounding the latest discoveries and may have misled the public into being regarded as the custodians of truth.

Science etymologically means knowledge. From this perspective it encompasses all there is to know, whether within the confines of sense experience or beyond sensory realities. A better way to comprehend the essence of science from this standpoint is to be exposed to the nature, history and philosophy of science.

In our attempt at comprehending the content of present day science or modern science and the paranormal, it will be pertinent to explore the possibility of using the history of science to enlighten us about some of the problems facing scientific thought, but has been the bases of the supernatural or paranormal.

In delving into this area of knowledge, there is the possibility of some neophytes in philosophy questioning the rationale for choosing a topic like paranormal. They might wish to say that this is not philosophy, but psychology, parapsychology or even occultism. Such questions are possible and are in fact, one of the problems faced by paranormal science – the problem of rejection by all well established disciplines and even the church. What I wish to answer any person with such a question is that philosophy is all encompassing and is in reality the mother of all disciplines. Thus, a philosopher can reflect on any issue under the sun, including the universe as a whole, ranging from the known to that which to some appears unknown.

The paranormal is a *psychic science*, being a psychic science; it studies energies or forces assumed to be associated with the mind, so it is simply an aspect of metaphysics. This is why Rene Descartes said that "philosophy" is like a tree of which metaphysics is the root, physics the trunk and all the other science the branches that grow out of this trunk⁴. In the light of the understanding given to us by the father of modern philosophy, I wish to interpret the concept of paranormal.

What is "paranormal"? "The paranormal consists of alleged occurrences or powers which, if actual, cannot be explained by our current understanding of physics"⁵. The paranormal does not necessarily posit any explanation, but simply suspects that we don't know everything about nature. In other words, the paranormal eventually wants to be considered "Normal" or "Natural" once we have learned more about nature. The paranormal is also 'a general term that describes unusual experience that lacks scientific explanation'⁶. It could also be defined as an 'alleged

phenomena that is outside of science's current ability to explain or measure'⁷

This word "paranormal" came into the English lexicon around the 1920⁸. It consists of two words *Para* and *Normal*. *Para* is derived from the Latin meaning "above", "against", "outside" or "beyond"; thus paranormal is described as anything beyond or contrary to what is deemed scientifically possible⁹. By this, the definition implies that the scientific explanation of the world around us is the "normal" part of the world and *Para* makes up the beyond part of the meaning.

Naturally, many philosophers have been plagued with the philosophical problem of sensory realities and extra-sensory realities. Their defence for any of these positions has been based on what they accept as realities as against illusions. We can identify this among others in the works of Heraclitus, Plato Rene Descartes, David Hume, Emmanuel Kant etc. Each of the explanations of realities by these philosophers has direct implication in understanding the position of science and the paranormal.

If we go into in-depth analysis of the concept paranormal and science, we will observe that there are elements of symbolism in both areas of knowledge. Symbols represent ideas and acts as the mirror of the unseen. In formal and empirical sciences symbols are codified and universalised. The same appears to be true within the realm of the paranormal.

Issues bordering on the paranormal phenomena within contemporary African philosophy are found mostly in areas where we investigate the African world view as it relates to seen and unseen being and forces. The paranormal or the supernatural is assumed to be 'the world of the mysterious, or the unknowable, that is not readily understandable by sensual mechanism, the incomprehensible entity'¹⁰. Despite the element of belief attached to the paranormal by those who claim to have experienced repeated success of certain inexplicable acts, the United States National Science Foundation, contends that scientific evidence does not support paranormal beliefs¹¹.

1.2 STATEMENT OF PROBLEM

Some of us have at one time or the other observed acts inexplicable using the scientific procedures. We may have heard of medical laboratories not able to dictate illness assumed to be projected by supernatural powers. We may also have seen the blind receive their sight, the Lame walked or tales of those who believed to have been dead come back to life in Christian crusades. These feats we believe to have been possible through an act of faith.

Within the realm of the magical arts, there are those who profess to be invincible to knife cuts and bullets impact. More still there are those who eat fire. Magic may be defined as a primitive form of applied science. Whether or not spirits or gods are thought to enter at some stage into the process their actions are compelled by the man in possession of the proper magical technique ¹². For a magical art to take place the magician sets in motion certain consequences of events and cause and effect then with some certainty execute his intention or thought.

By our understanding of experimental science, it is based on laws of nature and if magic is assumed to be a primitive form of applied science, it then implies that magic has its own systematic character. With this, the issue now is in what aspect do they differ from one another?

There has been an age long problem of dichotomy between the seen and unseen, mental and physical, world of reason, ideas and sense experience. With this dichotomy, many schools of thought emerged claiming prominence and have ascribed to themselves the custodians to the truth as regards understanding nature and forces behind it. An example is pragmatism. This rejects metaphysics or anything that does not yield practical utility. Pragmatism is best understood in its historical and cultural context. It arose during the late 19th century, a period of rapid experimental scientific advancement typified by the theories of British biologist Charles Darwin, whose theories suggested to many thinkers that humanity and society are in a perpetual state of progress. During this same period a

decline in traditional religious beliefs and values accompanied the industrialization and material progress of the time. In consequence it became necessary to rethink fundamental ideas about values, religion, science, community and individuality. Thus, 'any theory that works in practice is the true one, the hypothesis that works is the true one'¹³. Extra-sense or paranormal to them is nonsense.

In the realm of the paranormal is the case of those who utilize psychic powers to move objects at a distance (Psychokinesis or Telekinesis), those who can receive thoughts of others (telepathy) the clairvoyant-those who or can see and identify objects miles away without the use of the five senses. These acts fall within the realm of the super-sensible and naturally have no clear empirical scientific justification. This classification did not categorically state that it is not science, but that it is a science that is not true. Not true because contemporary scientific method of investigation cannot give interpretation to its processes and results.

The empirical sciences have passed through developmental stages right from the Copernican era. Its growth has reached a dimension where certain discoveries in this contemporary era cannot be easily explained. The issue of the theory of relativity and uncertainty principle plagued the minds of men and scientists, they were no surer of the certitude of scientific laws. Joan Solomon wrote as regards this perplexing situation that "Gone was the comfortable certainty of previous ages ... the power of exact prediction of future events from scientific laws was lost forever"¹⁴. Issues bordering on subatomic particles have come to be more perplexing as more insights' overwhelming mankind were opened.

The problem is: How can we interpret this inexplicable dimension of knowledge bordering on these two realities (paranormal and normal)? What is the underlining force or energy in miraculous, magical or other paranormal acts as well as at the borders of the experimental sciences that happens to bamboozle man and has remained inexplicable? An attempt to present the meeting point of both assumed

dichotomy and procedures of both phenomena is the essence of this dissertation.

1.3 PURPOSE OF THE STUDY

It is pertinent to note that every problem needs solution. But for the solution to be successfully sorted out there must be a purpose or objective that will necessitate the search for the solution. The main purpose of this research is based on the following problems. The criteria for justifying what should be regarded as truth has been a major concern of philosophers of science. Ludwig Wittgenstein limits the scope of philosophy to the consideration of empirical sensible realities. In his book, *The Tractatus logico-philosophicus*, he explicitly recommends that empirical verifiability should serve as criteria for truth. Thus, anything not verifiable is nonsensical; hence extra-sense is nonsense. In other words, issues bordering on the paranormal are abnormal. The pragmatists on their part advocate that a theory is true if it works. It emphasized experience, experimental enquiry that will yield practical utility.

A basic error in this position is its failure to realise that a man has two basic ways to knowledge acquisition. One can know through direct apprehension or by intuition, without any direct agency of the senses. It is on this ground that we may appraise the "Against method" of Paul Feyerabend. The idea that science should be run according to fixed universal rules is actually unrealistic. Reasons being that "All methodologies have their limitations and the only "rule" that survives is "anything goes"¹⁵ We may from this perceptive interpret the concept "anything goes" from the pragmatists point of view which postulated that truth is that which works, or yields satisfactory results in terms of our experience and in addition profitable for us to believe or what is good. Thus, if an experimental scientist can displace an object by applying physical force, for example by playing golf and successfully hit its target and the paranormal expert, by psychokinesis or telekinesis sends the ball rolling in the air without observed physical senses and successfully hits his target, both have achieved their goals. The issue

however, is that one is generally known as a method of playing golf while the other is not.

The purpose of this study is to critically analyse, interpret and if possible prescribe the melting point between the concepts paranormal and empirical science and in addition to making "paranormal" intelligible in the light of contemporary scientific and technological development. The major questions are; what are the methods applied by experts in paranormal feat and experimental scientists?. Are they similar or different? Of what value are the results of both in solving man's existential problems? What are the underlining forces or energy behind paranormal activities?; Can they be juxtaposed with current development in particle physics? For a proper comprehension of the issues under review, emphasis shall be placed on clarifying issues bordering on the place of symbolism in paranormal and empirical science. The force or energy behind telepathy and psychokinesis are of great significance. Other areas are the issues of "field theory" or "fields of force", uncertainty

principle, theory of relativity, atoms and sub-atomic particles.

The cogent understanding of these and other concepts thematised above will help us explain the meeting point between the paranormal and the experimental science. In summary, the purpose is to:

1. To show that no single method of investigation can give a satisfactory solution to the understanding of nature.
2. To expose the effect of propaganda as a tool that can stultify research and research proceedings.
3. To re-examine research in paranormal and juxtapose it with recent developments in particle physics.
4. Finally to show how only the unification of various approaches in the study of nature could serve as a panacea to paranormal and experimental science dichotomy.

1.4 SIGNIFICANCE OF THE STUDY

This research aims at a fuller understanding of the methods of the experimental science and that of the *psychic science*

(paranormal). It is hinged on identifying or the possibility of showing the meeting point of what we term as paranormal acts and experimental scientific activities. We believe that at the end the major contribution of the work to existing knowledge shall be the demystification of acts that has been seen as superstitions or fetish. The paranormal shall be seen in the light of a new epistemological leanings. In doing this, man's intellectual and social life will improve because he would be knowledgeable and free from dogmatic mystification of acts which are as "natural" as the theory of relativity and uncertainty principle. In doing this, it will open up completely a new perception of the universe and contribute in the development of philosophy of science.

1.5 SCOPE OF THE STUDY

Science and philosophy of science are vast area of study with many aspects. There is the aspect of the historical development of science and the philosophy of science. Each of these area gives an insight into the character of scientific knowledge and claims about scientific knowledge. It delves into concepts formulation, theory construction, methods

and procedures of scientific investigation. "It goes further to critically analyse the implication of scientific methods and models for science, technology and society¹⁶. It also goes into the social basis of science and the institutions in the scientific enterprise. Furthermore, it hopes to identify the role of education, creativity and dogmatism. Politics in science is another area that cannot be forgotten because it involves decisions about expenditure involving scientific investigation.

Paranormal, a *psychic science*, as a study on its own is viewed holistically side by side experimental "scientific" knowledge. The methods and the procedures adduced to be necessary in arriving at the truth will be a major area to critically analyse. This critical analysis of scientific procedures is one of the basis of philosophy of science, thus the scope of this study is limited to the philosophy of science. Emphasis within the paranormal shall be psychokinesis and telepathy.

1.6 RESEARCH METHOD

The new **Webster's Dictionary of English Language** defined method as "a way of doing something, a procedure for doing something". The question is, does philosophy have any method? The answer is that philosophy does not have one particular method. A. C. E. Wing warns that desiring one method of philosophy is dangerous because it unnecessarily limits the scope of philosophy by excluding those realities that are not amenable to the defined method¹⁷.

This work is based on textual analysis, internet sources and observations. The method of this dissertation is hermeneutic. It shall also be descriptive, historical and analytic in character. By hermeneutic, we mean to express, interpret, translate and explain or to make intelligible. In this research, the phenomenon, paranormal will be made intelligible and unravelled as well as the "experimental science". By descriptive method, we mean that we shall "attempt to unravel the essential elements and characteristics of any phenomenon or attribute. It could be extensive or narrow in coverage"¹⁸ In historical method, we

shall deal with determination, evaluation and explanation of the past events – essentially for the purpose of gaining a better and clearer understanding of the present and making a more reliable prediction of the future”¹⁹.

The history and growth of science or knowledge will assist us to achieve a clear philosophical investigation and synthesis between the paranormal and experimental science. The presentation of our research reports shall closely apply the Chicago manual of style (CMS) whereby references and footnotes of a chapter come at the end of the chapter rather than at the foot of every page. This method is widely used by writers, researchers and most philosophers.

1.7 CLARIFICATION OF CONCEPTS

The whole of this thesis is hinged on making the paranormal intelligible in the light of recent developments in particle physics. In doing this, certain terms would need

clarification in order to avoid ambiguity. The need is as a result of the fact that most concepts are capable of having more than one connotation. Another need for conceptual clarification stems from the fact that it forms part of theorising. Thus, the most persistent concepts of this study requires clarification because these concepts have been explained in different other concepts. This is important because "the vagueness of a concept is equivalent to a difficulty in observing clearly the thing to which the concept is presumed to refer"²⁰

Paranormal

The focus of our study is the paranormal. This phenomenon should be understood in the light of the following definitions. (i) As alleged occurrences or powers which if actual, cannot be explained by our current understanding of physics"²¹ (ii) As a general term that describes unusual experience that lack a scientific explanation²² (iii) As a phenomenon that is outside of science's current ability to explain or measure²³ Note that science from this stand point is experimental science.

Drawing from this understanding, paranormal acts include among others, miraculous acts like faith healing, prophecies or foretelling the future, magical acts like voodoo, invincibility to bullet wounds or knife cut, exorcism or spells. Others include psychokinesis, telepathy or clairvoyance. As long as all these phenomena cannot be explained by our current understanding of experimental science, they are all classified as paranormal. However, our thesis shall be limited to **psychokinesis** and **telepathy**.

Science

The term science is used in a wide range of senses as against experimental science. For better classification, it is necessary to note that science has two major divisions, real and formal science. Within the purview of real science are the natural, social and the cultural sciences. Real sciences base their research on "empirical" justification. It takes up some definite aspect of the world of experience through the use of some definite methodology. Its study could be a part of nature (as with the natural sciences) or what is created through human activity (as with the cultural sciences).

Real science (with emphasis on empirical justification) comprise of physics, chemistry, astronomy, biology, geology etc. As part of real science are the cultural sciences and social sciences respectively. The cultural sciences comprise history, religion, art, language, etc., while the social sciences are political science, sociology, economic etc.

Formal sciences comprises of formal logic, which deals with mental processes or logical reasoning. Mathematical sciences, as a type of formal science emphasise pure forms or qualities and abstract structure and facts. The formal sciences do not go after sensory realities, but achieve their results through logical reasoning. Formal sciences have a formal and deductive character. Sciences is said to be formal if its contents, arguments and procedures obeys abstract rules. Formal science generally includes mathematics, theoretical physics and statistics.

PSYCHIC SCIENCE

By the wide range of the concept, "science" the concept *psychic science* is a science on its own as against

experimental science which is more “empirical” and inductive in character. The concept has its origin from the Latin word *Psyche*, meaning mind, soul or spirit. Thus, if we use the term *psychic science*, the reader should be able to make the distinction bearing in mind that it has its own method and procedures peculiar to experts in that field. Psychic science studies issues that border on energies or forces associated with the mind. Such energies or forces are perceived to be responsible for the physical reality of phenomena such as psychokinesis and telepathy.

Psychic Energy

Psychic energy can be defined as energy possessed by man and is naturally occurring independent of the will of man sometimes consciously or unconsciously radiated. Thus, we may talk of psychic radiation, psychic fields, psychic wave or psychic force. These terms are used to describe various phenomena within the *psychic science* that experimental sciences have not been able to explain or measure. This study assumes that the ontological basis of the activity of paranormal acts is the human mind. (The human mind is

another complex concept that may need clarification). This psychic radiation, wave or force is an energy emitted from the human mind relative to individual understanding of “universal laws”. The effect of psychic energy can be seen in psychokinesis and telepathic phenomena.

Universal Laws

Universal Laws as used in this study is not limited to theories that prove to be so universally valid or true, that they are true anywhere in the world and have such a high degree of probability. (This can be called, natural laws). Our concept of universal law is inclusive of methods beyond experimental scientific investigation that have yielded practical utility and have been accepted as true by a community of experts without necessary empirical justification.

Psychokinesis

This term is taken from two Greek words *Psyche* meaning mind, soul or breath and “Kinesis” meaning motion.

Literally, it is “movement from the mind to something else”²⁴. Psychokinesis is a general term used to describe a variety of complex mental force phenomena (including object movement) and **telekinesis** is used to refer only to the movement of the object, however tiny (a grain of salt or air molecules to create wind or move large automobile, building, or bridge). Hypothetically, a person could have very profound telekinetic ability, but not able to produce any of the additional effects found in psychokinesis, such as softening the metal of a spoon to allow its bending with minimal physical force²⁵. Conversely, someone who has succeeded in psychokinetically softening metal once or a number of times may exhibit no telekinetic ability to move objects. However, in this work the term psychokinesis will be used to describe all phenomena within what we described above.

Telepathy

This is the ability to perceive another person’s thought by means beyond the ordinary senses. It also means the

communication of impression of any kind from one mind to another, independent of recognised channels of the senses. In telepathy, one can consciously or unconsciously transfer ones idea, thought or wish to another and can also receive consciously or unconsciously depending on the innate "psychic Energy" and ability of the individual ideas of that individual.

Field Theory

This is a theory that tries to reconcile all known phenomena, the nature and behaviour of all matter and energy into a whole.

Teleportation

This is the transfer of matter from one point to another more or less instantaneously. Teleportation has been widely utilized in works of science fiction. Teleportation might explain various allegedly paranormal phenomena.

Morse code

This is a form of encoding that transmits telegraphic information using rhythm.

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CHAPTER TWO

LITERATURE REVIEW

Introduction

A review of literature is generally believed to be an essential ingredient for the development of knowledge through research. The significance of the literature review derives from the fundamental belief among researchers that the more one knows about the existing methodologies, findings and conclusions in one's area of research; the more one can tackle one's own research problem. This section of the research is therefore directed at examining the contributions of scholars to the central issues in this research and indentifying gaps and attempting to fill them.

The major concern of this study is to make the paranormal intelligible in the light of contemporary experimental science. This study falls within the confines of philosophy of science, because it is predicated on methods and justification of science, whether in the realms of "Normal" science or paranormal, natural science or the so called supernatural science.

It is pertinent to note that in dealing with this type of study, you cannot divorce the history of science because science

has gone through many stages or evolutions and is still on the process of resolution. There is in fact no literature that has holistically investigated the resolution of experimental science and paranormal. There are literatures, scattered relics and information about the paranormal and about scientific methods. In this chapter, we shall present few of the earliest literatures on this subject.

Do the Paranormal Exist?

The existence of the paranormal and its physical reality has been contested. It has been part of our natural existence just as the mind and its processes. The existence of the mind as a thinking thing cannot be doubted but its activities are subject to philosophical investigation.

Approaching the paranormal or things that border on Extra-Sensory perception (ESP) from a research perspective is often difficult because of lack of acceptance of the physical reality of most of the purported phenomena. By definition, the paranormal does not conform to conventional expectations of the natural. One of the attempts at

establishing the possibility of extra-sensory perception (ESP) (An aspect of the paranormal) is the work of Rosaline Heywood titled: ***Beyond the Reach of the Sense***. The book posits that there exist unrecognized faculty in man which has been "cast aside as nonsensical since it would not fit in with the concepts of current science"¹ The work went further to state that experiments conducted under rigid scientific conditions have now shown that it is possible for one human being to become aware at a distance of another's thoughts or feelings, under conditions strictly controlled to ensure that no knowledge of them could have been acquired by sensory means. This faculty has been known as telepathy.

The next question was, could human beings also get information about inanimate objects of which there was no mental image in any mind? Further experiments were performed to demonstrate that certain participants could report with a high degree of correctness, the order of packs of cards which was unknown to anybody after they have been mechanically shuffled. Experiments have also shown

that not only can the limitation of space be thus overcome, but apparently those of time as well. Rosalind Heywood did not take a firm stand despite the results of the experiments, but allows the reader to judge himself.

What the experiments in all have come to produce is that "Man is a creature who can make contacts with distant events by an unknown process, which does not invoke the use of sign or hearing or touch or taste or smell, and which to some extent at least is independent of time"² This curious faculty is of great significance and requires a philosophical interpretation. The reason is that beyond the fringes of telepathy are other inexplicable acts that have repeatedly occurred with accuracy without doubts by those involved.

The issue is that the simple understanding that such a faculty exists could lead to a revolution in thought about the nature of living creatures and their relation to their environment. Our problem however, is that the laws which govern this phenomena is not yet known. The question of great philosophical or psychological interest is; why is it not

acclaimed a momentous discovery just like the uncertainty principles? Or like the theory of relativity? Why is it ignored? Though Heywood did not notice or mention uncertainty principle or the theory of relativity as a comparison, but she wondered why this faculty which is inexplicable should be ignored. Her position was that there are two main reasons why they are ignored. These reasons in fact form a major interest in my philosophical investigation of this hidden faculty.

The first is that we accept without question certain hypothesis on which both our practical activities and our scientific theories are based. We take it for granted that every event has a cause which precedes it, and that no event can have an effect before it has happened; also that for any event to influence another, there must be some transfer of energy between the two. Some of us nowadays also take it for granted that consciousness is no more than an aspect of physical processes, (Materialistic conception of the universe) that it is non-existent apart from a physical brain, and that it can only become aware of its

surroundings through the medium of a physical nervous system. In other words, we do not accept that mind can be separated from body. These assumptions fit in with the whole enormous body of information acquired through the natural sciences, and are believed in by most educated men in the twentieth century. I must however stress that this assumption does not fit into most African traditional communities. In Nigeria, with emphasis on the Igbo, Yoruba and other traditional communities, issues of the paranormal are normal. Normal in the sense that these phenomena are an integral part of the society. The seen and unseen world are parts and parcel of an existence. In Igbo world view, every event always has a cause. Events must have identical causes. That a tree fell and crushed a man to death is not sufficiently appreciated as a fatal accident. Just as in serious illness, what engages the people's attention is the question "why should it be this man and not another person to be crushed." A deeper underlying cause is postulated: It is either a result of punishment or retributive justice meted out by paranormal forces that has been offended, or specially, the ancestors are responsible.

Occasionally, such mishaps are attributed to human agent-evil men or women with paranormal powers. Thus, paranormal acts are an integral part of the African traditional social system. Those who tend to shy away from this issue are mostly the well educated and euro-centric bias and oriented towards the experimental sciences.

One major thing we have to understand is that advocates of scientism or the scientific methods as postulated by the experimental sciences see telepathy or any other paranormal feats as a heresy thus should be discarded or regarded as nonsensical and absurd.

The second reasons adduced by Heywood why these latent faculties are ignored include among others, the fact that men of science before modern techniques were developed, the evidence in favour of telepathy were anecdotal and not watertight. Issues such as

“a mother’s sudden awareness that her distant son was drowning; a wife’s vision of her dying husband; a man’s consciousness that his friend was in desperate need; an apparition given

warning of danger; fore knowledge of an unexpected event; these were the kind of phenomena which aroused contempt”³

The reason for this contempt added Heywood is based on the perception that they were not evidence collected in a scientific manner, and until the power of receiving extra-sensory impacts could be tested experimentally its existence could always be denied. A closer and critical observation may show that these schools of thought are hinged against anything unseen, metaphysical or anything assumed not provable. We may all be aware of earlier literature by August Comte classifying society into three (3) stages in favour of science, the pragmatists assuming metaphysics as nonsensical; these are preludes to bias for the experimental science.

The fundamental issue in this work is that new data have been made precise and science (experimental science) must in future take note of them in its attempts to explain the nature of the universe.

Another very significant literature in this thesis is that of Percy Seymour titled: ***The Paranormal: Beyond sensory science***. The author's motivation which drew my interest is his conviction that the large-scale structure and dynamics of the universe are intimately bound up with life on earth and the structure of atoms. This means that the author believes that there is interconnectedness between one object or substance and another. By this he tends to postulate that there is no vacuum in the universe. This study opened the door to an explanation of some aspects of the paranormal, including the human aura; apparitions, telepathy, clairvoyance and or ability to look into the future. Dr. Seymour's work investigates a level of space inaccessible to the senses and scientific instruments and therefore beyond our present understanding of reality.

It is accepted by most scientists that life on earth started with a single organism. This was the branch point for all life, to which we all have genetic connections of different degrees of clarity. Extinction of specie for any reason, leads to the termination of the "chain of gene telephone

exchanges" for that specie..."⁴. By this, Seymour is trying to state that people or individuals have genetic link with one another like a telephone exchange and this is possible because of magnetic memory from one person to the other. We also opined that all human life share a common branch point, this branch point is a long way in the past, and so communication through it will be very weak. The ability to communicate via a common "gene telephone" exchange becomes stronger as we move to groups whose members have links that run close together for relatively long periods of time. Thus, it is strengthened by racial similarities and family ties, and can be observed between identical twins.

There are various cases of this interconnectedness within man. For example, twins having same type of pain together, giving birth together or dying together. There was an issue published in an Australian magazine – **Truth** where:

"...twin sisters Helen and Peg, one night three quarters of an hour before midnight, Peg was killed in a car crash when the steering wheel penetrated her chest. At the same time Helen woke up screaming, saying she has

a severe pain in her chest. On her way to the hospital, she died in the ambulance”⁵

This shows that Helen and Peg had a connection despite their distance from one another. There is also a mysterious synchronism between twins that justify interconnectedness. A particular strange example recorded by Seymour is between identical twins. It occurred at 4:35 pm on a Saturday in July 1948. At this time Alice Lamba was reading in the parlour of her home in Springfield, Illinois, U. S. A, when she suddenly felt a jolt on the left side of her body. This was followed by a feeling of shock and sharp stabling pain in her side. She then seems to be knocked off her chair by some unseen force, and just before fainting, she said “something’s happened to Dianne”. At that very instant, seventy miles away, Dianne her twin, was travelling on a train that had just been derailed, and she had been thrown across the carriage. When she woke up in hospital, it was to find that she had suffered severe concussion, and that she had fractured two ribs. Alice also complained of pains in her side, and when she was X-rayed it turned out that she had fractures just like her sister at

that same two ribs⁶. Investigations show “that many twins possess a strong telepathic link, although this does not always show up convincingly in controlled laboratory experiment”⁷

All these examples of interconnectedness given were not peculiar to Seymour, but also applicable within our social milieu. There are many other examples within our communities that justify the issues of paranormal activities. What we want to stress is that these activities are as natural as the laws in physics and its methods are as “scientific as possible within the framework of our understanding of scientific methods.

Another interesting work that justifies the existence of the paranormal is that done by Dr. J. O. Mume in Nigeria, titled “How I acquired the knowledge of traditional medicine” in ***Traditional Healing: New Science or New colonialism.*** In this work the author gave an account of his day to day special training on traditional healing method. He delved into how he was introduced into the esoteric. He states:

"... my instructor invited me again into a private room to prepare me for a special knowledge. He brought a special solution prepared of herbal materials and asked me to open my eyes and he poured the solution into them. For over an hour I was uncomfortable and fell into a state of deep trance. When I woke up from a deep sleep, I found myself generating esoteric powers which gave me increased ability of clairvoyance to identify the witches and wizards of our street"⁸

Mume's training as a qualified native doctor went through curative and destructive methods that are unknown to orthodox medical doctors and unbelievable by them. "Medical doctors want tests and proof, and when they have proved, they condemn again. Our proofs are the results"⁹

The statement of Mume shows that the traditional methods emphasize the pragmatic content of the research. Practical utility is the watch word as against conjectures and refutations.

Within the parlance of the paranormal, battles are fought without physical guns, knives or spears, but with psychic powers or energy using special principles or techniques that may be interpreted by future science and technology. The author recounts a paranormal battle between his instructor or master and another man:

"...I remember in 1942 when my master had a land dispute with another native doctor of repute. Both challenged each other in root power, and I heard my master telling his rival that he would not live to see the seventh day. The same word was repeated to my master by his opponent. Then it was for us, learner doctors, to watch whose power will surpass the other. I saw my master fortifying himself with native preparations against wizards attack and, as well, sending powerful destructive spells telepathically to his opponent. In the early morning of the third day after their quarrel, there were shouts that Mr. X had died. The Mr. X was the rival of my master"¹⁰

One interesting aspect of this work is the subject, telepathy. What is the scientific interpretation of this telepathic act? What connection has Mr. A with Mr. X that the telepathic transference will have effect? The result of the spells telepathically programmed, is to be "Struck to death by lightning which penetrated his thick mud wall to strike him while in bed"¹¹ All these need explanations.

One of the most interesting tales by Dr. Mume is his experience of healing a mentally deranged woman through psycho-analysis. This analysis was a situation where by he talked to the mentally deranged woman and observed that her situation was a product of her past thought and imagination. This observation by Mume hypothesis that certain situations that we thought that supernatural forces are involved, might simply be the activity of altered state of consciousness- a state of mental imbalance. This imbalance most times are interpreted by many as an activity of the gods, spirits, or demons. He states that he would like to

"...acquaint my audience with the facts that the traditional methods of treating mental disorders

are quite different to that practiced by the medical psychiatrists and the traditional methods are quite safer and effective".¹²

There was a case of a twenty seven year old woman who gave birth to a male child and went mad. Despite her malaria fever, cold and headache that have been treated, her constant complain was "I have a mighty snake going up and down in my stomach trying to take my life". She wept and said she would die adding, "Doctor, can you remove this snake from my belly"?

The author played on her psychology in order to successfully effect healing on the insane woman. He sent one of his assistants to get a snake dead or alive, this was done. He gave her herbal emetic to induce vomiting. While she vomited, he rubbed pepper into her eyes in order to "blackmail" her from knowing his tricks. At this instance, he brought out the dead snake he concealed in a bottle and placed it among her vomit and asked her to open her eyes, only to see a dead snake in front of her. He shouted in an

unusual voice “your trouble is now over, your trouble is now over. I have killed the snake that is going up and down in your stomach, and I have made you to vomit it”¹³ With this technique, the woman’s insanity disappeared she was so happy as she pointed at the snake telling her husband “I told you there was a snake in my body”.

In this situation, what do we say? She was mentally ill because she had a belief that a snake was right inside her. Then she was tricked to believe again that the snake had been killed and she became well and sound. This shows that probably there is a clear interconnectedness between the mental and physical and that words have special effects like sound waves with certain vibrations that affect the higher dimensions of the physical human being which is the mind. The traditional medical practitioners may not reflect in that dimension, all they know is that their methods bring practical utility, but how it works remains elusive.

Another very interesting area of the paranormal is that of psychokinesis – ability to affect matter through the activity of the mind. It is a term used to describe “ability of the mind to influence matter, time, space, or energy without the

use of any currently known type of physical means”¹⁴. Example of psychokinesis includes distorting or moving an object¹⁵.

Records show that paranormal feats have been performed by many individuals, but the force or energy behind it has been unknown. Notable claimants of psychokinetic or telekinetic abilities are Uri Geller, an Israeli famous for his spoon-bending demonstrations. Nina Kulagina an alleged Soviet psychic of the late 1960 and early 1970s. Another is Felicia Parise, an American medical laboratory technician who allegedly was able to repeatedly demonstrate telekinetic movement of small objects beginning in the 1970s. In the first reported instance spontaneously, and then with practice by intense conscious intention. “she said her inspiration for making the attempt was in viewing the black-and-white films of Nina Kulagina performing similar feat”.¹⁶ Another individual who developed this ability by viewing the films of Nina was Alla Vinogradovo of the Soviet Union who is said to have been tested successfully under laboratory controls.

A number of researchers have conducted studies to determine whether mere human intention could affect the movement of moving objects. Over three thousand experimental runs have been conducted with twenty five individuals. The results were significantly beyond chance expectation.

The most extensive research on metal-bending was conducted by physicist John Hasted at the University of London's Birkbeck College. His subjects were mostly individuals who had developed an interest in metal-bending upon exposure to the public performances of Uri Geller. They were asked to bend or deform metals without touching them. The specimen were attached to resistive strain gauges or (in later work of their research) Piezoelectric sensors where used. The sensor is a device that uses the piezoelectric effects to measure pressure, acceleration, strain or force by converting them to an electric signal. Signals from these devices were then amplified and registered on chart recorders. In all the sessions conducted,

bending was observed, however anomalous signals frequently appeared on the chart records – from sensors separated up to several feet from each other. This led Dr. John Hasted to hypothesize an unknown form of conduction of electrical charge from the subject's bodies through the atmospheres to the sensors¹⁷. This unknown form of conduction of electric charge from the subject's bodies is simply called psychic energy. Psychic energy from the position of this work is the underlying force or wave responsible for the physical reality of Paranormal Phenomena. This study assumes that the ontological basis of the activity of the Paranormal is the human mind through unconscious or conscious intentions.

A number of studies on this issue suggest that conscious intention can influence the growth and movement of biological targets. One of such was conducted by Dr. Carrol B. Mash in which bacterial growth was psychokinetically accelerated and retarded according to the intentions of randomly selected college students. In two separate studies, the growth of fungus was less when an attempt was

made to mentally retard it than was the growth in the controls.

These studies on special areas of the paranormal and also the researchers experience on telekinetic energy on humans and objects, raise many questions regarding the nature of energy or powers involved that appears to transcend experimental scientific explanations. This inability to explain these phenomena by experimental scientists resulted to its classification as pseudo-science, superstition etc.

The question we have again is; how do we see the paranormal and science? Is it in the light of development of ideas, competing theories or anything that has pragmatic content and cash value? This also leads us to another question within our review:

Are the Methods of Science the Basis for Understanding Reality?

Issues and questions of this nature are epistemological and fall within the confines of philosophy of science. Philosophy of science as a study began with the pioneering efforts of Francis Bacon in the 17th century as documented in his book, *Novum Organum*¹⁸. Some scientists and philosophers such as Galileo Galilei, Isaac Newton, Rene Descartes etc, emphasized the scientific methods. For them, the more adequate method to use in knowledge is that of experiment and the language of mathematics.

August Comte, probably impressed by the growth and development of knowledge, especially experimental science, was moved to offer positivism, not as a way of thought, but as a major solution to the problems of society. The issue was how to maintain social unity and order at a time when theological beliefs are no longer held in common and when anarchy of ideas threatens anarchy in society, the only solution as Comte saw it was for people to accept positivism. Things that have to do with the paranormal were viewed with contempt and seen as religious and this pattern has

held sway for centuries and maintained by the authority of the church.

In order to explain why there was improvement in knowledge especially experimental science, Comte played down anything, metaphysical or within the borders of the supernatural. Thus, in his book: ***The positive philosophy*** (1856) he stratified society into three stages. These three stages represent the history of ideas which indicates the movement of thought as regards discovery of truth. The stages are Theological stage, in this according to him man sought transcendental explanation of the universe that is of the phenomena or nature in supernatural being. Imagination other than reason is the primary instrument. The second stage is the metaphysical stage where man supplants the preceding transcendental explanation of the theological stage with immanent abstract explanation of the causes of natural phenomena. The third and final stage is the stage of positive science where explanation of the universe is based on observation of facts of experience. He believes that the most developed nations of his time were in

the positivistic stage because they were opposed to transcendentalism. He says "the spirit of the positive philosophy rose in opposition to that of the superstition and scholastic systems which had hitherto obscured the true character of all sciences"¹⁹

The above is a clear indication of the bias against anything supersensible, hence a propaganda for scientific method which invariable is the "spirit" of positive philosophy. We can see that the paranormal is seen as superstitious and they perceive the scholastics as dogmatic. The issue now is, when do we say that a particular knowledge is scientific, true or acceptable?

Anyone who has critically examined the history of thought would discover that there is always a trend that permeates in an epoch. We have observed the evolution of science as presented by Comte who outlined the history of thought in three stages. The conclusion we could get from his developmental stages is that the paranormal should be discarded in favour of experimental science.

Thomas Kuhn's, *The Structure of Scientific Revolution* is a detailed work that exposes the factors that provide or retard the development of a scientific revolution. The work postulates that each scientific epoch dominated for a time before it was succeeded by another. In history, we have had for instance the Aristotelian physics, the Astronomy of Ptolemy, the Optics of Newton, the electricity doctrine of Benjamin Franklin, the Phlogiston²⁰ chemistry, etc. Each of them had its day before being succeeded by something else. Similar elements may be present in them, yet they have different meanings. To go from one system to the other for Kuhn is not a rational factor, but often propaganda, and interest orientation that establish the new system. As one theoretical system gradually receives general acceptance, a paradigm is established. This is then followed by a period of normal science. During normal science rather than attempts to falsify theories, scientists engage in puzzle – solving activity. Their faith in the underlying theory is such that anomalies are not treated as falsifying instances of the theory but as puzzles to be solved. The failure to solve a

puzzle is not attributed to the inadequacy of the paradigm, but the inadequacy of experiment or the incapability of the scientists. Normal science from the Kuhnian perspective means "... research based upon one or more past scientific achievements; achievements that some particular scientific community acknowledges for a time as supplying the foundation for further practice"²¹

An important factor for the success of scientific revolution is the advantage of age between the younger and older generation of scientists. Representations of a new system are often young people who take advantage of their youth to carry through their views at the demise of the older generation of scientists. Thus scientific revolution takes place when an old system is suppressed by a new one. According to Kuhn as stated above, a normal scientific tradition comes to be when a group of persons come together and are convinced that the interpretation given to some phenomena is correct and that from this interpretation, models for further solution of problems are possible. Such models is what Kuhn refers to as

paradigms.²² A paradigm for Kuhn is either the entire constellation of beliefs, values, techniques and so on shared by the members of a given community (or) on the other hand, it denotes one sort of element in that constellation, the concrete puzzle-solutions which, employed as modes or examples can replace explicit rules as a basis for the solution of the remaining puzzles of normal science.

By the understanding we have gotten from the above, the concepts "Normal science" and "paradigm" from the Kuhnian perspective are almost synonymous. By scientific community, Kuhn means adherents to a paradigm; men and women who share a paradigm or an idea.

Thomas Kuhn rejects all forms of falsificationism as postulated by Karl Popper, arguing that all paradigms normally contain anomalies. The anomalous results which may occur during normal science are suppressed or dealt with by the use of ad-hoc hypothesis. Nevertheless, a time may come when the number of anomalies becomes so large that the ad-hoc hypothesis can longer contain them. Thus

making most members to lose faith in the paradigm. This is regarded as a period of crisis. This period of lack of confidence on the paradigm may result to what Kuhn calls a “paradigm shift” which constitutes a scientific revolution²³

An “anomaly” or scientific crisis is a situation that arises when Normal science or a paradigm fails to answer the questions or try to solve problems inherent in a scientific community. In all, what Kuhn states is that scientific investigation are influenced by the interest and goal the scientist wishes to achieve. If this is so, then it is a big point against the supposed objectivity of scientific results. And this should be directed to those who emphasize on method within the scientific enterprise. Kuhn recognizes the uniqueness of modern scientific revolution, he states “what distinguishes the modern scientific revolution from earlier revolutions or transformation in science is that for the first time, science acquires a universally accepted paradigm contrasted with earlier times when there were equal competing models.²⁴ This new universal paradigm is what we refer to as the experimental science.

Some of the major areas this study will benefit from Kuhn is the fact that most scientific investigations are influenced by interest and goal. Secondly by the understanding of paradigm we shall be able to understand the political economy of scientific investigation and how it has undermined studies within the borders of empirical sciences called the paranormal. His argument shows that psychology plays a major role in scientific investigation.

Many ancient ideas concerning nature and the cosmos are often dismissed as myth, Kuhn cautions us against such labeling. He states "if these out-of-date beliefs are to be called myths, then myths can be produced by the same sort of methods and held for the same sort of reason that now lead to scientific knowledge. If on the other hand they are to be called science, then science has included bodies of belief quite incompatible with the ones we hold today. Giving these alternatives the historian must choose the later. Out-of-date theories are not in principle unscientific because they have been discarded"²⁵

The above are some of the general ideas that we need to keep in mind as we examine different views in the current state of science and compare these with view of science hundreds of years ago.

The significance of Kuhn's work in this research is in the area of paradigm/shift. Issues bordering on the paranormal before the propagation of scientism were not disparaged. It existed as part of the human nature thus incontestable within the framework of knowledge. What really happened was the overflow by a different school of thought that emphasizes scientific methods. This however does not mean that the paranormal has been abandoned as a science, the only problem is that the new paradigm with its community have turned their attention because of the "spirit" of the age hence dismissing anything paranormal as not scientific.

One of the major philosophers of science who made an ingenious attempt to solve this problem is Paul Feyerabend. His book: ***Against Method: Outline of***

an Anarchistic Theory of Knowledge is a great work that appears to unify all sciences. Feyerabend is a methodological anarchist, because he believes that the whole notion of a methodology of science is an illusion. He claims that none of the methodologies of science has lived up to expectation and that these methodologies have not provided adequate rules for the guidance of scientific activities. According to him all scientific methodologies have their limitations and the only rule that really holds is "anything goes". For Feyerabend the fact that the future of science with regards to development is unpredictable, and given the fact of the complexity of any realistic situation in science, it will be implausible to ask a rational scientist to adopt this theory because it receives most inductive support from accepted facts (inductivism) and reject that theory because it is incompatible with generally accepted facts (falsificationism proposed by Popper). All these rules are not progressive within the scientific enterprise. Thus, Feyerabend states

“The idea that science can, and should be run according to fixed and universal rules, is both unrealistic and pernicious. It is unrealistic, for it takes too simple a view of the talents of man and of the circumstances which encourage, or cause their development. And is pernicious, for the attempt to increase our professional qualification at the expense of our humanity. In addition, the idea is detrimental to science, for it neglects the complex physical and historical conditions which influence scientific change”²⁶

The criticism made by Paul Feyerabend in his ***Against Method*** was directed against the positivists inductivistic methodology and the position presented by Karl Popper and others. Feyerabend in his critiques considers as unpopular the view that science works by collecting facts and inferring theories from them. He argued that theories should not follow from facts in the strict logical sense. He went further to ask; to what extent can the theory of relativity be said to be supported by facts. In dismissing all scientific

methodology as inadequate Feyerabend went on to discuss the relationship between science and other forms of knowledge. He observed that many methodologies of science present as though it is the paradigm of rationality. Science instead is one of the many ideologies that should be treated as fairy tales.

The propaganda (according to him) that science is superior makes its investigators not to delve into other forms of knowledge; this notion is what he abhors. For him, if justice is to be done in making comparison between science and other forms of knowledge, a thorough investigation of the nature, methods and aims of science must be carried out "side-by-side" those of other forms of knowledge.

The objective of Paul Feyerabend is to free society and man in particular from the grip of science. By this, individuals will be free and allowed to possess liberty so that they can lead a rewarding life. This can be made possible by studying "historical records, textbooks, original papers, records of meetings, and private papers, letters and the

like.²⁷ The main point being put across by Feyerabend is to stand against the propaganda of scientism or institutionalizing science to the detriment of humanity. With this, individuals will be encouraged to choose between experimental science and other sciences.

One of the major issues that militate against humanity is the politics of science. It has become institutionalized that science subjects are taught and are made compulsory in schools. In Nigeria scholarships are given mostly to those who are inclined to science more than others. In America people are free to belong to any religion of their choice, they are however not free to demand that his child or children be allowed to study paranormal sciences like magic, spiritism or astrology at school. There is a clear separation between science and the state. State and science work closely such that there is huge government expenditure in science and technology. The reasons are that it is believed that development is clearly predicated on science. To eliminate this anomaly Feyerabend opined

“... accepting and rejecting of ideologies should be left to the individual, it follows that the separation of state and church must be complemented by the separation of state and science ... such separation may be our only chance to achieve a humanity we are capable of, but have never fully realized”²⁸

His conclusion was that science, myths dogmas of theology and metaphysics are some of the many ways we interpret and understand nature. Thus, a successful exchange between science and the assumed “non-scientific” world views will be for the benefit of the growth of science and for the development of our world views²⁹

The significance of Feyerabend’s *Against Method* to this study lies in the perceived undogmatic approach to knowledge. This is because every form of knowledge has its own method. Bearing in mind the definition of science, the paranormal is a science with its own methodology. The

question we might later come to ask is what is the scientific character of paranormal activities?

ARE PARANORMAL ARTS SCIENTIFIC?

The issue of if the art is scientific or not is predicated on our various conceptions of science. The experimental scientists may wish to say that paranormal acts are not scientific because they do not follow directly the inductive procedures of observation, collection of data, experimentation, analysis of data etc. and that the energy involved has not been quantified or measured by our current apparatus. This argument may be reasonable but reasonable only to the advocates of contemporary experimental science.

The word science or scientific is here used to include any art or project, mental or physical, conceptual or experimental, that involves a systematic process of trying to provide an explanation or justification for any object of experience, noumenal or phenomenal (kantian term). When the procedures of various paranormal acts are viewed in the light of this term, a better understanding of issues classed as miracles, magic or other paranormal feats will emerge.

It may bring to light a monistic philosophy showing that the human being, who comprises of mind and body and the activities regarded as thought consciousness and paranormal feats are related or aspects of the same thing.

The Ancient Greek Philosophers like Democritus and Leucippus³⁰ described the cosmos including man, even the soul in terms of atoms. Atomism is traditionally associated with the argument that the basic building blocks of reality and which make up absolutely anything that exists, are incredibly tiny objects that do not have physical parts, cannot be split, divided or cut, and which are either point – sized (size less) or they have a tiny size. By this, it may imply that mental activities are as a result of atoms in motion, because the soul is assumed to be a collection of fine smooth atoms.

The issue however, is that the atoms that chemists and physicists of the early 1800s thought were indivisible turned out to be composed of even smaller entities: Electrons, neutrons, and protons. Similarly, experiments showed that

protons and neutrons are made of even smaller quarks. So, the trend of empirical evidence for ever-smaller particles inside "atoms" suggests the question: Is matter infinitely divisible? Experiment likely can never answer that question; who can say that the experimental scientists and the theorist will not develop some even more powerful means to smash what some previously had thought to be "indivisible" to find that it is composed of even smaller pieces of matter and energy.

It should be observed that a specialized area in knowledge which science cannot explain normally is termed to be paranormal. Who knows if someday, that which is acclaimed "paranormal", will one day be normal.

Paranormal feats such as Telekinesis, Psychokinesis, Telepathy, faith healing, etc are not violations of the Laws of nature but have their own scientific character. Thus spiritualism, magic, miracles etc are words used dogmatically to mystify (though not consciously done) individuals who do not understand that the universe is

governed by energies or forces inherent within it and that these acts are natural. The religious extremist may explain paranormal acts beyond their comprehension in terms of their perception. For example they may identify the brains sense of self-identity as spirit, the brains dreams or psychoses as revelation, while the immaterial world of the human mind, which obviously exists and is part of nature as supernatural beliefs.

David Hume made a contribution on issues that border on the paranormal, especially miracle. He defined miracle as 'a transgression of a Law of nature by a particular volition of a deity". He went further to posit that miracles seem to occur mostly in "ignorant" and "barbarous" nations and times, and the reason they don't occur in the "civilized" societies, is that such societies are not moved by what they know to be natural events³¹

The definition given by Hume has a problem and his explanation on why miracles seem to occur is misplaced. His argument on why miracles seem to occur may appear

reasonable when we follow some social theories of the growth of societies, but it does not explain or make us understand the knowledge or belief or non belief nor does it establish the possibility of what we term miracles. The point is that the nations Hume classified as "ignorant" and "barbarous" and the ones he thought were "civilized" are all in their various stages of ignorance and dogmatism in their philosophical and historical development. The era one lives or the epoch determines ones world views and understanding of nature. Hume's epoch was bereft of the scientific character of paranormal activities. It was a period "dogmatized" by the liberation from Aristotelian cosmology and attempt to emphasize a new method of science that was inductive. A period that was freeing itself from religion and the influence of the church. With the general thought pattern of his time, we can see why he could classify issues that border around religion as a product of nations that were ignorant and barbaric.

Immanuel Kant had a more impressive approach in the understanding of paranormal acts such as miracle. He

states as regards miracles. "If one asks, what is to be understood by miracle? It may be explained "... by saying that they are events in the world, the opening Laws of whose causes are, and must remain, absolutely unknown to us"³²

This definition appears better than that proposed by David Hume. In Kant's definition, there is no talk here of a miracle as involving "transgression" of a Law of nature. The idea is that in the case of miraculous events there are Laws of nature operating, but these Laws are unknown to us. Where Kant however digressed from our perception, was in the statement where he stated that the causes "must remain absolutely unknown to us". This was not possible in the society of his time, but we hope it will explain something new in our natural world. Kant's definition seems to imply that the Paranormal Phenomena classified as miracle is an appearance relative to individuals. The lack of knowledge of its workability is what makes it mysterious or makes it miraculous. This same ignorance is what permeates within the experimental scientists that makes them classify it as superstitious. With these discussions, it is clear that if we

know the Laws governing the paranormal acts, they will cease to be miraculous, magical or superstitious.

Research in paranormal can be approached from different perspective. The reason for this various perspective is the lack of acceptance of the physical reality of most of the phenomena. By definition, the paranormal does not conform to conventional expectations of the natural. Despite this challenge, studies on issues bordering on paranormal feats are periodically conducted by researchers all from various disciplines. It might interest us to know that some researchers study just the beliefs in the paranormal regardless of whether the phenomena are considered to be objective or not.

The various research approaches to the paranormal are the:
Anecdotal – This approach to the paranormal involves the collection of stories told about the paranormal. The best known collector of the paranormal anecdote is perhaps Charles Fort (1874-1932). It is said that Fort collected over 40, 000 notes which he called “the orthodox conventionality

of science" most of which were published in scientific journals such as Scientific America, Nature and Science. He is credited in writing several books on the subject paranormal.

Para psychological experimental approach – Para psychologists began using the experimental approach in the 1930s. The major exponent of this approach was J. B. Rhine (1895 – 1980). He popularized the famous methodology of using card-guessing and dice-rolling experiments in a laboratory in the hopes of finding a statistical validation of extra –sensory perception.

Participant – observer approach – The participant – observation method suggests that by immersing oneself in the subject being studied, a researcher is presumed to gain understanding of the subject. While the parapsychologists search for quantitative evidence of the paranormal in laboratories, the participant – observer looks for the qualitative approach. This participant-observer methodology is tantamount to the phenomenological research that seeks

largely to describe subjects as they are experienced, rather than to explain them.

Skeptical Scientific Investigation – Scientific skeptics advocate critical investigation of claims of paranormal phenomena. This is done by applying the scientific method to reach a rational scientific explanation of the phenomena to account for the paranormal claims, taking into account that alleged paranormal abilities and occurrences are sometimes misinterpretations of natural phenomena. A way of summarizing this method is by the application of Occam's razor, which suggests that the simplest solution is usually the correct one³³.

Anomalistic – Anomalistic works on the premise that paranormal phenomena may be hoaxes, understood within current scientific models, or else be rationalized using an unexplored avenue of science³⁴.

Survey approach – While the existence of paranormal is controversial and debate passionately by both proponents of

the paranormal and by skeptics, surveys are useful in determining the beliefs of people in regards to paranormal phenomena. These opinions while not constituting scientific evidence for or against, may give an indication of the mindset of a certain portion of the population³⁵.

These approaches are scientific in character and is predicated on the area of the research as against the expected procedures of the experimental scientists.

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CHAPTER THREE

THE PARANORMAL AND A NEW THEORY OF THE UNIVERSE

Paranormal phenomena are anathema to orthodox scientists because they neglect the central dogma of the materialistic faith: that everything is explicable in terms of

physical matter - energy operating according to known Laws. Many scientists are so convinced that the paranormal does not exist that no amount of evidence will ever persuade them otherwise. Once when two physicists submitted an article presenting evidence for clairvoyance to a scientific journal, an "expert consulted by an editor responded by saying "This is the kind of thing that I would not believe in even if it existed"¹.

The activities of the paranormal and science can be described in a way that would lead us to explain reality from a particular theoretical framework. This particular theoretical framework is invariably a new theory behind the workability of the paranormal and also that of the inductive sciences. Both follow methods and procedures to arrive at what they assume to be the truth. The question however is how do we adjudge their methods and procedures? And which should we appraise and on what ground should it be accepted as against the other?

METHODS OF SCIENCE

With discoveries in the science of the Paranormal, we have come to understand that the dogmatic claim of modern experimental scientists as the custodian of true knowledge is a misnomer. The experimental scientific enterprise from what we have come to understand follow specific inductive rules or procedures, and other forms of science also follow specific methods or procedures. Thus, it will be irrational for them to claim to be total custodian of the knowledge of the universe of man.

We can define scientific method as the mode or manner generally employed by scientists in the course of their scientific research. It could be various and diverse or alternative modes or manners adequate to the pursuit of scientific knowledge or truth. These mode or manner may vary as much as there are various scientists and philosophers of science, yet whatever goes as an authentic scientific method must as a matter of natural necessity prove to be a variable means for a true empirical and objective knowledge which is the hallmark of the experimental science. Jack Aigbodioh in his Philosophy of Science asserts that:

“scientists and most philosophers of science believe that there are procedural rules for attaining results in the sciences just as the carpenter or the bricklayer has definite and definable ways of using his instruments to produce certain objects. Such rules may not be codified. They exist as professional habits which the scholar imbibes in the course of his training. In scientific practice therefore, distinctions are said to be capable of being drawn among, for example, scientific tool, scientific techniques and scientific method”².

This distinction shows that all the sciences viz experimental, social and cultural sciences have their procedures. The nature of science as we have to observe is such that it must deal with observable phenomena, the given, which must give themselves to empirical verification, and this accounts for the erroneous belief that scientific method consists in experimentation alone, or rather the belief on the other hand that scientific method is another term for experimentation method³. It is a truism that experimentation is quite fundamental, but it is completely

wrong to think of it as the only step or method applied in research method, or think that experimentation is only carried out in physical sciences.

Although experimentation is less frequent and in some cases not a criterion in other sciences, it is wrong to consider it completely unnecessary or non-existent in such sciences. With regard to actual steps necessary in research method, it is perhaps relevant here to observe that such steps vary as much as there are different scientists and motives for various scientific researches. Some philosophers of science even reject outright the existence or the possibility of a scientific method. As Aigbodioh asserts:

“Like Kuhn, Karl Popper has argued that no scientific method exists in any of the three possible senses in which one might say that there is a method. (i) of discovering a scientific theory (ii) of ascertaining the truth of a scientific hypothesis (i.e. of verification); and (iii) of ascertaining whether a hypothesis is probable or probably true. All that can be said to exist as “scientific method” are continuous efforts on the part of scientists to refute or falsify existing theories on the

basis of some possible or conceivable observations. This, for Popper is not a method in the real sense of the word but a way of fixing truths and belief and encouraging their acceptance⁴.

However, experiments have often been strictly associated with physical sciences alone due to the rigid nature of experimental structures. Until quite recently, it was not as such associated with social sciences and disciplines in humanities such as in history, linguistic and philosophy to mention but few, yet the fact remains that though it applies to these other sciences than physical sciences, its application remains minimal which is due to its minimal adaptability to other sciences or fields of studies. It is however, quite erroneous to think that experiment or experimentation does not serve any other discipline at all except those of physical sciences. This explains why people often refer to physical sciences as experimental sciences, notwithstanding that today we can talk of experimental psychology, and as well as in other various disciplines in social sciences and humanities.

As regards issues related to the paranormal, the paranormal scientists follow certain procedures, not always predicated on observable empirical tools like that of some medicine men or magicians. They may arrive at observable results without the use of empirical tools of investigation. The possibility of some arriving at specific results without observable tools is possible through "psychic energy"⁵.

The Mind and the Paranormal: A View at Psychokinesis

We wish to state that all activities of the paranormal cannot be possible without the human mind. The reason is that "Man is the measure of all things, of the things that are, that they are, and of the things that are not, that they are not"⁶. These were the words of Protagoras of Abdera, and what this implies is that whatever knowledge man could achieve about anything is limited to his capability. Thus what he says is true is true to him, hence whatever we see as paranormal or beyond our sense perception is predicted on our knowledge of the universe and what we perceive of them. On this grounds the conception that activities of the

paranormal are fraudulent or pseudoscientific is a claim of the empirical scientists whose knowledge of the universe is limited to their experimental scientific orientation. This study assumes totally that the ontological basis of the activities of the paranormal acts is the mind.

One major question in regards to this is: Is the mind spiritual or material? Does it depend upon the brain? Neuroscience (a branch of physical science concerned with the brain) posits that damage to the brain can cripple or damage the mind. It went further to posit that impaired mathematical calculation is associated with damage to the posterior sector of the left hemisphere and that the ability to read can be selectively impaired by cerebral problems. It is also understood that the degeneration of nerve tissue will cause or impair ones capacity for memory, including recognition of ones husband, wife, brother or friends.

The theory of materialism or physicalism which can be traced back at least to Thomas Hobbes in the seventeenth century is the most popular contemporary view among

philosophers of the nature or character of mind-brain dependence⁷. By this materialistic thesis, there is nothing spiritual about the mind because without the brain there is no mind. The physical movements that occur in these are produced by other events in the material world; either outside our bodies or inside, and in turn can produce further physical motions in ourselves or outside of ourselves. Every idea of pain, of perception, of memory, and so on, is nothing but a set of physical occurrences in our higher nervous system and brain⁸.

The materialistic theory may appear plausible, but how can we explain issues that has to do with psychokinesis, telepathy and others that involves the mind or the use of psychic energy to affect matter? What is the relationship between the mind and the affected matter in psychokinetic acts?

Etymologically, psychokinesis is derived from two Greek words "psyche" meaning mind, soul or breath and "*kenesis*" meaning motion. Literally "movement from the mind"⁹. The

term “psychokinesis” was coined in 1914 by an American author – Publisher Henry Holt in his book *on the cosmic relations* and adopted by his friend, American Parapsychologist J. B. Rhine in 1934 in connection with experiments to determine if a person could influence the outcome of falling dice. Both concepts have been described by other terms such as “remote influencing”, “distant influencing”, “remote mental influence”, distant mental influence”, and “mind over matter”. Originally, Telekinesis was coined to refer to the movement of objects thought to be caused by ghosts of deceased persons, mischievous spirits, angles, demons or other supernatural forces. Later, when speculation increased that human might be the source of the witnessed phenomena not caused by fraudulent mediums and could possibly cause movement without any connection to a spiritualistic setting, such as in a darkened séance room, psychokinesis was added to the lexicon. Thus, psychokinesis is the ability to affect matter through a variety of mental force. These phenomena may sound absurd to most philosophers who actually may need justification for the possibility of mind affecting matter. My

interest in trying to postulate a possible explanation to these phenomena is predicated on my practical experience as an undergraduate at the University. A young man boasted while others were discussing issues that border on religion and the supernatural, that he can move an object, open a closed bottle or displace an object without physical contact. This claim drew the attention of everybody around. With this curiosity, I ran across to the hostel and brought an empty bottle of wine with its cover and placed it on a table. "Do it lets see if it will be possible" I said to him as I called others to watch out for any foul game. He beckoned on everybody to be silent with the wave of his hand as he directed his gaze at the bottle with intense concentration. Suddenly, in half a minute the cover unscrewed itself slowly and fell off. Some students took to their heels, while others called him a wizard or magician. But I was more curious, because I questioned myself that if spirits were involved, probably he would have made some incantations, invocation or possibly prayed.[This was the procedure we assume to be conventional within our socio-cultural and religious milieu] Why does he have to concentrate? I drew up a hypothesis

that the mind and his brain might have been part of this exercise and that there could be a radiation or force which may be possible to interpret scientifically. This hypothesis, I reasoned even if its mistaken, may lead to new discoveries. "It can help investigators to see significance in tiny clues which might otherwise escape them"¹⁰. In an attempt to prove my hypothesis, I constantly interviewed the young man and discovered that he has no strong religious belief system that would make one postulate that he drew his powers, psychic energy or force from a god, gods or spirits. My research exposed me further into psychokinesis "the apparent power of mind to influence matter directly at a distance without any transfer of physical energy"¹¹. Research into psychokinesis is apparently new and appears to be avoided by intellectuals on the grounds that it is pseudo scientific or seen as phenomena of the occult.

However, a renewed interest has recently developed in large psychokinetic effects particularly metal bending. The most extensive research on this has been conducted by physicist John Hasted at the University of London, Birkbeek College.

His subjects were mostly those who have developed an interest in metal bending upon the knowledge and exposure to the public performances of Uri Geller¹². They were asked to bend or deform some metals without touching them. Signals from these metals were amplified and registered on chart recorders. Bending was observed in most of the sessions. This led Prof. Hasted to postulate a hypothesis that there is an unknown form of conduction of electrical charge from the subject's bodies through the atmosphere to the sensors. In his experiment he posited that the subject (Metal benders) had no opportunity to interact directly with the chart recorder¹³.

Hasted's experiment

Fig. 1



Brittle alloy bars bent in Hasted's experiment

Another group of researchers who delved into the possibility of psychokinesis were Charles Crussaid and J. Bouvaist notable French metallurgists. These individuals were funded by a metal company to investigate the paranormal act-psychokinesis. These two metallurgists took the following experimental steps with a magical performer Jean Paul Girard: (1) All dimensions of metal strips or rods were measured before and after bending; (2) The micro-hardness

of the metal was measured at several points before and after bending; (3) Residual strain profiles were examined (4) Electron micrograph analysis of the fine structure of ultrathin foil specimens were often made (5) Analyses of the chemical composition at various places along the strip or rod were made. Additional precautions included consultations with magicians, video recording of trials, and the making of test specimens. The specimens were bars of aluminum alloys, stainless steel cylinders and duralumin plates¹⁴.

The result of the experiment showed that metal bending was possible through psychic energy. The question however, is how can this be quantified? What type of radiation was transferred from the mind to the metals? Is there a hidden connection between the mind and the metals that needs exposition? These questions need clarification. However, before delving into the possibility of a connection, it will be pertinent to view another paranormal feat called telepathy.

Is Telepathy Possible?

Many may have heard about the phenomenon – telepathy, some accept its possibility, while others do not. But whether these phenomena really exist is another point that scientists need clarification about. To modern experimental scientists, claims for telepathy or precognition are a heresy. Telepathy is the ability to become aware of another person's thought or feelings by means beyond the ordinary senses.

The term telepathy was first used by an English essayist and poet Fredric W. H. Myers in 1882. Myers defined telepathy as “the communication of impressions of any kind from one mind to another, independent of the recognized channels of sense”¹⁵. An example is that of a person in one room knowing what a person in another room is thinking. Telepathy is usually considered one kind of extrasensory perceptions (ESP). To prove the possibility or impossibility of such phenomena has led to various researches.

Most of us have in one time or the other received a strong impression about another person's feelings at a distance outside sensual observation. In some cases we refer to it as

intuition while in others we discover that they were direct thought of the individual radiated and received by our minds. To the philosopher, this claim may appear funny without justification. Excluding our daily experiences, telepathy has appeared to function in controlled experiments involving the reproduction of simple drawings at a distance.

My interest in this phenomenon, just as that of psychokinesis was due to my practical experience of a telepathic rapport as a student couple of years ago. I was working along with a friend in search of a particular item when I suddenly "received" a strong impression that my friend planned to abscond when we arrive at our destination. Reason for that planned action was not clear to me, but the intention was very clear in my consciousness. I stopped suddenly and looked at him questionably and asked "why?" He was shocked at the question and retorted "why what?" "Why are you planning to abscond once we arrive?" I replied. He was surprised and dumfounded. When he regained himself, he apologized and said that it

was not his intention to accompany me because there were certain people he didn't want to meet where we were going. After some time, he asked me how I got to "read" his mind. I could not really give any explanation on how I got to receive his thought; all I knew was that I "read" his thoughts. This particular incident and others motivated my search for a scientific or rational explanation for telepathy.

Experimental research into the nature of this strange faculty is still at a very early stage and is hampered by the fact that the laws which govern it are not yet known¹⁶. After my first clear evidence of telepathy, I began to consciously experiment on not only to receive thoughts, but also the transference of my thought to others. This idea came from the hypothesis that if a transistor radio receiver could transmit signals from a radio station, our ears and the human mind can receive thoughts from another then it is also possible to transfer or transmit thoughts just as the radio stations do. We may argue that radio waves are as a result of the physical components of the radio which makes reception possible. We may as well state that telepathy and

thought is as a result of the physical reality of the human person. The argument therefore is that the type of wave or energy involved will find expression in the physical property in which it is aligned. Thus, telepathy will be aligned to the human person through the instrumentality of the mind just as the radio wave will be aligned to the radio receiver through the instrumentality of its component.

Evidence so far, for both psychokinesis and telepathy can be found mostly from controlled experiments, which have been frequently repeated in laboratory conditions and assessed mathematically to estimate the number of coincidences which may have occurred by chance. "It thus conforms to the accepted standards of the physical sciences"¹⁷. Another evidence for telepathy is "the type to be found in a court of law and it involves in nearly every case an element of subjective judgment in the assessment of its value"¹⁸.

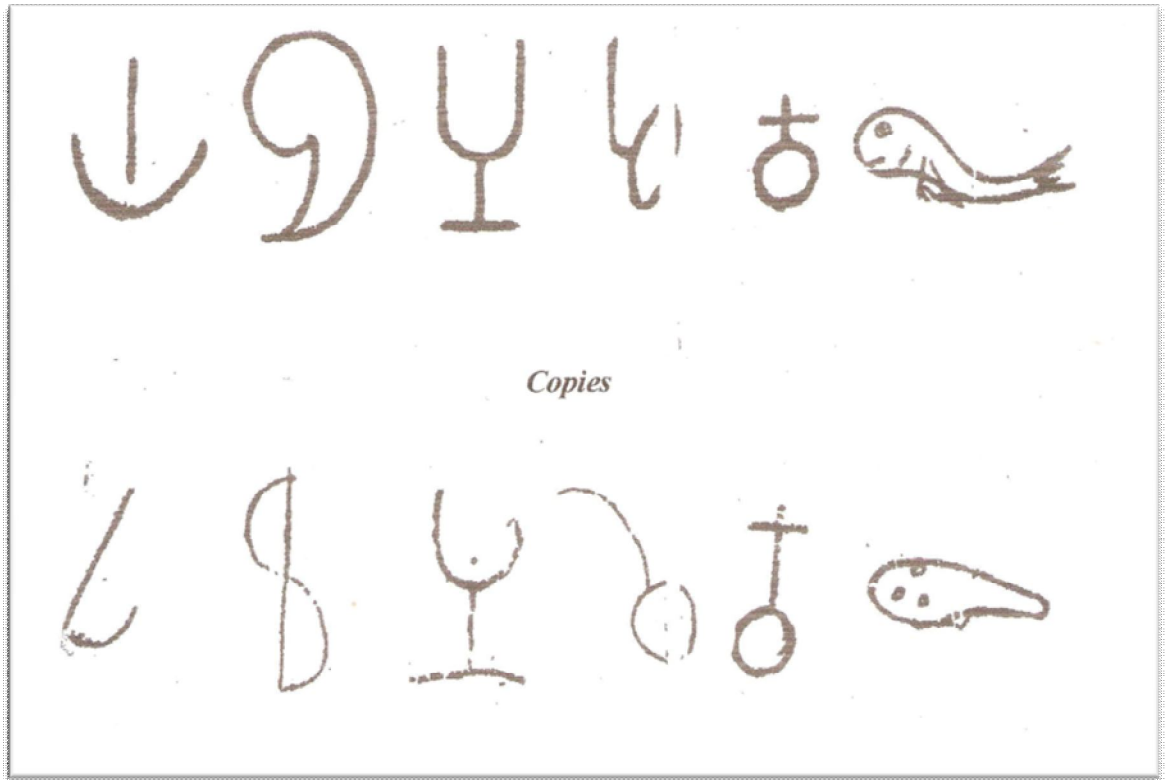
The result of one of the successful experiments by the society of psychical research is given as exemplified in Fig. I, and a short extract from the original report of the series

done by Malcolm Guthrie and James Birchall: "The originals of the following diagrams were for the most part drawn in another room from that in which the "subject" was placed. The few executed in the same room were drawn while the "subject" was blindfolded at a distance from her in such a way that the process would have been wholly invisible to her or to anyone else, even had an attempt been made to observe it. During the process of transference, the agent looked steadily and in perfect silence at the original drawing which was placed upon an intervening wooden stand; the "subject" sitting opposite him and behind the stand blindfolded and quite still. The "agent" ceased looking at the drawing, and the blindfold was recovered, only when the "subject" professed herself ready to make the reproduction, which happened usually in times varying from half a minute to two or three minutes"¹⁹

THE GUTHRIE EXPERIMENTS

Figure 2:

Originals



A complete consecutive series of six-drawing transmitted by telepathy from Mr. Guthrie to Miss E without contact during the Liverpool experiment..... When No 6 was being transmitted, Miss E said almost directly, "are you thinking of the bottom of the sea, with shells and fishes?" And then, is it a snail or a fish?" -then drew as above.

Proceedings from S.P.R., Vol. II

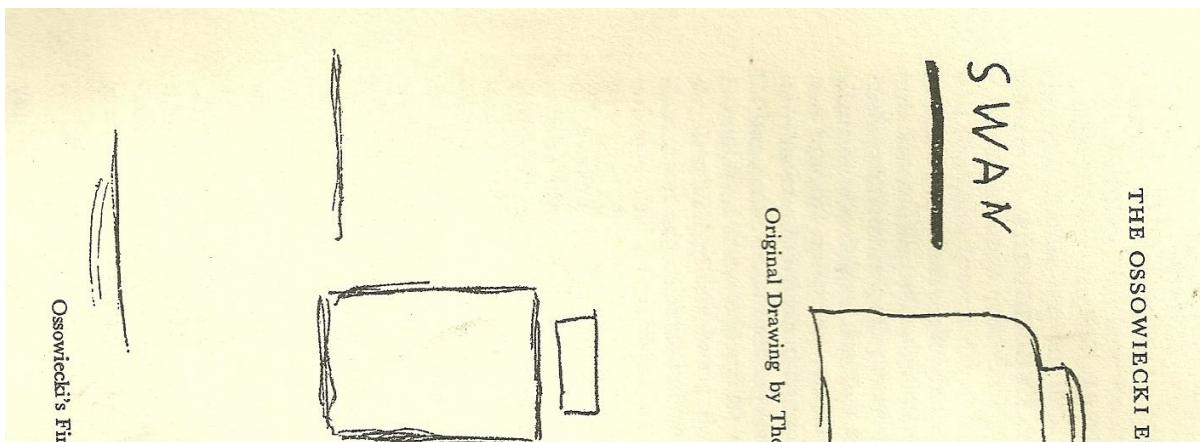
Note-The above is a proceeding from the society of psychical research. Miss E,{anonymous} was a participant in the research. Another notable qualitative experiment was

performed by a Polish Engineer, M. Stefan Ossowiecki believed to possess extra sensory perception (ESP). this experiment was undertaken under the auspices of the society of psychical research (SPR). In the committees own view, it took every conceivable precaution to make sure no foul play was involved. The research officer of the SPR, Mr. Theodore Besterman, drew – in England – an ink bottle on ruled paper and near it he wrote the words SWAN, underlined in blue, an INK, underlined in red. He then put the paper, folded, in a series of three opaque envelopes marked these secretly, so that tampering could be recognized, and sealed them in a special way with surgical tapes.

In Warsaw, Mr. Ossowiecki, who knew no English was allowed to handle the outer envelope in the presence of Lord Charles Hope and two other members of the society of Psychical research. Having done so, he made three drawings at intervals (see figures. 2 and 3 of Ossowiecki's Exp.). Lord Charles watched the envelope carefully while it was handled by Ossowiecki and afterwards confirmed that the seal was

untampered with. Ossowiecki reproduced the following drawings at intervals. Moreover, the drawing was deliberately to destroy the shape of the bottle and of one word, yet he still seem to have got his impression as a visual image. See fig. 2 and 3 (in page 104)

Figure 2 and 3.



The above example of my telepathic experience and the laboratory controlled proof to establish the existence of this phenomenon are just few cases. Examples of telepathic rapport of various dimensions were mentioned in chapter

two. This study opened up some aspects of this phenomena which shows that there are areas inaccessible to senses and scientific instruments and therefore beyond our present understanding. It exposed to us that there could be interconnectedness between one man and the other. This is exemplified in the mysterious synchronism between twins and loved ones.

What we can derive from these few examples of experiences and controlled laboratory experiments makes it plausible to assert the existence of these paranormal phenomena.

Let us examine another dimension of the paranormal that may not have been subjected to controlled laboratory experiments, but has been in some way part of the general African experience. I think, that by the end of this research we may draw up a conclusion that the paranormal phenomena is a fact and its recognition will force renewed Scrutiny of the axioms on which scientific work is based and particularly problems based on the ultimate relation of mind to matter.

Symbolic Elements in Paranormal Acts

At the beginning of this chapter, we emphasized that the activities of the paranormal is based on the human mind. The reason being that man is the measure of all things. We also observed issues that have to do with the interaction between the mind and the brain and explained the physicalistic position based on neuroscience. Taking the neuroscientific stance however will not really assist us to understand the workings of the paranormal, like psychokinesis and telepathy. It could not explain the interconnectedness between one mind and the other, neither was it able to explain the energy behind psychokinesis. Within the purview of this paranormal acts are other phenomena which also have to do with the mind but this time the inclusion of symbols. These symbols are representations of unknown energies within the corporeal realm, but have not probably been harnessed by the empirical scientists.

Symbols are mental entities and subjective, hence requires justification, yet they are of practical value to thought or psychic acts and science in general. We are also all aware

that the ontology of African symbols emphasizes that symbols “cannot be an isolated compartment but could be seen as a synthesis of his cultural social and philosophical thinking²⁰. Thus, issues of the paranormal in traditional communities are embellished with symbols in the sense that they assist as a point of contact in the process of executing paranormal acts. An example of the use of symbolic element is the one given in chapter two by J. O. Mume. In that work the author gave an account of his special training on traditional healing method. He recorded how a special herbal preparation was poured into his eyes and it resulted to him “generating esoteric powers which gave me increased ability of clairvoyance to identify witches and wizards of our street”²¹. With regards to this, one may think that whatever esoteric powers he believes he had possessed is subjective because, it is relative to him. The herb poured into his eyes is seen as a symbol representing some aspects of forces and unseen and unquantifiable energies in nature.

Within religious circles, like Christianity, African traditional religion, Buddhism etc. it is believed that battles are fought without physical guns, knives or spares, but with psychic

powers or energy, using special principles or techniques known only to experts. The experts could be religious leaders, adepts or psychics who claim to possess better knowledge of the paranormal powers of nature. Within the Christian parlance, there are statements such as "the weapons of our warfare are not carnal, but mighty through God..." This shows that there is a belief in unseen warfare. Mume states: "I saw my master fortifying himself with native preparations against wizards attack and, as well, sending powerful destructive spells telepathically to his opponent"²². What we may need to know is that some extra-normal phenomena may be simply the application of knowledge about the physical universe which is not yet understood by conventional science. Most of the rituals and symbols seem to be for the purpose of heightening the emotional state of the practitioners, on the assumption that in a heightened emotional state they will be able to impose their will upon elemental forces. Telepathy, the application of mind power to transfer a wish, may or may not have to do with any religious affiliation or orientation. The result of Mume's master's telepathic spell was that his opponent was "struck

to death by lightning which penetrated his thick wall to strike him while in bed"²³. The question we may ask here is what is the link with the thought or telepathic rapport with the lightning? We have postulated the possibility of communication from one mind to the other, What then is the connection with the mind and natural act like lightning?

Symbols are used as a kind of key to convey religious concepts, ideas, visual, auditory and even kinetic representation of event. Symbols have been used to express ideas, communicate meanings and convey emotions²⁴. These emotion, from our analysis of paranormal acts are propelled through psychic energy to affect matter, which may be people, individuals (like Mume's case) or other minds (in form of telepathic knowledge).

Beyond the realm of the herbs are more mysterious symbols like the Effigy. In Haiti, Southern America and some African communities, such practices are classified as "Voodoo". The effigy can be used as a direct contact to the

person involved. Through incantation and invocation (or what we may call sound vibration) it is believed that if the effigy is stabbed, the stab will directly be felt by the person involved. In most cases, if the intention is to kill, the person dies. There has however been no empirical scientific investigation to this claim. The theory is that there must be a link between one object and the other, either through magnetic resonance of the earth's gravitational field which activates the Psychic fields of individuals or through radiations in the atmosphere which is converted to Psychic radiation that makes it possible for minds to "read" minds or minds to affect matter. This study may in the long run provide a link that will develop a new theory of matter.

Symbolism is as old as knowledge itself, hence cannot be limited to the knowledge of the paranormal alone; it features significantly in secular themes. Modern day organized science utilize symbols for general acceptability. Symbols in scientific knowledge are necessary for objective communication by scientists. Scientific-technical symbols have assumed an ever increasing importance in modern

science and technology. These symbols serve partly to codify and indicate, abbreviate and make intelligible the various mathematical and other scientific and technical relationship and functions. Scientific symbolism functions in a manner similar to that of the religious symbols which associates a particular meaning with a particular sign. The question now is; is there any theory that can explain the workability of these two assumed different worlds of experience?

Scientific Dogmatism

Scientism as a school of thought is according to John Wellmuth, "a belief that science and the scientific method afford the only reliable natural means of acquiring knowledge as may be available about whatever is real"²⁵. However, our work has shown that modern experimental science cannot adequately explain all there is in the universe of man, hence cannot be the custodian of all knowledge. It has failed in its bid to interpret the workings of paranormal acts.

There is however a significant issue that is antagonistic to the proper study of the paranormal, and this is hinged on not only the inability to establish the workability, but linked solely on our dogmatic emphasis on the experimental scientific procedures. Prof. Price and Bergson who delved into the possibility of the paranormal especially telepathy and psychokinesis, says as regards critics to this phenomena during controlled experimental sessions, that the reason for this phenomena being rare is hinged on inhibitions and skeptical attitude of some people.

Why is it that telepathy and psychokinesis are relatively rare? The reason is because of mutual inhibitions and skeptical attitude. Skeptical attitude according to the position of Price and Bergson can generate negative forces that can repel and distort telepathy or psychokinesis. The logic therefore is that if thought can be transferred from one mind to the other telepathically for a purpose, it can also be transferred through skeptical thought to act otherwise. It is also a reason why they may fail to occur if there are skeptical spectators in an experimental situation. Indeed,

the skeptics need not even be spectators. It will be enough if the general climate of opinion is skeptical. But this is itself just another manifestation of the self-expressive tendency of ideas. The negative idea, the idea that "such things do not happen" expresses itself by preventing the phenomena from occurring, or at least by making it more difficult for them to occur. {Could this be the reason why Jesus the Christ left Nazareth? They seem to have negative ideas, because it is written "Now He did not do many mighty works there because of their unbelief"}. This position may sound dogmatic in favour of paranormal, but the stance could also be dogmatic as we can be in experimental scientific method. Just as we sometimes need the experts in certain areas of science to explain the workings of a phenomenon, so we may need some experts in the paranormal to explicate issues around its phenomenon.

What we can deduce from the above statements is that negative or skeptical thought emits negative radiation or negative psychic energy or thought that can stultify an endeavour. As a result of the disdain on things that are

paranormal, "... there have been no experimental results that have gained wide acceptance in the scientific community as valid evidence of the paranormal²⁷. This position has already been predicted couple of decades ago that "if we accept these observations (of ESP and PK²⁸) for what they are said to be, we cannot fit into the physical laws of the universe as we define them today"²⁹.

Interconnection of Everything in the Universe

There are certain issues which may help us to postulate a theory to explain the relationship between the paranormal or the "natural". An analysis of telepathy as one of the "realities" in our existence cannot be over emphasized. The fact that a school of thought posits that that paranormal does not exist does not suffice it to be true. Neither would those who experience the paranormal state that that paranormal is what entails in reality. There have been evidences of psychokinesis, telepathy, faith healing, magic and other paranormal feats that have defied scientific explanation and do not negate the being of those phenomena.

The conclusion one may draw from all these related phenomena is that there must be a link or interconnection between matter and mind, between the seen and unseen forces or energy in the universe. The reason is that for a mind to receive the thought of another mind accurately or partially show that there must be a connection between one mind and the other. In addition, for there to be a psychokinetic effect or moving an object or displacing it from one point or position to another, there must be a medium in contact that makes it possible for the connection in the universe.

The interconnection between all things has for hundreds and even thousands of years been very much part of Eastern religion and mysticism. This interconnectedness has been fully exposed by modern particle physics a couple of decades ago in the form of the theory of relativity and quantum theory. Thus, it should not be surprising that there exist a parallel between mysticism, psychic phenomena and current foundations of particle physics.

As regards this position, Fritjof Capra presented an encouraging explanation to juxtapose the interconnectedness in nature by stating this position in his book, The Tao of Physics³⁰, that: Just as it was in Eastern mysticism, so it is in modern physics that everything in the universe is connected to everything else no part of it is fundamental. The properties of any part are determined, not by some fundamental law, but by the properties of all the parts. Both the physicists and mystics realize the resulting impossibility of fully explaining phenomena, but then they take different attitudes. The experimental scientists, as discussed before, are satisfied with an approximate understanding of nature. The Eastern mystics on the other hand, are not interested in approximate or relative knowledge. They are concerned with “absolute” knowledge involving and understanding of the totality of life.

To corroborate Capra’s position, Gary Zukay³¹ few years before Capra had already made his claim. He declared that there are similarities between modern experimental science

and Eastern mysticism. For him, Eastern religions differ considerably among themselves. It would be a mistake to equate Hinduism, for example, with Buddhism, even though they are more like each other than either of them is like a religion of the west. Nonetheless, all Eastern religions and psychologies are compatible in a very fundamental way with Bohm's³² physics and philosophy. All of them are based upon the experience of a pure undifferentiated reality which is that – which is. Bohm disagreed with prevailing views among physicists “the world is assumed to be constituted of a set of separately existent, indivisible and unchangeable elementary particles which are the fundamental building blocks of the entire universe ... there seems to be an unshakable faith among physicists that such particle gives a complete and coherent explanation of everything”³³. In Bohm's conception of order, primacy is given to the undivided whole, and the implicate order inherent within the whole, rather than to parts of the whole, such as particles, quantum states, and continua.

We can in the light of these few positions postulate that paranormal phenomena are possible and thus true. True in

the sense that reality is one unified web, whether in the realm of the seen and unseen due to the possible interconnection between things through psychic energy. What however we should strive at is to establish the procedures for the workability of the paranormal to assist the science of the future to effectively probe without bias. The problem this area of study is facing in this contemporary era is that of dogmatic propaganda for experimental science and the political economy of science. However, before delving into that, let us make an evaluation of some scientific theories and see if it can open up our understanding of the possible workability of the paranormal.

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CHAPTER 4

EVALUATION OF SOME SCIENTIFIC THEORIES AND ITS RELATION TO THE PARANORMAL

Scientific theories are simply propositions that can be expressed in several ways, and they are provisional. It is simply an explanation about a broad range of causes like the paranormal; many of the common places of science are difficult to understand in everyday terms. In particle physics we have, Heisenberg's uncertainty principle in which the position and velocity of a particle cannot both be precisely determined: define, one more accurately and greater uncertainty attaches to the other. Research into paranormal acts like telepathy and telekinesis appears protracted as a result of (1) Dogmatism in favour of experimental procedures and (2) lack of adequate instrument of measuring psychic phenomena. Our earlier chapters have introduced attempts by various research institutions to establish or prove the workability of the above phenomena. Arguments bordering on these researches are that no adequate scientific evidence has been

given to prove telekinesis or telepathy. Scientific evidence has only established the possibility of brain activity in form of electric impulse in controlled laboratory experiments. The major source has been through statistical analysis of the successes of each experiment, while other quantitative evidence has remained illusive at least to contemporary science. Do we now say that the paranormal is non-sense or that extra-sense is non-sense because empirical science has not been able presently to quantify or measure its physical reality. Taking cognizance of this and the inability of science to explain certain issues and wonders in nature, we may want to ask, ***Is science a myth?***

The word myth comes from the word "Mythos", implying story⁽¹⁾, thus it is commonly taken to mean fictions or fabrications. Some anthropologists regard myths as memories of some historical figures, or as crude, pre-scientific accounts of natural phenomena by native people. A myth is conventionally defined as "a sacred narrative explaining how the world and humankind came to be in their present form."⁽²⁾ Science may not be sacred but its

findings, theories and laws are almost sacredly guided by scientists. Myth is also "a collective term used for one kind of symbolic communication, specifically indicate one basic form of religious symbolism as distinguished from symbolic behavior (such as cult and ritual) and symbolic places and objects (such as temples and icons). It can also be the term that refers to any traditional story⁽³⁾. The language of science is definitely symbolic. Without symbolism science cannot communicate its ideas, knowledge or discoveries to one another.

People have always tried to understand why certain things happen. For example, they have wanted to know why the sun rises and sets and what causes lightening. They have also wanted to know how the earth was created and how and where humanity first appeared. Today, people have "scientific" answers and theories for such questions about the world around them. But in earlier times and in some parts of the world today, people lacked the knowledge to provide scientific answers. If science, the most prestigious achievement of Western civilization is largely an

autonomous system (self validating resulting and reporting), is it therefore a myth? However, arguing from Kuhnian perspective, science is merely one paradigm among many. Its findings in recent times have opened up more questions than answers. The research findings of one specialization interlock with those of another, and theories lead on to other theories, which are themselves consistent with matters yet more fundamental. Science as against religion is broadly successful in presenting a world that is coherent and consistent, it sometime represent alternative views and presenting research findings with practical rhetoric.

However, science is not the only world view. According to aesthetician Stephen Peppers, there are five ways recognized in dealing with reality and these ways are: *formism*, *mechanism*, *contextualism*, *organicism* and *selectivism*⁽⁴⁾. These root metaphors, as he called them, were the use of one part of experience to illuminate another, to help us understand, comprehend, even to intuit, or enter into the other. Each of these ways were destruct and perfectly plausible way of making sense of the world, but they were

independent and could not be mixed. Pepper formulated each root metaphor in his own way; however, Formism broadly conforms to Platonism, contextualism to Dewey's pragmatism and organicism to Hegel. Mechanism corresponds to the Anglo-American empiricist tradition: general laws that explain a world ultimately made up of sense impressions. Selectivism was introduced later as a purposive act. Pepper's positions mirrors Paul Feyerabend's against methods. Science may however not be called a myth because its results appears to be universally accepted despite controversies arising from new discoveries in particle physics.

If science carves nature at joints of real importance, it still has enormous difficulties in answering simple philosophic questions such as the nature of scientific laws, the reality of quarks⁽⁵⁾ etc. Moreover, it deals with the morally neutral, and with abstractions amenable only to advanced mathematics experimental science despite its growth has not been able to explain everything, especially issues that border on paranormal acts and its workability. This chapter

tries to postulate that the dynamics of the universe are intimately bound up with life on earth and the structure of atoms and sub-atomic particles. The understanding is that there may be interconnectedness between one object or substance and another, thus declaring that there is really no vacuum in the universe. Bearing in mind these assumptions, we shall examine some theories and principles and how it relate to the paranormal. However, before delving into these theories, let us look at the "space" by which the seen and unseen energies interacts, the phenomena of resonance and levels of information and communication. These have direct thematic link with scientific theories that can be juxtaposed with the workings of the paranormal.

Sensory and Psychic Space

The dimension and extent of space accessible to each of our senses are rather different and as such we can define a space for each of our senses by establishing their limits. The existence of space was denied by Parmenides. Parmenides posited that there was no such thing as empty

space. Space could only be described as “where the real thing, that which is, was not⁽⁶⁾. But where you have not got that which is, you obviously only have that which is not i.e. what does not exist. What had complicated Parmenides concepts of space was his thought that whatever exists must be material, wherefore space, if it existed, must also be material.⁽⁷⁾

The atomists however have one fundamental tenet, and that is space does exist. This view is fundamental because the atomic world view posit that atoms move about in space. Space in general usage is characterized by the earth's atmosphere or beyond the solar system is outer space. Space was regarded for many thousand of years as having three dimensions: Left and right, up and down, and forward and backward. This kind of space which is measurable according to the rules of Euclidean geometry is entirely consistent with everyday experience and with all forms of ordinary measurement of size and distance. Modern investigators in mathematics, physics and astronomy, however have indicated that space and time are actually

parts of the same continuum, which scientists refer to as space – time continuum.

The space of touch is really defined by the space filled by our own bodies. This is because in order to feel something, we have to touch it with some part of our hands and the soles of our feet are the most sensitive area of our skin in this respect. The sense of touch can tell us about materials and substances around us.

Other ways in which the sense of touch can be extended are experiences of the wind on our faces. This can tell us something about the temperature in the direction from which the wind is blowing and if it is combined with weather maps it can be used to deduce something about the weather conditions in and around our environment. Heat can be transmitted across empty space by means of waves called infra-red radiation. The infra-red radiation given off by an infra-red lamp, an electric radiator or a fire heats the skin on that side of the body facing the source, and the resulting

sensation of warmth it produces can be used to tell us the direction of the object producing the heat.

Other areas relating to touch and temperature is the nerve endings in the skin that we can use to judge the temperature of objects. In comparison with other animals and reptiles, our own system of judging heat is rather unsophisticated. Some snakes like the rattle snake has heat – sensitive organs on either side of the face, between the nostrils and the eyes, which allow them to dictate changes in temperature as small as 0.003 degrees Celsius and thus or virtually able to “see” a vague outline of their prey in total darkness. In some traditional communities this ability to see in total darkness could be termed supernatural.

Psychic space as against sensory space is the dimension and extent of “space” accessible to the human mind. Psychic space appears to transcend time from the ordinary man’s perception. Thus, the concept of space and time within the psychic realm falls within modern investigators perception which is referred to as space-time continuum.

The space – time continuum appears to explain the mystery in telepathy and telekinesis. The reason being that minds or the psychic of individuals and objects are linked to one another like the monads postulated by Leibnitz. Testing the limits of psychic space and energy is uncertain and cannot be precisely determined by any empirical apparatus. Its uncertainty gives it the perception of paranormal and supernaturalism.

At this juncture, we may ask ourselves this question; Are paranormal phenomena explicable in Heisenberg's uncertainty principle? What is the difference between the unexplained paranormal phenomena and inexplicable scientific findings?

What is Heisenberg's uncertainty principle, the uncertainty principle is certainly one of the most famous and important aspect of quantum mechanics. It has often been regarded as the most distinctive features in which quantum mechanics differs from classical theories of the physical world. Roughly speaking, the uncertainty principle states that one cannot assign exact simultaneous values to the position and momentum of a physical system. Rather, these quantities

can only be determined with some characteristic “uncertainties” that cannot become arbitrarily small simultaneously. But what is the exact meaning of this principle and indeed, is it really a principle of quantum mechanics? Uncertainty principle may refer to a lack of knowledge of a quantity by an observer, or to the experimental inaccuracy with which a quantity is measured, or to some ambiguity in the definition of a quantity.

The investigation of the paranormal with current experimental tools will always be met by uncertainties, because the results may contradict the expectation of the scientists involved. However, experiments, no matter its procedures are never completely accurate.

What we are stressing here is that indeed there is more to the universe than can be measured by our physical senses or by our laboratory researchers, which are but an extension of the powers of our sensory perception. Our physical universe is but a reflection of a vast and invisible psychic realm filled full with many grades of forces. It is the combined activities of those psychic energies and forces

which bring about what we call the laws of nature. Mankind forms one group of both the visible and invisible forces or energies, because after all, the conscious thinking self of us is invisible, while the portion of the universe that we call visible is merely that aspect of it for which we have developed organs of perception: the eye, the ear, nose and so on. The aspects of the universe that we cannot perceive with our senses are not far away, but are right with us here and now, inter-penetrating our physical sphere and impinging upon our inner selves every moment. Helen Savage made a clear point when she states "it is a mistake to suppose that invisibility necessary implies spirituality."⁽⁸⁾ This inevitably implies that what our five senses cannot interpret should not be ascribed supernatural but simply a continuum of another dimension of reality. A dimension ascribed to the realms of the mind, the psyche which we are all conscious of, yet find it difficult to explicate. One major phenomenon that has a relation to both normal and paranormal is that of resonance.

The phenomena of resonance and telepathy

Issues that border on telepathy have been controversial on the grounds that evidence establishing the physical reality of the phenomena has been under contention by Skeptics in favour of experimental science. However, the phenomena of resonance appear to give us an insight to the interconnectedness of energies or things in the universe. For better explanation, let us clarify what resonance is all about and how it works in the physical and in the paranormal.

Resonance from the point of view of what we may call psychic science is the special meaning that something has for you because it is connected with your own experience. Thus, every physical activity, be it telepathy, telekinesis or even clairvoyance can only be possible due to resonance with the physical sciences, the phenomena in which a relatively small, repeatedly applied force causes the amplitude of an oscillating system to become very large is called resonance. Many physical, biological and technological systems exhibit the phenomenon of

resonance. The issue of resonance can apply to a child on a swing. The physical principle involved is that when energy is fed into swing by pushing at its own natural frequency, then each small amount of energy is remembered and stored in the system. However, if energy is fed into the system at a frequency which is greatly different from its natural frequency then it is not remembered or stored and as a result it has no long lasting effect.

Atoms and molecules respond resonantly to specific types of radiation and ignore other types of radiation. Biological organisms respond resonantly to certain sounds and vibration and ignore all others. Resonance is also the basis of our systems of communication which use radio waves to transmit information over large distances, often via satellites. In a book titled: *Electromagnetic Man*⁽⁹⁾, Smith and Best, posited that a radio receiver can detect and amplify a specific frequency of the transmitter to which it is tuned (a coherent signal) and which can be present in its environment at an intensity far below the over-all background of electromagnetic signals from the power

supply. On a much larger dimension, a radio telescope can be tuned to receive specific radio waves emitted from hydrogen atoms in a galaxy, which is fourteen million, million miles from our earth⁽⁹⁾. This principle, if juxtaposed with telepathic rapport, it may explain how the mind or human psyche can receive psychic waves in form of thoughts or psychic energy by another mind that gets tuned to receive either consciously or unconsciously because man biologically can respond resonantly with one another due to the fact that they have something in common.

The phenomena of resonance explain the principles of sympathetic magic of Sir James George Frazer, as documented in his **The Golden Bough**. And both in turn explicates the understanding as regards the physical reality or possibility of paranormal feats like telepathy or psychokinesis. These principles include the “law of contact” or “similarity” which is a systematized version of the manipulation of symbols. Frazer explains them this way:

“If we analyze the principle of thought on which magic is based, they will probably be found to resolve themselves into two: first,

that like produces like, or that an effect resembles its cause; and, second, that things which have once been in contact with each other continue to act on each other at a distance after the physical contact has been severed. The former principle may be called the law of similarity, the latter the law of contact or contagion. From the first of these principles, namely the law of similarity, the magician infers that he can produce any effect he desires merely by imitating its: from the second he infers that whatever he does to a material object will effect equally the person with whom the object was once in contact, whether it formed part of his body or not" ⁽¹⁰⁾

Frazers work appears to buttress the theorem of the theoretical physicist John Bell, whose theorem demonstrate that if two particles have interacted in the past, then each particle carries a memory of that interaction.

Levels of Information and Communication

Information and communication are transmitted from different levels and its reception depends on individuals, animals or birds and at the same level on the psychic energy levels of individuals.

Many insects that live just below the surface of the water can use certain organs in their legs to detect underwater vibrations and to locate preys or even escape from predators. As regards the sense of taste, man uses his mouth to taste. We can sometimes taste the salt in the air blowing over the sea, or we can taste the smoke from a barbecue, but more often than not it is difficult to distinguish the actual taste from the smell and the memories evoked by the smell. Man's sense of smell is not developed like that of some animals. Birds and many winged insects have highly developed senses of smell. It is said that Turkey vultures can detect freshly killed carcasses through kilometers of dense forest, and the tsetse fly can detect the breath of cows over similar distances.

As regards sound, solids can vibrate and there can be ripples on the surface of water, or even under the water, so there are ripples in the atmosphere which we call waves. These sound waves are very tiny changes in the pressure of the air. The sources of these disturbances are many and varied. They can be caused by the movement of the branches of trees in the wind, by the mouths and throats of animals, or by the movements of parts of the bodies of insects. These waves are vital to the survival of many different species for two reasons. They provide the individuals of these species with information about their environment, including the location of predators and preys. They also allow at least some form of communication between the individuals of species, even though in some cases this takes a very basic form. Elephants and pigeons can hear the very low-frequency sound called ultra-sound, which is used by mice and bats. Infrasound, the extremely low-frequency sound can carry for considerable distances. Sources of this type of sound are the wind blowing over mountain ranges or the sounds of the desert, the breaking of waves on beaches and the machinery used in towns and cities. It is very likely that

some birds become familiar with these sounds and use them to find their way home. Elephants, on the other hand, seem to use infra-sound to communicate with other members of their own species over large distances.

Mammals like bats use echo location during navigation. For example in a mountainous region or tunnel we can hear the echo of our own voices. The time delay between the sound we produce and the echo we hear when the sound wave bounces back can be used to tell us how far away an object is whether visible or invisible within our space.

Naturally, we experience our surrounding through the five senses of sight, hearing, touch, taste and smell. For many centuries people assumed that other animals had a similar, if perhaps more limited view of the world. Any strong or inexplicable behavior, both in humans and in the natural world was ascribed to some supernatural sixth or psychic sense.

The phenomena which at one stage were believed to indicate the existence of a sixth sense could be understood once we had a theory of sound waves and once we realize that the range of frequencies to which our ears are tuned was not necessarily the same as for other animals. After the publication of James Clerk Maxwell explaining the theory of electromagnetic radiation we realized that light was just a small part of a vast spectrum of electromagnetic radiation with the extremely short gamma rays and x-rays at one end and infra-red radiation and radio waves at the other. Building on the experimental work of Michael Faraday, James Clerk Maxwell, the Scottish Physicist proved mathematically that electric and magnetic energy travels in waves at the speed of light. This important theoretical result was demonstrated experimentally by Heinrich Hertz, at least over short distances. This was further developed by Marconi, who turned the waves into a method of transmitting Morse code and signals without the need for electric wires. Thus radio was born and we had a method of increasing our audio communication.

Recent discoveries shows that some snakes and fish can detect infra-red radiation and many birds, some fish and a few insects can detect ultra violet radiation. However, not all examples of mysterious abilities in animals, man, etc can be explained in present scientific knowledge. Some fishes and animals have the ability to detect and generate electricity. Our own bodies work on electricity. Nerve impulses are really electrical messages carried along the nervous system and muscle cells are activated by electricity. Sharks can detect a swimmer kilometers away by remote sensing of the electrical current emitted by the muscular movement of the swimmer. Medical practitioners can diagnose some diseases of the brain and heart by studying the electrical activity of these organs using special equipment. We may however not be able to detect the electricity generated by another person without this equipment.

The aim of experimental science has been to give an exact picture of the material world and one of the major achievements of physics in the twentieth century has been

to prove that, that aim of knowing the material world cannot be possible. By this, it postulates that there is no absolute knowledge and any who claims absolute knowledge, whether of experimental, cultural or social science is being dogmatic, hence opens the door to tragedy. This is predicated on the belief that all information is imperfect, thus should be treated with humility because the recent development in particle physics has opened up issues that has more questions than answers.

THE THEORY OF RELATIVITY AND JOHN BELL'S THEORY IN RELATIONS TO PARANORMAL FEATS.

The laws governing paranormal feats may not look universal from the perception of contemporary empirical scientists. It however falls in line with some scientific theories. Albert Einstein discovered another characteristic of the law of physics, which he used as a basic concept of the special theory of relativity. This theory had to be true for all observers that were moving at constant speed in straight lines with respect to each other. For any researcher to comprehend telepathic rapport and telekinetic acts, the

individual has to be in line with the psychic principles governing the phenomena without which the phenomena would remain a mystery, pseudoscientific or even classed as occultism. By Einstein's theory, the mathematical formulae used to describe the laws of physics have to be independent of the motion of the observers, provided they were traveling at constant speed in straight lines. The other principle of Einstein's special theory of relativity was that the speed of light was the same throughout the universe, and it did not depend on the speed with which the observer was moving. The theory of relativity placed a speed limit on the transfer of information, energy and matter, whereas the quantum theory strongly suggests that this speed limit can be transgressed under certain circumstances. A reference to the controlled laboratory experiments of telepathy as exemplified in Figure I of Chapter three shows that a clear mental vision of the objects of experiment were "received" by the subject, but the subjects ability to reproduce what he received made him score eighty (80%). The principles observed in telepathy can be juxtaposed with that of our systems of communication which use radio waves to transit

information over large distances often via satellites. The human psyche or mind from our judgment of its acts can be juxtaposed with a satellite that can receive and transmit information. The satellite however is a physical property and can be replicated by anyone who knows the technological knowhow. The human psyche on the other hand is not physical and its acts are mental and can only be confirmed by statistical analysis as exemplified in our textual analysis of experimental investigation. Just as atoms and molecules respond resonantly to specific types of radiation, and ignore other types of radiation, so biological organisms respond resonantly to sounds and vibrations and ignore all others, so the human mind in form of psychic particles respond resonantly to radiation of telepathic or telekinetic nature.

The reason adduced for the above claim is that individual organisms have psychical connection with one another across space. Such psychical connection from the point of view of this position is as fundamental as that of gravity between physical bodies. It shows that telepathy is a property of all living things and may be the pattern of

natural behavior which influences gene selection between members of a specie. By this one can postulate that members of specie like human beings are linked by telepathy in a group mind through connection by psychic fields and thought radiation from the mind. For example, the harmonious transformation from human fetus to adult may have been possible by telepathy or by definite mental conception like that of an artist or designer – a pattern outside the physical world.

What should be noted is that the psychical level of the subject (psychic) and that of the experimenter are not the same, thus the measuring rod will be different. The special theory required that the length of a measuring rod would be different for the observer moving at different speed. Thus, for example the length of a spacecraft or ship out in the sea as measured by an astronaut or ship captain working outside the craft or ship, would be different from its length as measured by means of a telescope fixed ashore or to the Earth. On this premise, the subject of experiment and the experimenter have different psychic energy level; hence

comprehensibility by both parties would definitely be divergent.

In 1966, John Bell, a theoretical physicist, proved a theorem which is now called Bell's theorem, which shows that in quantum theory "...an explicit causal mechanism exists whereby the disposition of one piece of apparatus affects the results obtained with a distant piece". Bells theorem demonstrates that if two particles have interacted in the past, then each particle carries a memory of that interaction which can be instantaneously recalled, so subsequent measurement on the pair will always be corrected.⁽¹¹⁾ Taking cognizance of this theory postulated by John Bell, it will be justifiable to accept the proposition that humans are naturally linked telepathically because of their genetic foundation. Thus, telepathy may be the original archaic method by which individuals understood each other or communicate, but it has now been relegated to the background by methods of communication via the observable senses which appears more efficient. Some people may become aware by telepathy of the conscious or

unconscious fantasies of others and express them in distorted fashion. This position is exemplified by the result of the Guthrie experiments in Figure 1, Chapter 3. The subject "received" the information or symbols telepathically but expressed it in a partially distorted fashion. Other distortions might take the form of displacing a past event into the future or transferring one person's experience to someone else. With this those who are not aware or conscious of this phenomenon may call it religious revelation, witchcraft or even magic.

In the dancing **Wu Li Masters**,⁽¹²⁾ Gary Zukav summed his work by positing that both quantum theory and Bell's theorem are potentially explosive in terms of existing frameworks. Quantum theory calls us back from the realm of symbolism to the realm of experience, while Bell's theorem tells us that there is no such thing as "Separate parts". All the "parts of the universe are connected in an intimate way previously claimed only by mystical and other scientifically objectionable people. This theory partially explains the activity of the paranormal acts and also reflects the

postulation made by G. Leibnitz in trying to understand the structure of the universe, and this means that there is one thing that is common among things and connects many things in the universe. According to Leibnitz, reality cannot be found except in one single source, because of the interconnection of all things with one another.

Another example that can buttress ones argument for psychic link or connectivity between one person and another hence responsible for the possibility of telepathy is a mother's body and the embryo of an unborn baby. Both the mother's body and the fetus is physiologically a single unit. A pre-natal environment – an egg or the uterus is not separate from the embryo whose environment it is. Both form a single energy field such that at birth the child due to biological resonance can consciously or unconsciously "receive" telepathic knowledge of the mother father and other siblings. This principle may have been responsible for the telepathic rapport between the twins exemplified in our previous chapters. It may also explain why a mother at a distance kilometers away feel or perceive her baby crying

either due to hunger or pain. The writer has observed a woman scream suddenly that her baby was crying at home. This declaration was made without any direct communication either by phone from anyone or otherwise. She was now asked how she got to know that her baby was crying, and her answer was that she had a certain hunch that her baby was crying for food and her breast-milk started coming out physically staining her brazier. This experience she claimed has been proved to be true repeatedly. This behaviour, taking cognizance of our theory of biological resonance and Bells theorem, exemplifies the position of telepathic rapport between the mother and child.

This psychical experience is synonymous with John Bells theorems and this may be juxtaposed with the phenomena of resonance (biological resonance) showing that there is a link between one personality and the other in the whole human web. What may have happened between the baby and the mother may be that, due to the hunger, the baby started sucking the mother's breast mentally by visualizing it. By doing this, the baby transmits thought energy

(psychic energy) unconsciously which telekinetically activates that breast to give off its milk. This phenomenon is natural within given laws that exists, hence has no religious or spiritual interpretation. Naturally, religious men tend to interpret whatever transcends their immediate five senses to be spiritual, thus, whatever is seen as spiritual is spiritual to those who see it as spiritual.

The problems of trying to understand that the paranormal feats such as telepathy or telekinesis are natural phenomena independent of the involvement of spirits or demons are dependent on ignorance and dogma. Most religious individuals see the act as supernatural and hence can only be executed by magicians, witches or native doctors under the influence of demons or evil spirits. Thus, the church perception of it is negative and any experiment to establish its physical reality is seen as a heresy.

Thus, the phenomena paranormal have fallen under the hammer of experimental science and religious dogma, thus classifying it under the scientifically unverifiable. The major

problem however that has stultified research into it is propaganda against the phenomena. It has probably been seen as commercially unprofitable by empirical scientists and religious men. Political economy appears to have militated against it. In our next chapter, we shall see the political economy of experimental science and the paranormal.

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CHAPTER FIVE

THE POLITICAL ECONOMY OF EXPERIMENTAL SCIENCE AND THE PARANORMAL

This chapter attempts to show that political influence and economic consideration affect research proceedings either positively or negatively in any given society. The relationship between experimental science and economic performance has been a recurring subject of public discursion and policy debates for decades, both in the economically advanced countries and newly industrialised economics. It focuses on the casual forces underlying the choice of a particular scientific enterprise and the role of historical forces, social factors, ideology, propaganda and the intervention of different groups like the private sector and government in maximizing their self interest through a particular scientific proceeding. It shows further that the paranormal - the science of the future is hampered due to negative propaganda precipitated by dogmatism of the empirical scientists.

The political economy method as part of this analysis gives primacy to material conditions, particularly economic factors in the explanation of scientific enterprise. It considers the history of the problem and related issues as background. "Economic need is man's most fundamental need. Unless man is able to meet this need he cannot exist in the first place. Man must eat before he can do anything else"¹. Aristotle noted this necessary material condition when he stated in his metaphysics that "... It was when almost all the necessities of life and the things that make for comfort and recreation had been secured that such knowledge began to be sought"². In the words of L. B. Boudin, Marx states that "the development of society and institutions are the results of the development of the material conditions under which man live; that these conditions are the only ones which have an independent existence and development; that the changes of material conditions cause the institutions of human society to be changed"³.

These propositions show the importance of material conditions in the growth of knowledge and this may be responsible for undermining the growth and research on issues that border on the paranormal. Reasons probably premised on the belief that the paranormal science does not yield economic or financial benefit.

THE LOGIC OF OPEN SCIENCE AND THE CASE FOR THE PARANORMAL

Many conceptions of science agree on one point, that it involves intercourse between man and nature. Science as practical need is carried on with the objective to comprehend and exploit the resources in our environment in order to improve standard of living. Thus, science has a goal, that goal is to maximize utility.

The progress of scientific knowledge is a cumulative process, one that depends in the long – run on the disclosure of new findings, so that they may be speedily discarded if unreliable, or confirmed and brought into fruitful conjunction with other bodies of reliable knowledge.

In this way, open science promotes the rapid generation of further discoveries and inventions, as well as wider practical exploitation of additions to the stock of knowledge.

The paranormal has been classed by empirical scientists as pseudo-science and has thus been so undermined that an expert consulted by an editor of a scientific journal as exemplified in the last chapter stated dogmatically as regards the result of physicists claim to existence of the paranormal that "this is the kind of thing that I would not believe in even if it existed"⁴. This dogmatic stance is anti-progressive because the ignorance of the scientists as regards the paranormal phenomena is buttressed by his irrational position against the phenomenon.

The fact of whatever is science is being opened minded. This determines what our theories of the world should be. Theories are tested according to Popper by making verifiable predictions that can then be demonstrated through experiment. One of the finest examples of this is Galileo. In the 16th century, following Copernicus, he put forth the idea that planets and other local heavenly bodies actually revolve

around the sun, not the Earth. At the time, earth was believed to be at the centre of the universe for religious reasons. The established religious community ridiculed both Copernicus and Galileo. Galileo used a telescope, which he constructed and showed that Venus exhibits phases as it goes round the sun (like the moon does as it goes around the earth) and that moon orbit Jupiter. These are both predictions of the idea that heavenly bodies can move around objects other than the earth, an idea contrary to the prevailing view. This and other examples show the open mindedness of science.

The paranormal science however, has been in the crossfire from both the experimental scientific community and the authority of the church, despite its various experimental researches as phenomena in nature. While the experimental scientists called its pseudo-science hence should be discarded as a viable scientific enterprise, the church on the other hand sees it as occultism and possibly witchcraft; hence research into any phenomena bordering on it should be abandoned.

Within the context of general proposition that science seeks to exploit nature and thereby improve man's existential condition, there is also the issue of whether the problem to be investigated by science is useful or not useful, important or not important and whether it will promote national development. Thus, the value and progress of any scientific enterprise can only be determined by social, cultural or political interest. The question that may arise when we reflect on this matter is, of what significance is the paranormal? To wave this area of research as of no significance will be a misnomer. Reasons being that paranormal science opens up a completely new and independent attempt at explaining the interconnectedness of sub-atomic phenomena. The fundamental nature of this phenomena shows that paranormal science is simply a new area to be explored further in the near future.

One major significance of the research in paranormal is that it will educate the supposedly dogmatic individuals on the possibility of the paranormal force or energy. When this exposition is made clear, these individuals will be

acquainted with the fact that there are inherent energies in nature that has been untapped, or not harnessed by man. The knowledge of these may necessitate further research into its utilitarian position in our society.

The position of any experimental scientist who does not subscribe to the openness of science as regards methods of investigation would be tantamount to an illiterate ignorant man who does not believe that there could be an electron or electric current in a wire. If this ignorant man is told that he can be electrocuted because there is an existing electric current in the wire and he replies that "This is the kind of thing that I would not believe in even if it existed". This reply would be a clear example of a dogmatic and ignorant individual.

We all may know that one could have a belief in science, religion or belief on a specific dogma without knowledge of the truth. Our sceptic above who does not want to accept the existence of the paranormal no matter the proof is suffering from scientific dogmatism. This position is tantamount to any religious individual who believes that killing another on the grounds of religious crusades and

fanatism would lead to salvation. The religious fanatic, just like the scientific dogmatic individual does not believe that science has the solution to mankind's problems; neither will some Muslim extremists believe that those of other religions worship God, nor would the "born again Christian" accept that there could be salvation for any other outside Christianity.

The idea of the paranormal is a thing of remarkable expansiveness; being capable of spreading rapidly from mind to mind without lessening its meaning and significance for those into whose possession it comes. In that quality, ideas are more akin to fire than to coal. Thomas Jefferson remarked upon this attitude, which permits the same knowledge to be jointly used by many individuals at once. "He who receives an idea from me receives instruction himself without lessening mine, as he who lights his taper at mine receives light without darkening me..." By this admonition, it is clear that he who receives the knowledge of the existence of the paranormal or psychic energy, receives a knowledge himself without lessening that of the paranormal nor does it destroy his

faith in science or religion, but opens a new dimension of knowledge that needs to be explored.

The idea or belief of the above dogmatic scientists brings us to the position held by Paul Feyerabend as regards the evils of emphasis on methodology. Feyerabend dismissed all scientific methodologies as inadequate and goes on to discuss the relationship between science (experimental) and other forms of knowledge. He observed that many methodologies of science present science as though it is the paradigm of rationality. His position is that modern science (experimental) is not superior to other fields of research like magic and Aristotelian science or these paranormal phenomena being discussed. He maintained that science is one of the many ideologies that should be treated as fairy tales and that all ideologies must not be taken seriously but should be treated as fairy tales because of the many wicked lies they contain. He complains that proponents of the superiority of experimental science do not take time to investigate other forms of knowledge. If justice is to be done in comparing science with other forms of knowledge, a thorough investigation of the nature, method and aims of

science must be carried out alongside those of other forms of knowledge. This according to him can be done by studying "historical records – text books, original papers, records of meetings, and private papers, letters and the like"⁵.

It is possible to keep a piece of information or a new idea like the paranormal feats of telepathy, psychokinesis etc secret because of its nature. But in this case controlled experiments have been taken place and research centres set up. Examples are British society for psychical Research, American parapsychological association, academy of parapsychology and medicine, the institute of Para science, the Academy of Religion and Psychical Research, institute for Noetic Sciences etc. each of these groups performed experiments on paranormal subjects to varying degrees. Parapsychological work was also conducted at the Stanford Research institute during this time.⁶

Parapsychologists began using the experimental approach in the 1930s under the direction of J. B. Rhine (1895 - 1980). Rhine popularised the famous methodology of using card guessing and dice-rolling experiments in a laboratory

in the hope of finding a statistical validation of extra – sensory perception. In 1957, the parapsychological Association was formed as the pre-eminent society for parapsychologists. In 1969, they became affiliated with the American Association for the Advancement of science. That affiliation, along with a general openness to psychic and occult phenomena in the 1970s, led to a decade of increased parapsychological research.

While parapsychologists look for quantitative evidence of the paranormal in laboratories, others are involved in qualitative research through participant – observer approach to the paranormal. Participant observer methodologies have overlaps with other essentially qualitative approaches as well, including phenomenological research that seeks largely to describe subjects as they are experienced, rather than to explain them⁸. Participant observation suggests that by immersing oneself in the subject being studied a researcher is presumed to understand the subject. Criticism of participant observation as a data – gathering technique are similar to

criticism of other approaches to the paranormal, but also include an increased threat to the objectivity of the researcher, because it is believed to rely on subjective measurement and positive observer effects (that observer may distort the observed behaviour) the general explanation of the basis for achieving the observable phenomena or the effect of psychic energy, shows the relative openness of this area of knowledge. The knowledge that something can be done is itself an important step towards discovering how it may be done.

THE GROWTH OF SCIENCE IN RELATION TO ECONOMIC AND POLITICAL INTEREST.

Science and its development have been laden with contradictions as a condition for growth. Successive historical epochs have been puzzled by aspects of the natural environment, man and the cosmos at large. Every age has had the type of science appropriate to it and its needs. The early Stone Age man was interested in animals for food, herbs for medicine and later in cultivation of crops. In response to the challenges of these needs, wooden

implements were devised for hunting animals and tilling the land. Reality was explained through myths and assumed supernatural activities of the gods. The ancients however felt dissatisfied with their concept of reality as civilisation and knowledge grew and had to seek for a rational explanation of the nature of the universe. Thus, Thales of Miletus explained the solid, liquid and gaseous composition of the universe in terms of water, while Anaximanes, Aneximander, Heraclitus and Democritus explained the constitution of the universe in terms of Air, *Aperion* or infinite, fire and atom respectively.

With time, the thesis or cosmological speculations of the pre-Socratic era of Greek Philosophy met with contradiction as people and philosophers in search of better material conditions saw the tradition as sterile and unimportant to their needs. The quest to boost their financial and social base led the thinkers of early Socratic period to sophism. The sophists were professors or teachers of rhetoric's, who taught the Athenian youths the art of rhetoric's and grammar in order to be well filled in the political climate of

the line. They charged fees to boost their financial base. This new move was socially and intellectually accepted by the society, since it taught them how to win disputes, how to speak well and convincingly and generally, how to succeed. Any wonder when Socrates came with his moral philosophy he was opposed by the state. His teachings were seen as "corrupting the Athenian youths" ⁽⁹⁾ this is because they believe that the progress of the state depended on the prevailing intellectual and social order.

The pattern of scientific growth is always tied to socio – economic relations of production in any given society. For example, the growth of geometry (*geometria*-measurement of land) in Egypt came as the yearly flooding of the Nile created serious problems. As water rose during flood, they washed off landmarks and boundary lines and created confusion. And since Pharaoh's tax collectors based their charges on the size of fields, it became necessary to find some ways to measure land areas accurately. They

"...learned how to calculate the area of rectangles, squares and triangles; and how to obtain the approximate area of fields with curved

border. They invented a simple form of solid geometry with which they could calculate the volume of stone locks that they used for building purposes. They learned how to measure angles and thus took the first faltering steps in development of trigonometry" (10).

Scientific discoveries and development right from pre-historic times has been motivated by the desire to satisfy wants and improve man's material conditions. Thus, scientific progress invokes in our minds the picture of achievement through creativity. The history of science shows that modern science is the cradle of discoveries and inventions, however these inventions had in one form or the other been discovered at one time or the other. The most interesting fact is intellectual and political significance attached to them and the economic gains that will be accrued from it.

SCIENCE AS A POLITICAL PHENOMENON

The discourses about science have been divided and sub – divided into particular academic disciplines on one hand, and into various policy or political – ideological perspective on the other. Sociologists, Philosophers, Economists, Political scientists, Historians, even Psychologists all have their own particular way of talking about science, and they rarely communicate with one another. And since science is an extremely important political phenomenon, its functions in society have come to be seen through particular ideological lens, which makes a mere comprehensive understanding extremely difficult to develop. It should be known that many scientific discoveries and innovations are subject to what might be called a commercial bias, for many of those who seek to analyse it, inventions or discoveries in science come to mean creating new marketable commodities. Thus, inventions that will not yield financial rewards will be discarded.

The effect of innovations and discoveries can be felt by many people and sustained by political authorities. For example, Aristotelian physics and that of Ptolemy for centuries were

sustained by the authority of the church through great figures as Albert Magnus (Albert the Great) and St. Thomas Aquinas. The church was antagonistic to any publication that negates this knowledge. There was a dogmatic acceptance of Aristotelian physics and that of Ptolemy because they were considered the custodians of absolute knowledge, such that whatsoever opposes their scientific postulations was indirectly opposing the authority of the church and state. For centuries Aristotelianism ruled the world of intellectualism. However, due to the dynamics in nature, science or knowledge cannot be left static. It met with contradictions or challenges during the period of "Renaissance" though it has been a fact of history that political forces have had impacts on Aristotelian physics, but at the beginning of the 17th century the work of Copernicus, Galileo, Kepler and Newtown gave a great boost to astronomy and physics. Their work "challenged the established power of the state and religion"⁽¹¹⁾, thus refuting and dealing a devastating blow on Aristotelian -Ptolemaic geocentrism in favour of Heliocentrism.

There are studies that indicate how science is governed by matter –of-fact national policies, economic criteria and pressure groups. Influences of political and social interest on scientists have been directing the output of scientific enterprise. Science is culture bound and thrives on existing tradition. Historians of science describe scientific traditions known in the past under such rubrics as Ptolemaic astronomy, Aristotelian dynamics or Newtonian physics. Each of these scientific traditions were sustained by prevailing political interests. The major development of Newtonian physics in the area of optics and ballistics had intimate connection with the needs of Mercantilist period, especially its interest in Navigation. The industrial capitalist class found calculus an efficient tool for both the control of commodity transactions as well as the labour forces.

We can observe that immediately after the First World War, influences of political and social interest on scientists became prominent. Science budgets increased and a struggle to split the atom began with Rutherford and James Chadwick. While “Rutherford and his group emphasised the purely theoretical interest on their experiment, the public

had a nose for economic progressit was to be thirty years yet before the first nuclear power station went into commercial production"⁽¹²⁾. The physicists were wrapped in their interest in the structure of the atom, but were blind to the economic revolution they had caused. Today the growth and development of nuclear power has been politicised and any nation stepping into research in nuclear energy will be seen in the light of competing with the world's most power nations.

The above observation lays bare the reason for disparaging research into activities that border on the paranormal. The paranormal is viewed partially in the light of religion, and religion is crowded with belief systems and elements of supernaturalism which appears to be in opposition with science. During the dark ages in Europe most unwholesome types of "psychic epidemics" occurred connected in some cases to sorcery.⁽¹³⁾ And as late as the seventeenth and eighteenth centuries psychic were still believed to be witches and were put to death by the church who could not explain the inherent energies in human

nature. Attempts were made by the theosophical society, founded in 1875 to demonstrate the powers or energies in man. H.P. Blavatsky, a psychic was commissioned to do that," her purpose in this was to show the sceptics that beyond their circumscribed sphere of physical matter was an invisible world operating under it's own unerring laws which, for one who understood them could be made to act with definite and demonstrable result". ⁽¹⁴⁾ trying to prove these hidden powers in man, Blavatsky met great opposition from the empirical scientist and were bitterly disappointed in the general attitude of the scientists towards her. This prompted her remark in this issue, stating that" Never were the phenomena presented in any other character than that of instances of power over matter, possessed by certain individuals who have attained to a larger and higher knowledge of the universe than has been reached by scientists and theologians, or can ever be reached by them, by the roads they are now respectively pursuing. Yet this power is latent in all men, and could in time be wielded by anyone who could cultivate the knowledge and conform to the conditions necessary for its development. ⁽¹⁵⁾ The

sceptics of paranormal acts are so dogmatised that no prove of the workability of the paranormal will satisfy them. Despite all the statistical laboratory evidence presented non were accepted by the sceptics. James Randi, a well known investigator of paranormal claims and also an investigator with a background in illusion, Randi feels that the simplest explanation for those claiming paranormal abilities are often trickery. He illustrated by demonstrating that the spoon bending abilities of psychic Uri Geller can easily be duplicated by trained magicians. Randi Is the founder of James Randi educational foundation and its famous million dollar challenge offering a price of US \$1,000,000 to any one who can demonstrate evidence of any paranormal, supernatural, occult power or event under test conditions agreed to by both parties.¹⁶ Since then, many individuals and groups have offered similar monetary compensation for proof of the paranormal in an observed setting. These prices have a combined value of over \$2.4 million dollars. ¹⁷

One may ask, why haven't anyone successfully taken the price? The reason may not be far, one major reason is that there is no demonstration that will convince the

sceptics because they have maintained a dogmatic stance. When the Mahatmas who started the theosophical society were urged by the sceptics to cause a newspaper published in India to appear in London on the day of publication or vice versa, to convince the sceptics once for all, their answer was "very true, we work by natural not supernatural means and laws. But as on the one hand, science would find itself unable (in it's present state) to account for the wonders given in its name, and on the other, the ignorant masses will still be left to view the phenomenon in the light of miracle; every one would thus be made a witness to the occurrence would be thrown off his balance and the result will be deplorable" ⁽¹⁸⁾. With this explanation, they declined to perform the experiment, positing that, on the one hand, no phenomena, however startling, would ever convince the sceptics; and on the other hand, that in order to prevent superstitious practices arising, a healthy element of doubt should be preserved.

As regards paranormal issues, a well known scientist Dr. George Thomas states that the evidence for paranormal facts is good, "good enough to produce acceptance if what is

claimed were not such a fundamental upsetting of systems of thought adopted by most modern and especially by scientists". He adds, moreover, that "the importance of the subject is enormous and much too little work is being done to it. If true it will produce a revolution in thought. The paranormal, he thinks will not disprove that brain and mind have one-one connection, but it will follow that thought is free to influence brain directly, not only but including the thinkers; it would show mind as force acting more directly than will now suppose, and one might be inclined to regard the brain as merely the shell that holds the oyster, limiting it in some respects but not in all ..."18. The implication of this statement is that the mind has power over matter and that paranormal phenomena may open up a great revolution in thought, if much energy is channelled to its research.

In whatever way we see the paranormal, the major reason why emphasis on research into it is minimal is due to the fact that it has not been seen as commercially viable, hence of no economic value to the state. Government spending on it has been out of the question because of ignorance of its

potential gains in the future. In addition, to this negative acceptance within the political circle as relates to the economy is the prejudice attached to it by the experimental scientists. This prejudice is anti-scientific and undermines the growth and progress of science.

SCIENCE AS GUESS

Science according to hypothetico -deductive method proceeds by hypothesis, it does it by reducing predictions from them and seeing whether these predictions are fulfilled in reality. If a theory's predictions are satisfied by reality, then it certainly seems plausible to think that the theory is thereby discredited or credited. But what is the position if the predictions are fulfilled? It is tempting to say that in this case the theory is supported: the more tests a theory passes successfully, surely, the more established it becomes.

The hypothesis that there is a political or state influence against the research into the paranormal as against experimental science can be corroborated with our earlier examples of prejudice "even if it exists". For when a

hypothesis “passes a test” all that can be said is that the fact has been discovered with which the general proposition (the hypothesis) is compatible. Does such a fact support the general proposition? If we say that it did, we should acknowledge the validity of an inductive argument – we should be admitting that a particular fact help to verify a general proposition (the hypothesis). This in all shows that science is simply guessing.

We may take a categorical stance that science is guessing, but there are actions that are anti-scientific in approach. These actions are prejudice and bias for specific approaches and methods to knowledge. The understanding of what science is breeds the misunderstanding of what the paranormal science is all about, not only as to its methods but also its goal and value. Many know science only through the presence of machines and mechanical products, even those who engage in this activity know science only by material results not by its world view, ideas, principles, scope of applications and its limitations. Science is a

manner in which we interpret things. Neither the collection of data nor a body of data so collected constitute science.

Science is not a datum or a fact, but a complicated act of judgement. It is human attitude towards the world of "facts" that has to be explained intelligibly. But in trying to explain the phenomena of nature in space and time, science goes beyond facts and operates with artificial words. Newton's physics, for example, was built "on the assumption as to what will happen to a material particle not acted on by any force" but the law of gravity nullifies the possibility of existence of any such particle. The science of pure dynamics is based on the assumptions as to what will happen in a frictionless engine. However, no such engine exists anywhere in reality except in the artificial and pure world of mathematics. The law of inertia states that "a moving body, free from all influence, will go on moving indefinitely in a rectilinear and uniform way". We do not know, and there is no such body, free from all influence. This is one of the "paranormal truths" of science invented by pure reason

solely on the belief that space has a rectilinear structure that is scientific or mathematical.

Experimental scientists should know that we cannot equate science with its techniques or say that science means experimentation, observation, prediction, measurement, etc. This would mean that physics is a science but not History, Economics or even Philosophy or those of other fields of knowledge (as exemplified in our earlier chapters) where experiments and accurate predictions are absent.

Experimental science cannot provide man with the goals, direction and value of life. They are mute as to the meaning of the world, life, man, etc. When the nature and limitation of science are recognised, its limited value and importance will be acknowledged without undue pressure. It will prevent human beings from expecting from those things it cannot provide. Things like the ability to interpret the force, energy or principle behind telepathy, psychokinesis, faith healing etc. All these cannot easily be explained or interpreted by present day experimental scientists.

The disdain and perception on issues that border on paranormal science are strengthened by propaganda for scientism. This propaganda is not limited to the advanced and developed economics, but also to almost all developing economies. The reason is that experimental science holds the ace to development. This reasoning is however misplaced in the sense that ignorance has stultified the study of a hitherto virgin area of knowledge on the grounds that it is pseudo-science.

The federal government of Nigeria in an attempt to overcome “scientific and technological backwardness and to promote the development of society within the frame work of present day understanding of experimental science, had to between 1975-1981 award bursaries and scholarships to students wishing to study science and science based subjects in Overseas technical institutions and colleges of technology. They improved this by setting up Universities and colleges of technology in almost all the states of the federation. The percentage of science to Arts students on admissions was put at sixty (60% to 40%) to forty percent. In a quarterly Educational journal, Abdul Rahman commented that “it is

the policy of the federal military government that science – Arts admission ratio into all federal universities should be 60:40%”¹³. With this, so many students struggled to study science in order to benefit from this policy. Even those not inclined by nature to study science made efforts to do so. To enforce this, the West African Examination Council (WAEC), in collaboration with the Federal Ministry of Education, had to insist that every student, whether inclined to Arts or social sciences, must include “at least a science subject” in his examination.

To buttress this and to show the value attached to science by the government, funding of research programmes by government, research foundations and co-operate bodies are encouraged. The endowment of university chair for a particular line of research has been a step intended to improve in science. Science is not social or economic context free, the endowment, for example, of a chair in microbiology by a brewery is a step which shows that it is striving towards an opportunity to maximise its economic resources through the results of the research. This same

chair however will not be granted in an Islamic state like Saudi Arabia due to the Islamic injunction against alcohol.

Science can be influenced due to prevailing social order or circumstances. For example, famines, environmental pollution, poor economic situation, epidemic outbreak, armament for national security are circumstances which could challenge the government to invite scientists to respond. According to historians, of science "Hiero II the tyrant of Syracuse, set Archimedes the task of discovering whether his crown was made of pure gold or not"¹⁴. The determining factor in this research is the financial economic value tied to the gold crown. This, however, led further to the advancement and development in the science of Alchemy and modern chemistry.

Political or civil crisis could create a material condition for a scientific or technological breakthrough. A couple of young scientists in Nigeria assembled to look for solution to their predicament during the civil wars. One of them, on occasion of development of a rocket for the rebel army during the

Nigerian civil war said "...minimum further research and tests, our design could have been improved to a ten (10) mile rocket. I must add that the rocket warhead with adequate safety devices, capable of detonating on impact, was designed and produced entirely by us We saw our achievements no longer in the context of the war, but as the dawn of a black technological revolution"¹⁵.

Perhaps the experimental scientists, politicians and economists are asking, on what theoretical framework do we establish the paranormal science? Or what social and financial gain exists in research into this phenomenon? These answers look as if they are not forthcoming, but just as the physicist did not expect the commercial value of the splitting of the atom, so should mankind probe into this science of unquantified energy without expecting economics gains. In all these we have an encouraging result in the work of physicists, especially in the particle physics. There are two mysteries within the content of modern physics and they are quantum theory and Heisenberg's principle of indeterminacy. We are all aware that in the place of solid atoms we now have a group of elusive entities, electrons,

protons and neutrons. All these cannot be observed directly and whose behaviour can only be assessed by statistics just like psychokinetic and telepathic phenomena. The new picture of basic matter (like the sub atomic particles above) as indeterminate is of great importance for psychical research. George Thomson points out that the working parts of the physical brain are known to be exceedingly small and that they may be within the range at which the principle of indeterminacy can be effective. And the relation between an undetermined brain and a mind, he says " may well be other than would be possible if the behaviour of the brain were determined in the same way as the motions of the planets are"¹⁶.

Recent developments in physics are reducing the widespread prejudice and hostility towards phenomena which cannot be explained in terms of the one-one correlation of mind and matter. Some experimental scientists still have strong prejudice on this subject, for instance, some accept the existence and the fact of paranormal phenomena, but reject any explanation for it

until they can find one which will harmonise with the apparently outdated mechanistic description of the universe. This attitude still seems to be conditioned by the view of matter which is more than half a century ago.

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CHAPTER SIX

AN EVALUATION OF PARANORMAL PHENOMENA

Many scientists feel that paranormal phenomena such as ESP (extrasensory perception) are impossible because they contradict fundamental laws of physics. This is not an encouraging point of view. In the eighteenth century, following the pronouncement of the great French Chemist Antoine Lavoisier that there were no stones in heaven and that none could therefore fall to earth; museums removed meteorites from their exhibits.

The reaction of the museums without reflection, shows the influence of those who are assumed to be experts on the lives of the common man. The scientists always assume that whatever cannot be explained within their framework is fraudulent or does not exist. Thus, Lavoisier's position is predicated on the inability to explain the origin and possibility of meteorites from outer space.

The German physiologist Johannes Muller stated in 1850 that science would never discover the speed of the nervous impulse. Muller's position on the speed of the

nervous impulses has been ascribed probably in Muller's thought as that which the gods alone can interpret. Hence the speed must be a product of the supernatural or is paranormal and since the paranormal "is that which is not understandable in terms of known scientific laws, it implies that science cannot know it. However, contrary to Muller's position, two years later Hermann von Helmholtz disproved this claim and discovered the speed. When Ernest Rutherford, the physicist who split the atom, was an undergraduate, his tutor told him not to bother taking up physics because scientists had a complete picture of the nature of matter and the final details remained to be settled.⁽¹⁾ If Rutherford had taken that advice what would have been its consequence for science?. Many examples of imperfections and about -turn in science could be discussed over and over again. Within the purview of the social sciences, more problems are identified. In economics it has been observed that classical economics theories cannot explain the combination of geometric rise in inflation and unemployment, especially ones noticed in the 1980s, nor do

they explain the high levels of unemployment in advanced economics and present world economic “meltdown”.

The methods of the empirical sciences have been ascribed as authentic, reliable and justifiable by all scientists and the notion that science is a dynamic and powerful tool for investigating the universe may not be wrong, but like all human enterprises, science is capable of many mistakes and biases which may persist for a long period. One major issue is that science does not deal adequately with genuine anomalies that challenge established views. This is a key point for the paranormal, since such anomalies are the very contention of the paranormal. What is not acceptable, nor should be acceptable in general is the view point often encountered within science which posits that “the paranormal contradicts physics, therefore it cannot exist” or to state that “this is the kind of thing that I would not believe in even if it existed”² This unfortunate mindset is often presented as “scepticism” however a sceptic as against an armchair critic as above is one who is placed in the position of challenging the status quo because they do not accept

conventional wisdom and are prepared to take an objective look at the evidences, (for example evidence for paranormal acts.)

The definition of the paranormal which posits that it is "those phenomena which are not understandable in terms of known scientific laws" or "those phenomena which cannot be explained by science, seemingly outside the normal sensory channels" while these are valid enough, a better definition would be "... Occurrences or powers which, if actual, cannot be explained by our current understanding of physics"³ and it could also be defined as an "alleged phenomena that is outside of science's current ability to explain a measure."⁴ This meaning shows that eventually or in the near future, a true, logical explanation for the paranormal will be presented, thus removing it from the realm of the paranormal.

We have good examples from the past to buttress this. It will sound abnormal, strange, mysterious or paranormal to state or find metal floating (ship) on water or fly (Aircraft) in the air. In the 12th century A.D. As mentioned, Lavoisier had declared that stones don't fall

from heaven, and it was not known that there was a vast world outside our planet. As a result, meteorites were considered to be mysterious and paranormal. Such was the mindset of the people at that time. Today, such mindset that metal cannot float as ship or fly as plane or that meteorites are mysterious would seem childish, primitive and unintelligent. It would also sound ridiculous in the past trying to measure the speed of the nervous system, it may look like challenging the works of the creator within religious parlance, hence should not be ventured into. This should be left as one of the mysteries of life or paranormal phenomenon. Though this perception may be laughable, yet it is important. It describes how the mind set of individual or groups of individuals can have an effect on the direction of scientific thought.

Investigating the paranormal has been seen to be contrary to popular thought and seen as a boring task. True investigations involve hours of research work, collection of data, statistics and meticulous plausible conclusions. Just like in any other scientific discipline a paranormal researcher needs to keep an open mind to all sorts of

possibilities, or even none at all. Any slight bias towards scepticism or even belief would prove to be a hindrance in the investigation. To add to the hindrances in paranormal research, people generally hold an irrational fear of exploring the areas covered by all things paranormal. Like our ancestors in the beginning, what was unknown was feared, and attributed to a supernatural entity. Science explained several things, and difference in the dept of the belief that existed in the past and present time, yet the fear remains. People would rather stay away from the exploration of these areas of our own world, and instead choose not to believe in its existence, since it makes things so convenient it is amazing to see that people can agree to accept the existence of a god or devil for which no logical basis exists, and yet choose not to believe or accept paranormal phenomena for which evidence has been shown. We hope that someday science will be able to uncover the vast majority of these phenomena for better comprehensibility.

THE PARANORMAL: A NEW SCIENCE

No matter how sceptical you are, there are three things that cannot be denied: that reports of paranormal experiences exist, that they persist and they are increasingly occurring on a global scale. When human beings are confronted with things they cannot understand, most will try attributing them to supernatural cause. Such was the case during the 18th century when science was starting to bloom. Despite all scientific advances, including the discovery of the planet Uranus, no one was able to explain what powered the sun. Some even claimed that human beings could not understand the sun's power source since it was the creation of God.

We see the same thing today with paranormal phenomenon. Science today does not have the instrument or knowledge, and certainly no answers to prove or disprove all these strange events that people are experiencing. Human beings like to think they are in control of their domain, and everything that occurs has an explanation, if it can't be explained, then it must not exist. Paranormal phenomena have no simple answer; they are very complex phenomena

indeed, and the only way to begin to understand these types of events is to accept the idea that the visible universe that we mere humans can see is only a narrow band of reality. It is my belief that the events we call paranormal phenomena are emitted from a parallel reality, perhaps even further:

Recently, the theory of multiple strings making up the universe has received considerable attention not only in the scientific community, but with the general public as well. String theory theoretically explains that the universe is multi-dimensional in nature. String theory is a relatively new idea that particles existing in the universe do not lie at zero dimension point, but are on building blocks or lines called strings. The theory unifies the forces of nature into a single one and tells that all of creation is linked together.

The trend and development in knowledge especially in particle physics and the investigation into the paranormal has shown that the future of science holds a lot for mankind. It should be noteworthy that science will continue to surprise us with what it discovers and creates. It may soon astound us by devising new methods that will be developed to produce these surprises.

Kevin Kelly, the author of **speculation on the future of science** states "the achievement of science is to know new things; the evolution of science is to know them in new ways"⁵

Kelly's statement brings us back to the paranormal or what we call psychic science. The achievements of science in the near future will be the demystification of issues of extra sensory perception (ESP) within psychic science. When we evolve into understanding paranormal phenomena in the ways it will be explicated in the near future, then it may no longer be classified as paranormal. Taking cognizance of the procedures of science, there is mounting evidence to justify a re- examination of basic assumptions that perhaps lead to a re-definition of what constitutes the essence of scientific endeavour. This evidence emerges when we consider the essential questions confronting science in many significant spheres of investigation. Science has thus far focussed on secondary causes and phenomenal realities rather than on root causes and essential knowledge. Kelly, believing that there will be a more sophisticated procedure of science posits that "I'm willing to bet the scientific method 400

years from now will differ from today's understanding of science more than today's science method differs from the proto-science used 400 years ago. A sensible forecast of technological innovations in the next 400 years is beyond our imaginations (or at least mine)"⁶

This position held by Kelly, posits that the future of science will open up better interpretation of the universe.

The future of science will greatly better the lot of mankind if strings attached to methodology are removed. Paul Feyerabend explained elaborately on this and was against the emphasis on methodology. The proceedings from the international centre for peace and development (ICPD) also, corroborated Kevin Kelly's stance by stating that "A shift in perspective and approach is called for that does not abrogate basic principles but widens the field of enquiry and evidence beyond the original limits imposed as a reaction to the exaggerations and flights of imagination of a previous age. This shift will open up new methods and concepts that can resolve all the present conflicts and inconsistencies and propel a rapid advance of scientific knowledge, discovery and invention"⁷

This shift according to this proceeding is for the purpose of re-examination and revocation of the empirical scientists emphasis on physical substance and physical energy to the exclusion of others. The reason for this is that history has shown that knowledge of the physical senses directly contradicts the evidence generated by the scientific method. To our senses centuries ago the earth is flat and the sun revolves around the earth, but we know both to be false. To our senses matter is solid, permanent and immobile, but we know now that it is an illusion. This shows that knowledge grows by accretion through problem solving. The scientific discoveries of yester years cannot be equated or compared with that of today, like wise the science of the future. Centuries ago Isaac Newton the greatest scientist of his time by our perception, described before he died how humbled he felt by the thought that he had glimpsed only a fraction of the potential of the great scientific revolution he had helped to launch. "I seem to have been only like a boy playing on the seashore and diverting myself in now and then finding a smother pebble or prettier shell than

ordinary, while the great ocean of truth lay all undiscovered before me" ⁸

This shows that there are more to knowledge than what the empirical scientists present to us. Reasons being that there are many things modern science cannot explain, and yet they occurs continuously. These include phenomena in the empirical science as well as in the paranormal. The effects of the paranormal act are now being proven in the Laboratories, even though they defy present scientific theories. This unfolding mysteries point the way to a new and deeper science of the universe, a science which will no longer deny paranormal acts like telepathy, telekinesis or psychokinesis etc but will acknowledge them. This position is strongly held by Claude Swanson, a physicist at both Massachusetts institute of technology (MIT) and Princeton University. On issues bordering on paranormal phenomena, his research has shown that signals can move much faster than light, and the human consciousness and even human influence, can move backward and forward in time. Science fiction concepts such as teleportation and levitation seem to occur in reality in paranormal events, and offer powerful

evidence that it will be a major frontiers of the science of the future.

In Swanson's new book; **The synchronized universe: New science of the paranormal**, he exposed many areas where empirical science discovered very real, physical and measurable effects which violates present science. Among his findings that expresses how the future of science would look like are few of these example:

"speed of light once thought unbreakable, has been exceeded in several recent experiment..... Evidence has also accumulated in the laboratory that many paranormal effects are real, and can be verified and studied scientifically. Among these are the following: ESP. large-scale experiments by the Princeton PEAR lab as well as other laboratories have proven that ESP is real, statistically verifiable scientific phenomena. Thousands of exponents have been converted with dozens of subjects, which demonstrate that this form of communication is real, and that it

does not weaken measurably with distance. This makes it unlike any known physical force.⁹

Psychokinesis /telekinesis or mind over matter, the ability to exert psychic force over objects at a distance has also been demonstrated in large scales experiments. Even over distances of thousands of miles the behaviours of certain machines, called RECS for Random event generators, have been altered by the intentions or the psychic force of a distant person. The odds that these effects are real, and not due to chance, is now measured in billions to one. In other words, the paranormal phenomenon is real. Other areas of the paranormal mentored by Swanson is Remote viewing which demonstrates that it is possible to view "targets" which are remote in space and time, in many cases details which were unavailable any other way were acquired by the viewer. It has been certain that rigorous statistical experiments have confirmed that remote viewing has accuracy far above chance, and represents a real phenomenon which defies present science. These are few examples of psychic phenomenon that though violates present interpretation of empirical science, but shows that

there is more to science than its present methods of investigation.

The mystery surrounding paranormal phenomenon can be well understood with each of the examples we have high-lighted. These feats achieved, centuries or decades ago could be termed paranormal among scientific practitioners who could not provide clear explanations in that epoch. Religious personnel at that time will simply ascribe it as one of the acts of God which should not be probed into and any attempt to probe into it may amount to lack of faith or disbelief in God who had kept it hidden from us.

The human consciousness as it relates to matter and psychical issues is very important epistemologically. The problem between science and the paranormal is predicated on our understanding of the universe. Understanding our interconnectedness releases us from our limitations and makes us part of the greater totality. It releases us from understanding the physical world of the empirical scientist as different from the psychical world where paranormal feats expresses it self. Karl Pribram, a great thinker and psychologist said that the body of

humanity is as a bio- hologram of energy quanta¹⁰ This position claims that the human brain functions as a hologram with regards to memory and as a holograph the “whole is in every part” where “image construction” of super consciousness can also become known.¹¹ Super consciousnesses according to Hurtak’s position imply the minds perception of the universe beyond our space –time.

Many scientists have great perception about the future of science. The reason is that scientific development has been advancing at a high degree and discoveries that were once thought to be known only to the gods are becoming explicable to man. On this perspective, the vision of the future of sciences shows a historic transition from the age of scientific discovery to that of mastery in which we will be able to manifest and mould nature almost to our wish.

According to professor Michio Kaku, a theoretical physicist of the city college New York, “in the coming decades cars will drive themselves, laboratories will grow human organs, robots will perform house hold tasks, eye glasses that double as home- entertainment centres, the exploitation of genes that alter human ageing and the

possibility of invisibility and the teleportation of human beings ¹²

Teleportation is the ability to disappear and appear else where or dematerialize and materialize in another location by man. This phenomena has been ascribed a great art of supernaturalism. An example of such was mentioned in the bible where Philip disappeared after preaching to the Ethiopian Eunuch and appeared in Azotus. "Now when they came up out of the water, the spirit of the lord caught Philip away, so that the Eunuch saw him no more, and he went on his way rejoicing. But Philip was found at Azotus" this is an example of teleportation.

Prof. Anton Zeilinger, a physicist of the University of Vienna comments on teleportation in the future of science. "We achieved quantum teleportation 10years ago, and we are using it on a regular basis on the information carried by a system. This information is teleported; therefore it becomes identical with the original. If you dream about teleportation of humans –well, we can dream – then all kinds of questions arise such as what does it mean to be me? When someone teleports me and I know that what is

being teleported is information – not matter, not the stuff I'm made of – who is it that ends up over there? ¹³

The human psyche can explore deep beyond present science. There is a thought to develop Nanobot armies, explained Dr. John Alexandra of the U.S joint special Operations university,

“on the battle field, Nanobots are going to do a lot of things; they can seek and destroy specific targets, for instance. You've heard about the “surgeons” that you can inject into your bloodstream – well, they can go in there to repair a clogged blood vessel, or they might be able to go in and punch holes in the blood vessels to destroy an adversary”¹⁴

To corroborate the vision of the future of science, Joel Gavreau, the author of Radical Evolution has this to say

“for the first time, our technologies are not so much aimed outward at modifying our environment in the fashion of agriculture or space travel; increasingly, technologies are aimed inward, at modifying our environment in the

fashion of agriculture or space travel; increasingly, technologies are aimed inward, at modifying our minds, or memories, our metabolism, our personalities and our kids. And this is not in some distant, science-fiction future –this is now. What's shocking about this is that if you can do all that, you're talking about humans becoming the first species to take control of their own evolution" ¹⁵

We can understand by this statement that taking control of our evolution is to understand our place in the whole macrocosm. This implies that the activities in the paranormal are simply the higher extension of science or better stated as powerful evidence that it will be a major frontier of the science of the future. That is extending our research beyond where modern science cannot explain, yet they occur.

SUMMARY, RECOMENDATION AND CONCLUSION.

This research delved into the investigation of the nature, distinction and dichotomy between the paranormal phenomena and the experimental science. The position held by the experimental scientists as regards the paranormal is that it is pseudo-scientific and its claims false, hence does not exist. With this in mind, no matter the statistical claim in order to validate paranormal acts like telepathy or psychokinesis, such claims are seen as fraudulent.

The research proceeded to make philosophical investigation of the claims of those involved in paranormal feats. This investigation took textual analysis, personal experience and internet sources as a guide to substantiate claims of the physical reality of paranormal feats. The emphasis is that ignorance or lack of knowledge of any phenomena by any person or group of persons does not negate the *beingness* of that phenomena. When human beings are confronted with things they cannot understand, most will try to attribute them to supernatural causes. Such was the case during the 18th century, when science was starting to bloom. Despite all scientific advances, including

the discovery of planet Uranus, no one was able to explain what powered the sun. The scientist during that time knew that no fuel source with which they were familiar could explain the tremendous output of energy given off every second by our sun. Of course, we now know that our sun's power source is deep within its core, where the element hydrogen is fused into helium, but at the time theories exist, none of which could give a satisfactory answer. Some even claimed that human beings could not understand the sun's source of power, since it was the creation of God. We see the same today with paranormal phenomena. Science today does not have the instrument or knowledge, and certainly no answer to prove or disprove all of these strange events like telepathy or psychokinesis that people are experiencing. Human beings like to think they are in control of their domain, and everything that occurs has an explanation; if it cannot be explained then it must not exist. Paranormal phenomena have no simple answer; they are very complex phenomena indeed, and the only way to begin to understand these acts is to accept present successful experimental results, experiences of others and the idea

that the visible universe that we humans can see is only a narrow band of reality.

It is my belief that paranormal phenomena are emitted from a parallel reality. Recently, the string theory emerged explaining that the universe is multidimensional in nature, these we discussed in Chapters three and four of this research. It is however strange to think that it took experimental science over 2000 years to catch up with what the mystics speculated. This theory is relatively new and postulates that particles existing in the universe do not lie at zero dimension point, but are on building block or lines called Strings. The theory unifies the forces of nature into a single one and tells that all creation is linked together.

The investigation concluded that there is the possibility of paranormal feats such as telepathy and psychokinesis, but was mindful of the fact that the general scientific community cannot empirically establish the claim using current methods of investigation. Though this was a setback but the researcher is convinced that the feat is possible bearing in mind his personal experiences which were buttressed by textual and internet information. During

the research, there was a significant observation that was made which is very important. This observation has to do with propaganda. Propaganda against the phenomenon of extra sensory perception (ESP) by the experimental scientists, religious individuals and political influence undermined further research into the paranormal. Derogatory words such as pseudo-science, devilish, demonic, deception e.t.c characterised the terms used against the paranormal. Propaganda brought an irrational rejection of the phenomena such that a physicist stated that; "it was the kind of thing he would not like to believe in even if it existed".

In delving further into the proper exposition of the future of science in relation to the paranormal and experimental science, there are certain recommendations. These recommendations are: (i) the propaganda by the experimental scientists against the paranormal should be checked in order to have an unbiased zeal when delving into its investigation. The reason is that any slight bias towards scepticism or even belief in it may prove to be a hindrance to the investigation. (ii) The only way to achieve a

progressive science of the future is to re-examine the empirical scientist's emphasis on physical substances and energy. The reason is that we have observed in experimental science sometime that physical sense directly contradicts the evidence generated by our experimental method. To our senses, the earth is flat and that matter is solid, permanent and immobile, but we know that this is an illusion. The emphasis is that ignorance or lack of knowledge of any phenomena by any person or group of persons does not negate the beingness of that phenomenon. By this, we can say that the present perception of the paranormal by current experimental scientists is as a result of ignorance. Ignorance from the point of view that they are investigating a sophisticated science of the future with unsophisticated tools.

We are all aware that the science used five hundred (500) years ago and the one of contemporary science differ in method and procedures. A projection from the science of the next five hundred (500) years from the above example will be beyond our imagination. It may probably explicate paranormal acts and thereby demystify it. If this is done,

the wide gap between the knowledge of the paranormal and the experimental sciences will be closed and we will discover that what we see as paranormal feats or psychic science will simply be a glimpse at the science of the future.

In all, what we may deduce from our investigation of the paranormal and the experimental science is that, the perception of the paranormal by the experimental scientists is misplaced due to their emphasis on judgement of paranormal feats from the model of current methodology of the sciences. In addition, the paranormal phenomenon is simply another way to look at the different aspects of the universe and the forces or energy in nature. Thus, no single method of investigation can give a satisfactory solution to the understanding of nature.

Bearing in mind the relationship between some scientific theories and paranormal, the unification of various approaches in the study of nature would serve as a panacea to paranormal and experimental science dichotomy. By this, it implies that experimental scientists in future may no longer deny the physical reality of paranormal phenomena. And those things modern science cannot explain yet they

occur and are classed paranormal can be explained. In that way, a new and deeper science explicating the universe will emerge.

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