# Scientific Acceptability of Rebirth

#### Dr Granville Dharmawardena

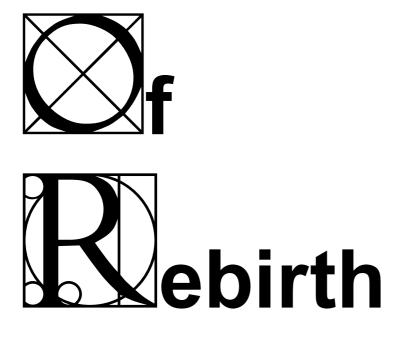


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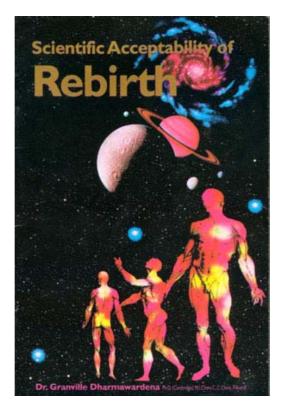
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#### AN APPRECIATION

This is to inform that all members of The Foundation For Buddhist Research convey their heartfelt appreciation to

Reverend Banagala Upatissa, the Chief Sanga Nayaka for Sri Lanka in Japan and the Deputy Chief Incumbent of the Maha Bodhi Aggra Srawaka Maha Vihara in Sri Lanka

For contributing by bearing all the expenses for printing this valuable book with a view to assisting the FOUNDATION to build up its initial funds.



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### Preface

Scientists and people who are educated in science refuse to accept this phenomenon. It is mainly because they are familiar only with classical science, which cannot perceive a possible mechanism by which it can happen.

In this book Dr. Granville Dharmawardena, who is an eminent scientist referred to in the nuclear science text books in the United Kingdom and in the United States of America, had his education and training at the Cambridge University in the United Kingdom, Harvard University in the United States, the Australian School of Nuclear Technology, Australia, and at the Atomic Energy Commission in France, and being most familiar with the views of the twentieth Century modern science, presents here a study he has made of rebirth.

Dr. Dharmawardena points out that the reason why classical science cannot explain rebirth is due to inherent limitations in classical science. Modern science has transcended these limitations, and therefore rebirth is within the scope of modern science. Modern science accepts rebirth as a scientifically acceptable phenomenon through the same tests used to prove scientific acceptability of generally accepted modern science phenomena.

Dr. Granville Dharmawardena point out that as science advances it gets closer and closer to reality, and this also brings science closer and closer to the Teachings of the Buddha.

Lastly I wish to tell you that I was blessed with the opportunity of writing the preface to this book, as Dr. Dharmawardena, a Sri Lankan scientist, was blessed with the wisdom to prove rebirth after 2,540 years – although it was researched by eminent scientists throughout the world.

"Let's build a world in which we live in harmony, without any calamities, by practicing the Teachings of the Buddha".

N.L.B. KIRIELLA

Udwela 20164

## The Foundation For Buddhist Research

The search for the True Reality of Nature has been the pursuit of hundreds of thousands of philosophers and scientists for thousands of years, and they have yet a long way to go. But the Buddha acquired full knowledge of the true reality of nature over 2,500 years ago, albeit not through the circuitous path followed by the scientists. Intuition and rationalism are two modes of functioning of the human mind. Buddha used the intuition mode to acquire complete understanding of true reality when he was in a mental state of supreme enlightenment. Scientists are using the rationalist mode of thousands of unenlightened minds.

In the current era of the human being, the scientific method is extremely popular all over the world and people accept anything that has scientists' acceptance. The reason for this is that science gave rise to the technology which helped man to acquire enormous material wealth and increase his living standards in leaps and bounds.

The science that has become so popular is the materialistic mechanistic model built by Descartes, Francis Bacon and Isaac Newton. This Newtonian science had two major limitations that prevented the scientists from moving in the direction of true reality. They are, limiting science to what is only materialistic, and to what is within three spatial dimensions. Such limitations are not there in the intuitional route.

The Dalai Lama says, "Science and technology bring society tremendous benefit. Yet, due to highly developed technology, we also have more anxiety and more fear. I always feel that mental development and material development must be well balanced, so that together they may make a more human world. If we lose human values and human beings become part of a machine, there is no freedom from pain and pleasure. Without freedom from pain and pleasure, it is very difficult to demarcate between right and wrong. The subjects of pain and pleasure naturally involve feeling, mind and consciousness."

Understanding and practice of Buddhism going side by side with science and technology is essential to create balanced human beings. Peace at home, in society and in the world can arise only among a balanced human population.

Albert Einstein and other prominent 20<sup>th</sup> century scientists took science beyond these limitations and developed modern science, which is closer to the teachings of the Buddha. This confirms that science is now on the right path and that Buddhism is a guiding light to science.

As a result of the paradigm shift in science brought about by Einstein and other 20th century scientists, interest in Buddhism is rapidly expanding among the scientists who are in the forefront of science. In order to enable this process to trickle down to others rapidly, it is necessary to research into ways and means of presenting the teachings of the Buddha to believers of science in a language they understand, accept and trust.

The function of the Foundation For Buddhist Research is to undertake research to find ways and means of presenting the teachings of the Buddha in terms that people the world over – and our school children, who trust science more than Buddhism – understand and accept in order to assist them to make use of them. One should note that school children in Sri Lanka still learn only the 19<sup>th</sup> century science that presents the extremely materialistic and mechanistic model of the universe. They do not even get a chance to know that there was a paradigm shift in science during the 20<sup>th</sup> century.

Ven. Madawala Upāli

## Scientific Acceptability of Rebirth

Based on a research paper presented at the Annual Sessions of the Sri Lanka Association for the Advancement of Science on the  $28^{\text{TH}}$  November 1996

#### SCIENCE AND REALITY

Rebirth is a very fundamental phenomenon in Buddhism. Science is a quest for knowledge meant to lead the way to understanding the true reality of nature, and every research scientist is expected to contribute at least a wee bit towards moving human knowledge in this direction. In examining every brilliant person who has been seeking to understand the true reality of nature, from a religiously unbiased point of view, the Buddha clearly stands out as the only human being who completely understood the true nature of the universe. However the Buddha's method of acquiring knowledge is not one recognized by western science. The Buddha acquired knowledge by intuition, the eastern way. Scientists acquire knowledge by the rational method, also known as the scientific method. Western science, which seeks to understand everything only through acceptance by the scientific method, finds it difficult to understand some of the important concepts and phenomena taught by the Buddha. Some such important phenomena which lie beyond the perceptual capabilities of familiar western science are rebirth (*punarbhava*), impermanence (*anicca*), egolessness (*anathma*) and *panchabigna* (phenomena such as telepathy, clairvoyance, precognition and psychokinesis).

As man's knowledge of science advances, it has become clear that the failure of western science to recognize or understand these phenomena is due to the inherent limitations of classical science, which have been stifling its attempts to understand reality.

Science has, from time to time, progressed in jumps or leaps. The scientist and historian, Thomas Kuhn, in an important book written by him (The Structure of the Scientific Revolution – University of Chicago Press) says that with each such jump towards progress science moves closer and closer to reality. It is now clear that the Buddha acquired complete knowledge of universal reality over 2,500 years ago and science as it progresses is moving closer and closer to the teachings of the Buddha. Science made a massive jump at the beginning of the  $20^{\text{th}}$  century and this has, for the first time, given scientists the prospect of acquiring the ability to understand some of the above phenomena that eluded them in the past. This paper describes how modern science of the  $20^{\text{th}}$  century enables us to prove the scientific acceptability of rebirth.

The 20<sup>th</sup> century jump in science came as a major paradigm shift (a profound change in the thoughts, perceptions and values that form a particular vision of reality) which completely transformed the basic foundations of science, and lifted science over and beyond the capabilities of the five senses of the unenlightened human being. Our common sense, particularly scientific common sense, is conditioned by the influence of three centuries of classical science, and this paradigm shift has pulled the rug from under the feet of scientists' common sense. Scientists are still trying to come to terms with the new paradigm established by modern science.

#### Classical Science ( $17^{TH}$ - $19^{TH}$ centuries)

Science is an intellectual exercise of the rational mind and scientific method is what the western world used in its attempt to understand universal reality. Science helped to develop technology and bring about the industrial revolution in the West, thereby providing an enormous amount of material benefits to people, and wealth and political influence to the West. This made science very acceptable to people of the west and those who received western styled education. People have, today, got used to believing anything that has scientific authentication. Scientific method is mistakenly believed as the only valid approach to knowledge. Not much emphasis is placed on the Eastern intuitive method of acquiring knowledge. The science that developed through the rationalistic approach during the 17<sup>th</sup> to 19<sup>th</sup> centuries, which we are familiar with, is known as classical science. Some books refer to this as modern science. This paper will stick to the term classical science and use the term modern science for the new science that resulted from the  $20^{\text{th}}$  century paradigm shift.

Classical science flourished during the last three centuries (17<sup>th</sup>–19<sup>th</sup> centuries). The value system underlying classical science is described by sociologist Pitrim Sorokin in his monumental four volume work in social and cultural dynamics as 'a sensate value system'. The sensate value system holds that matter alone is ultimate reality and that spiritual phenomena are but manifestations of matter. It professes that all ethical values are relative and that sensory perception is the only source of knowledge and truth.

Man's belief in classical science became so strong during the last three centuries that the sensate value system cherished by classical science pervaded all aspects of human activity, except where easternism dominated. As explained later, the world view presented by classical science is flawed and the pervasion of these flaws into every sphere of human activity has led to major crises of global proportions.

Classical science was founded on the basis of Descartes' philosophy, Francis Bacon's methodology and Isaac Newton's mathematics. In the seventeenth century Rene Descartes divided everything in the universe (Figure 1) into two realms: "Res Extensa" (matter) and "Res Cogitans" (mind). Res Extensa was considered as the realm of importance, and gathering knowledge in this realm was called science. Science was considered the respectable realm to study. The other realm, Res Cogitans, was not considered to be respectable and not up to the dignity of scientists to probe into. All important and respectable knowledge of the universe was thus restricted to Res Extensa, or science, which was confined to the study of those aspects of the universe that are measurable. Scientists accepted that the universe consisted essentially of "objects', leading to the belief that the ultimate realities of the universe are things and not beings. It was believed that everything in nature, including the mind, thinking and life, could be explained in terms of interaction of matter particles.

Descartes' split introduces an inherent deficiency in the very foundation of science by shutting out one important half of reality and directing scientists to look for true reality within the other half. The scientific method that developed within this framework included the requirement that scientists understand a phenomenon before it received scientific authentication. Scientists made idealized mental pictures of any phenomenon they want to understand. Imagined mechanisms were presented to make various phenomena and relations between them understood by the scientific community. Anything that failed to pass this test of being understood by scientists failed to receive scientific authentication. This process imposes another devastating restriction on science. Scientists are human beings and their understanding is limited by the limitations of the five senses of the human being. Our five senses can perceive only up to three spatial dimensions. Therefore the above process imposes the condition that the scope of science should be limited to three spatial dimensions, and any phenomenon that extends beyond three dimensions is beyond science and excluded from the reality that the scientists are aspiring to understand.

Thus, classical science has been blind to vast aspects of nature, aspects that extended beyond three dimensions and important non-material aspects. Trying to understand universal reality within these limits imposed on science is obviously a futile exercise.

No such obstructions stood in the way of Buddha's way of acquiring knowledge. This explains the reason why the Buddha succeeded where science failed. One cannot, however, say that science has failed, because science is still on the way.

Rational and intuitive are complementary modes of functioning of the human mind. Rational thinking

used by science is linear, focused and analytic. It belongs to the realm of the intellect whose function is to discriminate, measure and categorize. Rational knowledge tends to be fragmented.

Intuitive knowledge (the method used by the Buddha), on the other hand is based on a direct non-intellectual experience of reality arising from an expanded state of awareness arising as a result of enlightenment. Intuitive knowledge is synthesizing, holistic and nonlinear. Rational knowledge generates self-centredness whereas intuitive knowledge is symbiotic with nature.

The world view presented by classical science was mainly a creation of Isaac Newton. Here, the universe was one huge mechanical system operating according to exact mathematical laws. It consisted of material objects made of small, solid, indestructible particles which moved in an absolutely infinite three dimensional space and absolute time. All these particles were made of the same material substance. Reductionism, determinism and absolute mathematical certainty were basic tenets of classical science.

Reductionism builds on the idea that the objective world is fundamentally space time and material par-

ticles and nothing else. Every object in the universe is an aggregate of these particles bound together by forces described by Newton. These objects float in an infinite space in accordance with Newton's laws. The behavior of everything can be calculated with mathematics. The study of how these particles behave is physics, and how they combine to make bigger particles is chemistry. The study of how these big particles combine to become living particles is biology, and how living particles become more complex so that they appear to feel is the study of physiology. The study of the way those even more complex particles behave in such a way that they seem to have what we call intelligence is psychology.

The subject of nuclear science did not exist during the era of classical science. Even the concept of the atomic nucleus was not known at that time. Inadequacy of classical science to describe atomic phenomena drove scientists to discover modern science, and nuclear science is a new discipline of the 20th century modern science that embraces a wide variety of basic disciplines.

Determinism prompts that everything we experience, including our own lives, comes down to the movement of particles and these particles obey fixed, unchanging laws. If we could know the state of all the particles in the universe at any given time, then we could calculate the state of the universe at any other time in the future. Since all phenomena can be accounted for on the same basis all phenomena are predetermined. Human intelligence, consciousness, love, kindness and aspiration have no place in this mechanistic universe of classical science. Generosity is alien.

In outlining the methodology of classical science, Francis Bacon's view of nature was that she had to be hounded in her wanderings, bound into service, and made a slave. Scientists should torture nature's secrets from her. The goal of science had been to acquire the knowledge that could be used to dominate and control nature, and to this day classical science and its resulting technology are used predominantly for purposes that are profoundly anti-ecological.

The pervasion of this rationalist ideology into the western world conditioned western society to believe that the aim of science was the domination and control of nature, affirming that scientific knowledge could be used to render ourselves the masters and possessors of nature. Nature was seen as something feminine and therefore fit to be exploited. Rationalism treated all living things as machines. The adverse consequences of this reductionist fallacy became especially apparent in medicine, where the adherence to a Cartesian-Newtonian model of the human body as a clockwork has prevented doctors from understanding many major illnesses which are now known after abandoning the meaningless restrictions of classical science and the machine concept of life.

Classical science has driven western society to believe that life is a competitive struggle for existence, where unlimited progress must be achieved through technological growth. Aristotle's theory of sexuality giving the scientific rationale for keeping women in a subordinate role, subservient to men, got carried with classical science into the sensate society. For centuries this portrayed women as passive and receptive and man as active and creative. These concepts remained until nuclear science-driven modern science took over and began to influence society.

The pervasion of rationalistic and mechanistic thinking into western society was strongly influenced by philosophers Thomas Hobbs and John Locke. Hobbs declared that all knowledge is based only on sensory perception. Strongly influenced by Hobbs' work and classical science, Locke extended rationalist thinking into human problems. He extended reductionism to human society by drawing a parallel between an object and society, stating that just in the same way as a particle is the building block of objects, individual human being is the building block of society. Just in the same way that the properties of an object are those of its constituent particles, the behavior pattern of a society consists of those of its individuals. Locke extended this thinking to economics and political problems. He compared the human mind at birth to a tabula rasa, a completely blank tablet devoid of any knowledge, on which knowledge is imprinted once it is acquired through sensory experience.

#### The Birth of Modern Science

The universal reality eluded classical science because of the two limiting restrictions imposed on it. Nuclear science was not possible within these limits.

By the middle of the nineteenth century classical scientists believed that they had, by that time, completely understood the true reality of nature, all discoveries in science had already been made and any new research would only do the debugging and patching up that were yet to be done. The renowned nineteenth century physicist, A.A. Michaelson, said at the end of the nineteenth century about the future of physics, 'it would consist of adding a few decimal places to results already obtained'. Lord Kelvin said at that time that everything was perfect in the landscape of physics except for two dark clouds.

The possibility that an entirely new world of nuclear science was lying outside the scope of classical science was not seen at that time. In just the same way that phenomena such as rebirth, impermanence, egolessness and *panchabigna*, the scope of which were beyond three dimensions were not perceptible to classical science, the whole world of nuclear science, whose scope was also beyond three dimensions, was not perceptible to classical science.

At the end of the nineteenth century some nuclear science phenomena were becoming apparent and scientists found that it was not possible to find explanations for these within the "already complete world of classical science". Discovery of radioactivity in 1896 by Henry Becquerel was the first nuclear phenomenon that cracked the world of classical science. The nuclear reaction that keeps the sun hot and bright for billions of years baffled classical scientists. Sunlight tans our skin even with a short exposure, but exposure to a fire does not produce such a tan even after long exposure. The atomic process that generated the tanning component of sunlight was beyond the perceptual limits of classical science.

In spite of the deficiencies of classical science that were becoming increasingly apparent, breaking through the barriers of classical science and transcending into a new world of modern science, where the two major limitations mentioned earlier were no longer tying down the scientists to a misleading deadend path, needed the eminence of a person no less than Albert Einstein. Einstein ignored the limitations of classical science and presented the theory of relativity that went beyond three dimensions. He was too formidable a person for classical scientists to oppose.

The next break away from the ideas of classical science was the discovery of the atom, inside of which was over 99.9% empty space, and over 99.9% of the mass of the atom being concentrated in a region minute compared to the size of the atom. Its discoverer, Earnest Rutherford, was so amazed when he noticed that alpha particles turned back after hitting atomic nuclei, that he simply left the Cavendish Laboratory and spent a few days visiting friends and walking in the garden behind Trinity College (Cambridge) where Newton had observed the falling apple two centuries earlier, to come to terms with the new discovery. Nuclear scientists pictured the atom as a miniature solar system and tried to fit the electrons in orbits around the atomic nucleus. Lo and behold! electrons defied Newton's laws of motion, which were so successful in classical science. They had to discover new laws that electrons obeyed. The  $20^{\text{th}}$  century paradigm shift was mainly due to the discovery of quantum mechanics, which govern the behavior of electrons and everything else. Werner Heisenberg later discovered the uncertainty principle. The theory of relativity, quantum mechanics and the uncertainty principle form the foundation of modern science.

After modern science boosted our knowledge, transcending the limitations imposed by the five senses, profound changes had to be introduced to procedures in science. Our ability to understand everything by way of perceptible mental pictures diminished and it became necessary to imagine models with components which behaved in ways that had no counterparts at all in the world familiar to us. Mechanisms involved in these models in most instances are not only imperceptible but also consist of elements that operate in ways not known in the world that we actually experience through our five senses. The need to understand before acceptance had to be dropped. This has rendered scientific common sense, which had been inculcated in us over three centuries of classical science, badly wanting. For example, an electron can jump instantaneously from one atomic orbital to another without moving across the space between them (Figure 2). Here, the electron disappears from one orbital and reappears in the other. Movement of electrons in this manner which, like rebirth, lies beyond classical science, is explained by way of quantum mechanics. Mechanisms of such phenomena are beyond our imagination. Common sense familiar to us fails when it has to encounter such phenomena. Mathematical models devoid of pictorial content are typical of modern science. Classical science stood for absolute certainty. Modern science stands for the impossibility of absolute certainty.

Modern science joined up the two realms, Res Extensa and Res Cogitans (Figure 1) and brought us to understand that the universe cannot be broken up into independent arbitrary parts. They are not independent and cannot be studied completely independently. Within the establishment of modern science some of the aspects of nature that did not strictly adhere to the realm of Res Extensa, which were therefore earlier condemned as unbecoming for scientists to talk about, have become respectable. Rebirth falls into this category.

In terms of modern science the resulting whole is more than the sum of its parts. For example a human being is more than the sum of the atoms that make up his body. Modern science abandons the sensate value system. It holds that true reality lies beyond the material world. Obtaining knowledge through intuition is accommodated. The true standard of justice, truth and beauty is something much higher than what governments and police can impose. Modern science has shown us that there is no absolute truth in science, and all our concepts and theories are limited and approximate.

Modern science is introducing a holistic conception of reality, a shift from the solely materialist and mechanistic conception. The new view emerging includes a vision of reality where life, mind and evolution are all taken into account – a holistic approach to health and healing, integration of eastern and western approaches, a new conceptual framework for economics and technology, ecological and feministic perspectives where integration with the environment and non-exploitation of women are contemplated. The influence of modern science is slow to penetrate into society, but it is happening. Sensate values are on the decline. A need to protect the environment and maintain ecological balance is being recognized. The need to give women their due place is becoming recognized. The paradigm shift in science is influencing society in a very beneficial way.

Nuclear scientist Fritjof Capra says that the rationalist route of classical science leads scientists to the (atom) bomb and the more humane and holistic modern science leads them to the teachings of the Buddha.

#### Scientific Acceptability

The prospect of having a scientific theory accepted does not depend only on the theory, its genuineness and the data available. One important factor for acceptance is its geography, ie. the place where it originated. If it originated in the East or in a third world country the chances of getting it accepted are usually low. Many instances are reported of research papers, which had been rejected when presented from third world country universities, being accepted by the same journals when presented through high profile universities in the West. Scientific acceptance of rebirth faces the first barrier here, as it is essentially a concept that had originated in the East and the religions that endorse it are Eastern.

If a new scientific theory goes contrary to the teachings of religions popular in the West, its acceptance becomes extremely difficult even if it originated in the West, as happened to Darwin's theory of evolution and Galileo's heliocentric theory. Scientific acceptance of rebirth faces this giant barrier as well.

If rebirth is to be discussed from an unbiased scientific point of view, it is necessary first of all to find a way of bypassing these unscientific dual barriers. This can be done by considering the standard procedure used at present for the acceptance of any modern scientific theory, and testing rebirth by following the same procedure.

Geremy Hayward has described how one ventures to deal with a new theory. He describes this procedure as a four step scientific process, as follows;

- a) study the relevant phenomenon,
- b) formulate the new theory,

- c) use the theory to predict observations that we should be able to make if the theory is correct, and
- d) look for these predicted observations.

Richard Feynman, Noble Laureate for Physics, describes this process in detail. He combines steps "a" and "b" and describes it as a three step process.

If the observations made in the last step do not agree with the predictions of the earlier step the proposed theory is not acceptable. If they agree, the theory becomes acceptable. If more and more observations show agreement the theory receives stronger scientific acceptance. Once a theory becomes scientifically accepted by this test it remains so unless someone finds reliable new data to prove its unacceptability.

#### The Phenomenon of Rebirth

Rebirth is a very old belief and a large fraction of the world population believes it. For example Rene Descartes' statement in 1641 "What I have said is sufficient to show clearly enough that the extinction of the mind does not follow from the corruption of the body and also to give men the hope of another life after death." confirms his belief in rebirth. About 20 per cent of those in the Western World whose religions shun rebirth nevertheless believe in it. According to opinion polls this percentage is rising.

Hence, the phenomenon of rebirth is already known and therefore the steps "a" and "b" are already there. In examining the scientific acceptability of rebirth, therefore, one has only to go through the last two steps of the above scientific process. If this is done successfully rebirth is proved in the way any other theory of modern science is proved.

Rebirth may be defined as the re-embodiment of an immaterial part of a person after a short or a long interval after death, in a new body, whence it proceeds to lead a new life in the body more or less unconscious of its past existences, but containing within itself the "essence" of the results of its past lives, which experience goes to make up its new character or personality. Thus, infancy brings to earth not a blank scroll for the beginning of a new earthly record, but one inscribed with ancestral histories, some like the present scene, most of them unlike it, and stretching back into the remote past.

Rebirth is an issue of utmost importance, one that promises to touch the ordinary man, woman and child in a profound and far reaching way. Crime statistics show that convictions are much lower among those who believe in rebirth than among others. If scientifically accepted, rebirth will have a stake in defining human identity in the  $21^{st}$  century.

#### Scientific Examination of Rebirth

There are two possible scenarios – No-Rebirth scenario and Rebirth scenario – that can be considered. A human being is composed of the body and an immaterial part. The body, which is the material part, is well understood because it fell within the Classical Science realm of Res Extensa and was extensively studied by scientists. The immaterial part has not been studied by scientists because it fell within the Classical Science realm of Res Cogitans. Even in Medicine early doctors believed that all ailments of the human being were only due to disorders of the material body. The subject of psychiatry in western medicine is of more recent origin.

In the No-Rebirth scenario (Fig.3) death is something like the event horizon of a black hole. Crossing the

event horizon is a one-way journey and after crossing it nothing can come back, not even light. Here the body disintegrates after death and the immaterial part is either annihilated or gets into a scientifically unknown state and remains there forever, ie. each individual is born, lives one lifetime and at the end of it passes the event horizon of death to a state of no return.

In the Rebirth scenario (Fig.4) death is not an event horizon because only the body, the material part, disitegrates and goes into a state of no return. The immaterial part enters into a scientifically unknown state and reappears, after a period, in a scientifically known state in the body of an unborn infant. This is just like the way an electron disappears from an atomic orbital and reappears in another without passing through the space in between, the difference being that in the disappearance and reappearance of an electron there is no time gap in between.

The above description of the phenomenon of rebirth constitute steps "a" and "b" of the scientific process. The next step of the scientific process is looking for observations that can be predicted assuming the existence of this phenomenon, observations that have a reasonable chance of being practically examined. Abilities of individuals to carry memories of past events differ widely from individual to individual. Some people can remember events and experiences long passed, whereas some easily forget things within a few years. Most people vividly remember special events such as tragic happenings for a very long time, even up to death. Under hypnosis people recollect events which they had completely forgotten. Some people have the exceptional ability to recall knowledge and experiences gathered long ago and use them when necessary.

For example, a friend of mine, who had been discussing Advanced Level Physics with me when he was studying for the GCE (AL) exam a long time ago, but never did any science thereafter, escaped injury in the Central Bank bomb blast by instantaneously recalling his memories of discussing AL Physics. But others, who had studied Physics more recently, lost their eyes because that memory didn't flash back to their rescue at the time of impending disaster. As soon as my friend saw the flash of the bomb blast from his window, AL Physics flashed back into his mind that the shock wave comes a little while after the flash. Instantly he threw himself back flat on the floor before the shock wave blasted the window glass in. If rebirth as defined earlier is true, it should be possible to extend some of the above human capabilities, which result from immaterial aspects of the human being, beyond birth to the previous life and even beyond to earlier lives. Some people should be able to remember events in their past lives. Hypnosis must enhance this ability. Some must be able to make use of knowledge and experiences of past lives.

With these predictions we can move on to the last stage of the scientific process, to look for these predicted observations.

A large amount of data has been accumulated by research workers around the world on matters relating to rebirth. Spontaneous recall of past lives, past life therapy, child prodigies and others who can make use of knowledge and experience gathered in their past lives are some of the aspects that have been subjected to much research and investigation.

The observations on

- (i) Spontaneous recall of past lives,
- (ii) Past life therapy,
- (iii) Child prodigies and persons who can make use of past life knowledge and experiences.

match the predictions made in the third stage of the scientific process.

Spontaneous Recall of Past Lives

Most promising evidence bearing on rebirth comes from the spontaneous recall of past lives, especially by children. Often a child begins fumbling at the age of two, or sometimes even less, to communicate his/her memories of a previous life. A large number of such cases have been investigated all over the world. For example Dr. Ian Stevenson, Carlson Professor of Psychiatry at the University of Virginia (USA), has investigated over 2,000 such cases which are documented and published. There are several other researchers who have carried out such investigation on children who spontaneously recall past lives. Many of these researchers belong to religions that do not accept rebirth.

These children speak volubly, accurately and with unswerving conviction about their previous lives, and the histories related have been verified. In most cases these children voice their past life memories between the ages of two and five. They, being small, are free of memories crowded with information of their current lives. They often use phrases such as "when I was big" and often grumble about their small bodies and even speak resentfully of not being of the same sex as before. Often they yearn for the lost company of a husband, wife, son or a daughter. They hanker for the food, clothing, life style or sometimes even alcohol, drugs and tobacco of a former existence. They suffer phobias that can be linked directly to their unexpected deaths in their past lives, ie. fear of knives, water, motor vehicles etc. The strong identification felt by the subjects with the former personalities, the powerful emotional attachment expressed by them towards surviving past life relatives and friends, and the spontaneity of these, usually help to confirm the validity of such cases and exclude the possibility of fraud.

#### PAST LIFE THERAPY

Past life therapy is based on the premise that some people carry in their subconscious mind memories of unpleasant events of their past lives, and these subconscious memories adversely affect them in their present lives. By hypnosis they can be regressed beyond their birth to their previous lives or even to earlier lives. Many ailments, all types of phobias and even certain physical ailments can be cured by such hypnotic regression. Past life therapy has now become a standard western medical treatment for such ailments. The first highly publicised case of hypnotic regression to past life was that of Bridey Murphy in 1952 in the USA, when this subject was still in its infancy.

Several books have been written on this subject by medical practitioners who carry out such treatment. The interest of most of them is in curing the patients and only a few are interested in checking the information given about past lives. But a large number has been checked and documented. When regressed to past lives people often speak in languages they had spoken in their past lives which are completely unknown to them in their current lives. For example an Australian girl may speak in an ancient Egyptian language unknown in Australia or write in Egyptian stanzas inscribed in an ancient Egyptian temple which she had frequented in her past life. They would describe the setting in the past life in detail. Raymond Moody MD., who is a past life therapist, was himself regressed and recalled nine of his former lives. He has written a book giving his experiences on this subject.

Child Prodigies and Others who can use Past Life Knowledge and Experiences

The Roman philosopher, Cicero, maintained that the speed with which children grasp innumerable facts is strong proof of men knowing most things before birth. Since then the belief that genius is the flowering of past life experience has gained ground. Exceptional precocious talent in certain children of picking up knowledge can be explained only by rebirth. For example, a six-year-old child who had never played a musical instrument suddenly playing near masterpieces on a piano, or a three-yearold child mentally following his father's calculations on his employees pay sheet and spotting mistakes and later becoming one of the greatest mathematicians of the century cannot be explained in any other way. The latest such person reported is a fouryear-old American girl who speaks three languages, programs the home computer and reads Shakespeare instead of trying to read children's books. She has learned the Japanese language entirely from books.

One of the best reported cases of people who can make use of knowledge gathered in a past life is Jetsunma, a girl from a ghetto house in Brooklyn, in the USA, beset with alcoholism, violence and abuse. Her mother was a Jewish grocery store cashier and the step-father an Italian truck driver, both of whom were alcoholics who mercilessly hammered the child daily. When the mother was in a win situation she was dragged to the mother's church and when the step-father was in the win situation she was dragged to his church. When Jetsunma was 17 police advised her to leave home because it was too dangerous to live together with the parents. She left home, got married and produced a couple of children.

Once she was freed of the trauma of having to live with her parents, she acquired the capability to teach Tibetan Buddhism at a very high level and built up a clientele. She had never had any exposure to Buddhism. She did not known anything about Tibet. She or her clients did not know that what she was teaching was Buddhism. They had named it "Center for Discovery and New Life" Later she met a Tibetan monk, visited Tibet and found that she is the reincarnate of a former Tibetan monk. It was the knowledge that she had gathered in her past life as a Tibetan monk that she was teaching. Anyone visiting Washington can visit her Centre and meet her.

## CONCLUSION

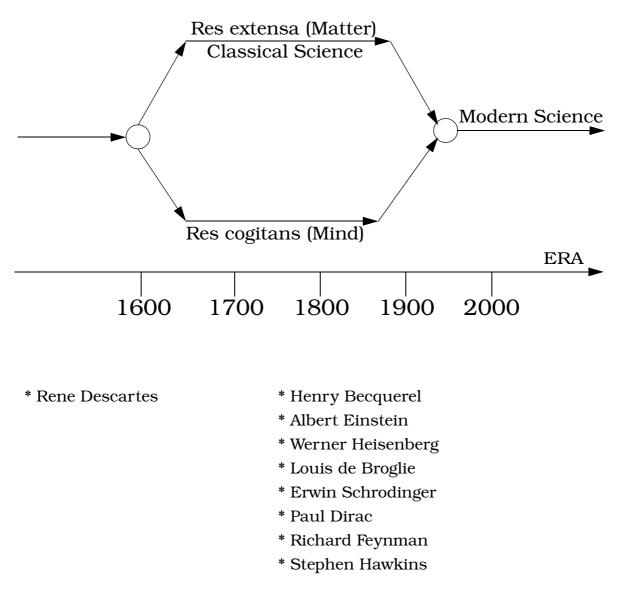
The observations made on the above areas agree with the predictions made in the third stage of the scientific process, thereby successfully completing the four step test for scientific acceptability. I have so far not come across any scientifically acceptable data that can go to prove the scientific unacceptability of rebirth.

On the basis of these tests it is concluded that the scientific acceptability of the phenomenon of rebirth is proven at least on three counts.

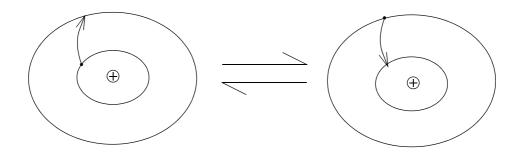
A science-minded person often finds it difficult to accept rebirth because he has failed to perceive a rebirth mechanism that is intelligible within the outdated Descartes' classical science frame work. But Modern Science, specifically Quantum Mechanics, has compelled us to accept unintelligible mechanisms of natural phenomena – like the jump of the electron – and we do not hesitate to accept them. Likewise with the data available we are compelled to accept rebirth as a reality.

Austrian Scientist Rudolf Steiner says:

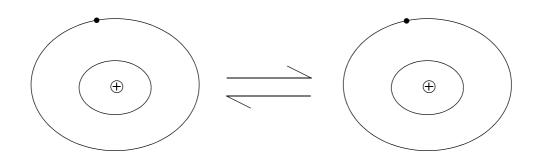
"Just as an age was once ready to receive the Copernican theory of the universe, so is our age ready for the idea of reincarnation to be brought into the general consciousness of humanity."



#### Figure 1

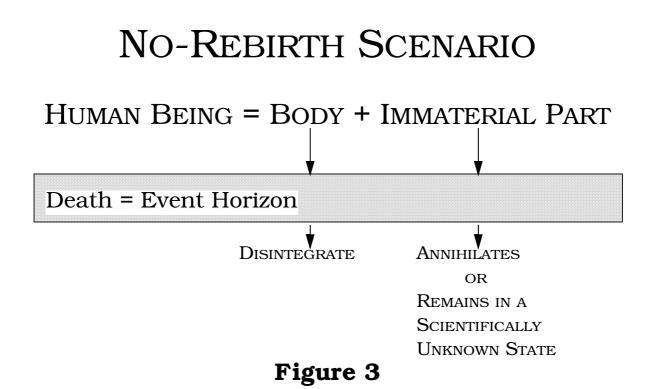


In classical science the electron moves from one orbital to another



In modern science the electron disappears from one orbital and reappears in another

#### Figure 2



## **REBIRTH SCENARIO**

