A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY

ARIFA K.

Thesis
Submitted to the University of Calicut
for the Degree of
DOCTOR OF PHILOSOPHY
IN
LIBRARY AND INFORMATION SCIENCE

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE
UNIVERSITY OF CALICUT

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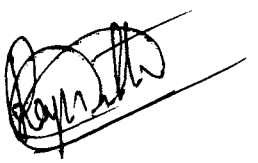
CERTIFICATE

This is to certify that this thesis is an authentic record of the bonafide research work carried by Smt. Arifa K. under my supervision and guidance and that neither this thesis nor any part of it has previously formed the basis for the award of any degree or diploma.



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DECLARATION

I, Arifa. K, do hereby declare that this thesis "A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY" has not been previously formed the basis for the award of a Degree, Diploma or Recognition.

Calicut University,
06 .02.2003

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CHAPTER 1

INTRODUCTION

1.1 Need and significance of the study

1.2 Statement of the problem

1.3 Definition of the key terms

1.4 Objectives of the study

1.5 Hypotheses

1.6 Limitations

INTRODUCTION

Information Technology, spreading throughout the globe in a lightning speed, has revolutionized each and every sphere of human activity. The emergence of a new electronic communication system characterized by its global reach, its integration of all communication media and its practical interactivity is changing and will change forever our culture, creating a new era of 'cybersocieties'. In fact, the twenty first century is being characterized by the emerging cybersociety.

Coming through the ages, we see that the primitive age was dominated by muscle power of man alone while in the agrarian society the muscle power of both men and animals were in command. Mechanical power was in the forefront in the industrial society whereas the post-industrial society was dominated by scientific and technological knowledge. The present Information Technology (IT) age is basically dominated by information. We are looking into the cyber age in which the most important resources are knowledge and wisdom. The cybersociety is basically a networked or interconnected knowledge and wisdom based society.

The cybersociety, which marks the culmination of IT revolution, can be taken to be the new social formations and the new community brought about by Computer Mediated Communication (CMC). It is the future society characterized by the computer network structures providing a sense of mobility--the ability to share thoughts and information instantaneously across

vast distances and the mobility of status, class, social role and character (Jones, 1998).

Even though cybersociety is marked by the information technology revolution, the very idea of IT is still vague, confusing or even contradictory. As such one may find it difficult to identify the theoretical basis of IT. The wide level social application of IT made recently all over the world aggravates the problem of defining or identifying the very concept of IT. This in turn demands for a study of the theoretical foundations of IT. Moreover, cybersociety being an emerging concept, its full implications and characteristics are yet to be known. There exists an urgent need to study about the theoretical and methodological foundations of the cybersociety.

Even in the emerging cybersociety, the value and importance of religions have increased in a tremendous way unlike the feudal society or industrial society. A world in which science and religion form an integrated part of a common understanding of our world will be better balanced, wiser and more civilized (Prince Charles, 1993). The Bible and the Quran are the basic scriptures of the two dominant religions of the world, namely Christianity and Islam. These scriptures have a greater role and influence in the emerging cybersociety. These two holy texts by and large deal with information, knowledge and wisdom and the essence of these are essentially meant for the advancement of the humanity.

It is a fact that both the Bible and the Quran have stimulated several a scientist in making original contributions and innovations. Various studies have been conducted highlighting these aspects. However, in spite of the fact that these holy scriptures encourage the developments in science and

technology, due to a lack of proper understanding of the very foundations of Christianity and Islam, some religious quarters held the view that Christianity and Islam are against the growth of science and technology.

The Bible and the Quran have their own approaches towards information, knowledge and wisdom. The very approach of Christianity and Islam being holistic and being founded on knowledge and wisdom, they could easily be accommodated in the highly networked or interconnected, holistic and knowledge based society, namely cybersociety. According to Guidaini (1998), our vision has overlooked the most important kind of capital in its fourth form, which is the 'wisdom capital' for the community of the future. Any treasury does not dispense wisdom capital. It is the product of the wisdom tradition--this tradition is handed down from age to age. It is stored in texts like the Bible and the Quran.

Modern Information Science is primarily concerned with the techniques or methods and theoretical foundations in handling Information and knowledge with the help of Information Communication Technology (ICT). Informatics/Information Science is considered a fundamental science, the theoretical aspects of which are connected with the semiotic study of sign system and properties of information and applied aspects--coupled with the need to exploit the new Information Technology (Giliarevski, 1996).

The recent advances in Information Science is very much dependant on the recent advancement in science and technology, especially computer and communication technology. IT has been made use of much efficiently and effectively in storage, dissemination, transmission and retrieval of information and also in information networks, without which international

communication of information could not have been possible. Thus IT has played a very important role in the multidimensional growth of Information Science.

Information Technology has its impact on the librarians and information scientists as well. Modern IT is providing a basis for library without walls. In this age and time, information will and can be retrieved from one's desktop with just a PC and a modem. The librarian's and information scientists' role should be to respond to that challenge, to bring the world of information to one's fingertips by being a participant in this 'wired' environment through 'virtual libraries' or 'digital libraries'.

But in spite of its developments, Information Science still lacks a thorough theoretical foundation. Being very much dependant on IT, it has been very often taken to be as Computer Science or Communication Science. Theories that explain empirical laws in a scientific and rational manner are very essential for the development of any discipline. Information Science, as a discipline lacks this aspect and very often its status as a scientific discipline is being questioned (Satyanarayana, 1996).

In this context, a very detailed study of the Bible and the Quran, especially with regard to the treatment of information, knowledge and wisdom will provide a theoretical basis for the emerging cybersociety and hence information technology also. Information Science, very much dependent on IT, the same logic above could equally be applied in tracing out the Biblical and Quranic foundations of modern Information Science. So the present work is a major attempt in finding out the theoretical foundations of Cybersociety and Information Science by studying the treatment of

information, knowledge and wisdom in both the Bible and the Quran. An attempt is also being made to make a comparison between the Bible and the Quran in this regard and find their relevance in the emerging cybersociety.

The investigator has adequate background in Information Science and IT, besides the Bible and the Quran that helps to pursue he present study. It is also realized that in spite of the emergence of Information Science as a big science from the status of little science, it still lacks the basic theoretical foundations. (Price, 1986)

1.1 Need and significance of the study

We understand that the holy scriptures like the Bible, the Quran, the Vedas and others have been the storehouses of knowledge and wisdom that emerged through the centuries. However, the society till today has not grown mature enough to make use of the knowledge and wisdom imbibed in these old scriptures.

It is expected that the emerging cybersociety will be mature enough to make use of the knowledge and wisdom coordinated and compiled in the holy scriptures like the Bible and the Quran. Cybersociety is a society of interconnections and communications, the base of which is knowledge and wisdom. As such, the Bible and the Quran can prove to be effective sources of knowledge and wisdom for the emerging cybersociety. The present study is an attempt to explore the knowledge and wisdom hidden in the Bible and the Quran in the context of the cybersociety. Such a study, in effect may

provide the very theoretical foundations of both Information technology and the cybersociety.

Information Science and Information Technology have no relevance or meaning without information or knowledge as the very theoretical foundations of these rely on information and knowledge. Both the Bible and the Quran deal with information and knowledge in depth and a deeper study on the approaches of the Bible and the Quran towards information and knowledge can provide a sound theoretical foundation for Information Science and Information Technology.

The study is an attempt to trace out the epistemological and cognitive foundations of the Bible and the Quran. Recent studies on the theoretical foundations of information reveal that information and knowledge are essentially cognitive phenomena and any fundamental theory of information should be based on the cognitive considerations (Godert, 1996). Therefore the study will prove to be a major contribution towards a fundamental theory of information and thereby lay a base for numerous disciplines since information and knowledge are themselves basically dealt in many disciplines including computer science and biological and neurosciences.

Even though several studies have been conducted by theologians, philosophers and religious groups, historians, sociologists, linguistic experts and literary critics on the various aspects of the Bible and the Quran, no major attempt has been made so far in studying them purely from the angle of modern information science in the context of emerging cybersociety

especially with regard to their treatment of information, knowledge and wisdom that are considered to be the basis of both Information Science and Cybersociety.

The value of spirituality has been discussed with much concern in this world of hitech information. The study has special significance in understanding both the Bible and the Quran and thereby Christianity and Islam in the context of the emerging cybersociety. The present state of the decline of values is the result that human beings have gone long distance away from understanding the intellectual content and the gist of these scriptures. A thorough study of the Bible and the Quran shows that wisdom and knowledge are very largely dealt within them and the essence of these has been meant for the uplift of humanity. The study is an attempt to dig out these intellectual aspects and to show that they are still very relevant in the modern cybersociety, or in other terms, the modern cybersociety can survive only if they keep up with these intellectual aspects of the two scriptures.

The world today has been experiencing several problems leading to unnecessary controversy or religious clashes that may ultimately lead to hostility and rivalry between people or communities or nations. The reason behind this is to a very large extent, the misunderstanding or misinterpretation of both the Bible and the Quran instead of realizing the values these scriptures uphold.

What is urgently needed at present is a peaceful coexistence of various religions. It is hoped that a proper and balanced study of both the Bible and the Quran in the context of emerging cybersociety will lead to greater understanding and cooperation among the members of a particular

religion and also among religions. The present study is expected to make some basic contributions in this regard.

1.2 Statement of the Problem

The study is entitled "A Comparative Study of the Treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the Emerging Cybersociety".

1.3 Definition of the Key Terms

The key terms used in the statement of the problem and their definitions are given below:

(a) Study – Study is to examine or investigate carefully and in detail (Webster's Encyclopedic Unabridged Dictionary of English Language, 1996)

(b) Treatment – The Hutchinson Encyclopaedic Dictionary (1994) defines treatment as the process or manner of behaving towards or dealing with a person or thing. In the present study treatment denotes to what extent the Bible and the Quran deals with information, knowledge and wisdom. In other words, the Biblical and Quranic approach towards information, knowledge and wisdom.

(c) Information – Information is defined as the communication or reception of knowledge or intelligence; something obtained or received through informing; the process by which the form of an object of knowledge impressed up on the apprehending mind so as to bring about the status of

knowing. (Webster's Third International Dictionary of English Language, 1978).

(d) Knowledge – Webster's New World Thesaurus (1971) defines Knowledge as learning, wisdom, information, experience or just simply know how

(e) Wisdom – Wisdom has been defined by Oxford Advanced Learner's Dictionary (1992) as

1. (a) experience and knowledge (shown in making decisions and judgements); quality of being wise

(b) good judgement, advisability, commonsense

2. Wise thoughts, sayings etc.

In the present study, Information, Knowledge and Wisdom taken as a whole refers to everything related to these concepts including the philosophical ideas like reasoning, learning, intelligence, creation of the universe, acquisition of knowledge and science and technology as dealt in the Bible and the Quran.

(f) Cybersociety – In the present study, Cybersociety refers to the knowledge and wisdom based future society and the new social formations brought about by the highly networked and interconnected Computer Mediated Communication with the ability to share thoughts and information instantaneously across vast distances.

1.4 Objectives of the study

The following are the objectives of the present study:

(i) To study the Bible and the Quran with regard to their treatment or approach towards information, knowledge and wisdom.

(ii) To make a comparison between the Bible and the Quran with regard to their treatment of information, knowledge and wisdom.

(iii) To examine the validity of the treatment of information, knowledge and wisdom dealt in the Bible and the Quran within the context of the emerging cybersociety.

(iv) To examine the practical importance of the approaches of the Bible and the Quran towards information, knowledge and wisdom in solving the basic developmental problems of the humanity.

1.5 Hypotheses

The following hypotheses are being formulated for the study:

1. The basic treatment of information, knowledge and wisdom in the Bible and the Quran remains the same.
2. The approaches in the Bible and the Quran with regard to information, knowledge and wisdom encourage the growth, development and application of information technology in the modern age.
3. The present study will provide a theoretical foundation for Information Science, Information Technology and Cybersociety.

1.6 Limitations

The study is not a theological one but purely a scholarly one within the framework of modern Information Science and Information Technology. It emphasizes on the academic and intellectual value of both the Bible and the Quran in the context of the emerging cybersociety. This can be considered to be a pioneering work in this field.

By taking into account the constraints of time and resources at the disposal of the investigator, the study is conducted mainly within the geographical boundaries of Kerala, especially with regard to the views of the experts.

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CHAPTER 2

THEORETICAL ASPECTS

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2.1.1 Information
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Chapter 2

THEORETICAL ASPECTS

The study is basically an attempt to find out the treatment of information, knowledge and wisdom in the Bible and the Quran within the context of the emerging Cybersociety and thereby search out the theoretical foundations of Cybersociety, Information Technology and Information Science on the basis of the approaches of the Bible and the Quran towards information, knowledge and wisdom. It is a fact that in spite of the IT revolution throughout the globe and emergence of a cybersociety, the very foundations of Information Technology is still unknown. The concept of cybersociety, in its emerging stage, also lacks a sound theoretical foundation. The case of Information Science is also not different. This chapter covers the theoretical aspects of information, knowledge and wisdom and also Information Science, Information Technology and Cybersociety besides the epistemological foundations of the Bible and the Quran.

2.1. INFORMATION, KNOWLEDGE AND WISDOM

2.1.1 Information

Information is being considered as the most important resource and power of today's society. Within the complex organization of present day society, various types of professionals have dedicated their studies to the subject of information, particularly the specialists in the field.

A dictionary (Brockhaus'Konversations lexikon) definition in Latin for information gives information as teaching, learning, reference data. Weiner (1948), a mathematician and accepted founder of cybernetics assume information as a new phenomenon, not matter, nor energy. A physicist, Jungclaussen (1988) defines Information as a body of signs to which a definite meaning may be imparted by somebody articulating it, and to which an interpreter may also impart a meaning. The cybernetician Kempe (1986) defines information as the ability of signs to produce images. Shrieder (1988) defines information as transformed knowledge, its form representing this piece of knowledge.

Various studies of information verified its plurality and diversity. Farradane's study "Knowledge, Information and Information Science" establishes the difference between Information and Information Science. Arntz (1983) refers to ontogenic and genetic information. Mc Hale (1981) assumes that information is stored in the brain and processed for further use. Dretske (1981) distinguishes between sense information and conscious information. He differentiates between information from knowledge and information from meaning. Leupolt (1978) proposes an informatology. Wersig (1980) assumes that there is intentionality and an ontogenic characteristic in the person receiving information and that this modifies his sense of action. Baird (1984) refers to "information theory and processing". Vogue considers an energetic component of information when he speaks of "Infodynamics". Similarly, Le Moigne (1990) likens his "inforgetics" to energetics. Froehlich (1989) postulates, "I am, therefore I think", where information is implicitly responsible for human thought process. Bergstrom (1989) compares the brain to a machine that processes

information. Buckland (1991) makes a distinction between information as a thing and information as knowledge and information as process. Finally, Stonier (1990) attributes economic development to information and distinguishes between structured, kinetics and intelligent information.

Information Science defines "Information" in a general way as every news (communication) that is of interest to the receiver. Information is that part of knowledge that is offered to participants because they need specifically that part of knowledge.

2.1.2 Knowledge

The notion of knowledge is intuitively no less clear that that of information. Yet it has come to us from across the centuries. It was through the shifts from oral culture where knowledge is memorized to scribal culture where knowledge is handwritten, to printed culture where knowledge is organized in books, to the new computer culture where knowledge is digitalized.

Knowledge is the most human phenomenon -- it is related to man. Soviet Encyclopaedic Dictionary (1980) defines knowledge as the result of reality cognition verified by practice and its correct reflection in human reasoning. Clark (2001) defines knowledge as the matrix of impressions within which an individual situates newly acquired information. The conventional assumptions about knowledge that information theory proceeds upon are:

(a) There is a reality, outside the human mind.

(b) Humans cannot directly capture the things in the real world, but sense and measure them, and construct an internalized model of them.

(c) Acts of sensing and measurement are enabled by, and constrained by, the human perpetual apparatus, comprising fairly well understood anatomical components, increasingly well understood physiological processes and mental processes which are still poorly understood.

(d) Knowledge is intrinsic or implicit within individual humans.

(e) Some people use the term 'knowledge' to refer to data that has been captured by human, reexpressed or stored (in a medium) and intended to be later recaptured by other humans.

The basic questions related to knowledge are -- what is knowledge? How is it created? How does man gain knowledge? What are the different ways for acquiring knowledge? The questions on knowledge, its logic, origins and basis have been dealt with in a separate branch of philosophy called 'epistemology'. Theoretical aspects of epistemology have been discussed later in this chapter.

Klix (1984), known for his works in conceptual thinking explains that human knowledge consists of concepts and links between them. This knowledge can be exchanged by means of language. Semenyuk (1988) writes regarding the emergence of scientific knowledge that at the first stage, each scientist solves the question of peculiar coding of cognition results, received in the course of studying a phenomena (for himself). At the next

stage the researcher sets the task of transforming the piece of knowledge obtained into a form enabling it to be perceived by other scientists and in general, by other people. (for others). Shreider (1988) asserts that knowledge is local; it is peculiar to a certain person at a defenite point of time. He distinguishes the two faces of human knowledge personal knowledge and social knowledge (i.e., information). Kiel (1994) observes that knowledge cannot be separated from individual or cultural subjectivity. Jaenecke (1994) sub divides knowledge into core, peripheral and pseudo knowledge.

Another topic of concern has been the interaction of information and knowledge. Although there has been disagreement on the relationship between knowledge and information i.e., whether information is a kind of knowledge or not, information and knowledge can at least be considered as the different stages of the same continuous process. Farradane (1979) defines information as the written or spoken surrogate of knowledge. Machlup (1983) presents a multisided discussion on the relationship between information and knowledge as follows: A close and firm link between information and knowledge has always existed, and most dictionaries define information as a certain kind of knowledge. Some have the word information denote 'a transfer of knowledge' or a 'piece of knowledge'. Distinctions between information and knowledge have been proposed chiefly on three scores:

(1) Information is a piecemeal, fragmented, particular whereas knowledge is structured, coherent and often universal.

(2) Information is timely, transitory, perhaps even ephemeral whereas knowledge is of enduring significance.

(3) Information is a flow of messages, whereas knowledge is a stock, largely resulting from the flow, in the sense that the 'input of information may affect the stock of knowledge by adding to it, restructuring it, or changing it any way.

Further considerations in this regard are needed in the context of the process of communication between human minds.

Informatics/Information Science basically deals with the interaction between information and knowledge. According to Shreider, who proposed Informatics, there lies an abyss over which a bridge is to be built by Informatics – at one side of the abyss is the spiritual world consisting of the content of man's consciousness with his peculiar knowledge, here and today and on the other side lies the world of social information that can be stored and processed by computer – everywhere and always. In the first world there is only knowledge processing and in the other there is only information processing. Any act of communication in the society, even a simple talk, proceeds so that knowledge is transformed into information and information into knowledge. Man is always included in this and without him no transformation is possible.

The interaction of information (IN) and knowledge (W) may be expressed by means of the formulae:

IN=fr (W) – Information is a function of represented knowledge and

W = fi (IN) – Knowledge is a function of interpreted information

In abstract terms, representation (articulation) proceeds as a transfer from the sphere of the brain (knowledge location) to the sphere outside the brain; and interpretation involves a transfer from the sphere outside the brain (information domain) to the sphere of the brain.

2.1.3 Wisdom

A further concept of relevance is "wisdom". This is, however, on an entirely different plane from both information and knowledge, because it has to do with judgement exercised by applying decision criteria to knowledge combined with new information. In the words of Sternberg (2001), to define wisdom is a task that requires more wisdom than any of us can have. Thus, we cannot quite comprehend the nature of wisdom because of our own lack of it.

American Heritage Dictionary (1985) defines wisdom in the following ways:

(1) Understanding of what is true, right or lasting insight.

(2) Common sense: good judgment.

(3) The sum of the scholarly learning through the ages; knowledge; wise teachings of the ancient sages.

(4) A wise outlook; plan or course of action.

Another Hebrew definition for wisdom is knowledge and ability to make the right choices at the opportune time. The prerequisite for it is the 'Fear of the Lord'. Wisdom has also been defined as the quality of being wise, knowledge, and the capacity to make use of it; knowledge of the

best ends and the best means, discernment and judgement. In the words of Coleridge, commonsense is an uncommon degree is what the world calls 'wisdom'.

The concept of wisdom can be understood from three dimensions- cognitive dimension, reflective dimension and affective dimension. From the cognitive dimension, wisdom is the ability to perceive reality as it is, i.e., to comprehend (or deeper) meaning of phenomena and events. From the reflective dimension, wisdom can be taken to be the self-awareness and the ability to look at phenomena and events from different perspectives. From the affective dimension, it is the sympathy and compassion for others.

Regarding the relation between knowledge and wisdom, Paley says, "In strictness of language, there is a difference between knowledge and wisdom. Wisdom always supposing action and action directed by it". According to Cowper, "Knowledge and wisdom far from being one have of times no connection. Knowledge dwells in heads replete with thoughts of other man; Wisdom in minds attentive to their own. Knowledge, a rude unprofitable mass, the mere material with which wisdom builds, till smoothed and squared, and fitted to its place, does but encumber whom it seems to enrich. Knowledge is proud that he has learned so much; wisdom is humble that he knows no more". (Zimmerman, 2001)

Whewell, differentiating wisdom from prudence, which is a synonym for wisdom, says, "we can conceive prudence as the virtue by which we select right means for given ends, while wisdom implies the selection of right ends as wells as right means". Hence wisdom implies the

union of high mental and moral excellence. Knowledge is a more comprehensive term and signifies the simple apprehension of facts or relations.

It can be seen on the verification of the theoretical aspects of information, knowledge and wisdom that man is the most important factor in these concepts. Without man, no information, knowledge nor wisdom exists. This fact is to be borne in mind throughout the present study undertaken. In the words of T.S Eliot,

> Where there is wisdom, we have lost in knowledge
>
> Where there is knowledge, we have lost in information.

2. EPISTEMOLOGY

Epistemology or theory of knowledge is the branch of philosophy, which examines questions about the nature of knowledge, and how we get it (Grayling, 1945). It attempts to answer the questions, 'what is knowledge? and what are the best and more secure ways of acquiring knowledge?' These questions are interconnected and attempts have been made to answer them in different ways. Two principal schools of thought in the history of epistemology, namely, 'rationalist' and 'empirical' holds that the chief route to knowledge are the exercise of reason and perception respectively. The model for rationalists is mathematics and logic where necessary truths are arrived at by rational inference. The model for empiricists is any of the natural sciences where observation and experiment are chief methods of inquiry. Epistemology is thus an aid in the search for

knowledge and to understand the nature of knowledge. It discusses philosophically truth, false hood, validity of knowledge, limits of knowledge and nature of knowledge, knower and knowee etc.

2.2.1 Ways of acquiring knowledge

Knowledge consists of truth, facts, principles, theories, beliefs or other objects acquired by mankind from generation to generation and from civilization to civilization. The man in ancient times acquired knowledge by chance, or with trial and error method. It was with the method of reasoning that man increased his opportunities to acquire knowledge.

2.2.1.1 Empiricism: Five Senses as a Source

We use eyes, ears, tongue, nose and hands to acquire little bits of knowledge. What we see, hear, touch, smell and taste-that is, our concrete experience-constitute the realm of knowledge. The view that knowledge comes through the senses is known as empiricism. Emphasis is placed upon man's power of perception, or observation, or upon what mind receives from the environment.

2.2.1.2 Rationalism: Reason as a way of acquiring knowledge

The thinkers who emphasize reasoning or thought as the central factor in the acquisition of knowledge are known as rationalists. Rationalism is the view that we know what we have thought out, that knowledge is obtained by the method of comparing ideas with ideas. The rationalist, in emphasizing man's power of thought and what the mind contributes to it, is likely to assert that the sense, by themselves cannot give

us coherent and universally valid judgements. The highest kind of knowledge consists in the universally valid judgments that are consistent with one another.

2.2.1.3 Intellect and Intuition

Intellect and Intuition are two faculties of acquiring knowledge. Intellect is the faculty of thinking and acquiring knowledge, especially of a higher order. Here, higher order is that pertaining to empirical sphere. The sense organs are equipment directed towards the external world. They take in sensations or sense data and furnish them to the concerned faculty of mind. The mind analyses and synthesizes these data and this is the intellectual type of knowledge. Intellectual knowledge is empirical. Intuition, on the other hand, is judgement without reasoning. It does not mean judgement based on irrational ground. On the contrary, it actually means a synoptic judgement where there are no logical or rational methods involved. The judgement arrived at is neither due to induction nor deduction.

Intuition as immediate awareness without logical or rational inference would mean that it is above logical inference or it surpasses the empirical limits. But to surpass the empirical, one must pass through empirical. Hence intuition is not the negation of the empirical, but the effulgence of the trans-empirical. Intuition is the immediate cognition of the essences of a thing and is a quick insight. It is always thought of as higher wisdom and its place is above intelligence – Intuition is the extension of perception beyond sense. Intuitional experience is a state of mysticism.

Mysticism is the intuitive experience of Divine Reality (Ultimate Truth) (Damodaran, 1993).

For Henrii Bergson, the French philosopher, intuition and intelligence are pointed in opposite directions. Intuition, which is instinct that has become self-conscious, can lead us to the very inwardness of life. We discover the world, by intuition, which is inward and immediate, rather than by intellect, which is external and describes the living in terms of the static and the dead. Intuition, according to mystics, may enable us to gain a vision of reality, to receive the inspirations of an immanent God, or to experience a unity with God.

2.2.1.4 Revelation

Revelation as a means of acquiring knowledge is different from those discussed above. Reason, thought or contemplation cannot acquire it. Revelation cannot be achieved by human efforts. It is the disclosing of Divine knowledge to man, and thus it is accomplished by only those who God chooses Himself (Haq, 1991). Both Christianity and Islam are based on revelations. Christians think that God reveal Himself in Jesus Christ. For Muslims, the holy Quran is the revelation of God to Prophet Mohammed in which His message to man is contained. The acute psychological difference between prophetic and mystic types of knowledge is that the mystic does not want to return from the repose of his unitary experience, and even when he returns, it does not mean much for the mankind at large. The Prophet's return is creative. For the prophet, it is the awakening, within him to completely transform the human world.

Another related discipline in Philosophy is Metaphysics, which is concerned with the theories of the nature of reality. It deals with questions like why does earth exist? How did it come into being? etc. Idealism, another realm of theory of knowledge is concerned primarily with the search for truth.

2.2.1.5 Experience

Banking upon personal experience or on that of others in seeking answers to vexed problems is the most primitive, and yet most familiar, useful and fundamental method to obtain knowledge. Deriving knowledge from personal experiences is important, but a person may make errors when observing or when reporting what he has seen or done.

2.2.1.6 Deductive Method

Aristotle developed syllogism-a method of reasoning which provides a means of testing validity of particular conclusion or idea by proceeding from general to the specific or from known to the unknown. Syllogistic reasoning established a logical relationship between a major premise based on a self-evident truth or previously established fact or relationships; a minor premise concerning a given case to which the truth, fact or relationship invariably applies, and a conclusion.

2.2.1.7 Inductive Method

Francis Bacon (1561-1626) vehemently criticized the medieval practice of deductive conclusions from self-evidence or authoritative premises. He maintained that man should not enslave himself to other men's

thoughts. Rather he advised the investigator to observe phenomena closely, to experiment, to tabulate all the facts, to study these facts in order to reach minor generalizations, and then to proceed from minor generalizations to establish general conclusions (on the basis of direct observations).

Charles Darwin integrated the most important aspects of the inductive and deductive methods in his works. This sweet marriage of the best in the inductive and deductive methods of acquiring knowledge gave birth to the Scientific Method of research. Scientific method is thus a synthesis of reason (deduction) and observation (induction). While using the scientific method man shuttles back and forth between deduction and induction and is engaged in reflecting thinking.

2.2.2 The Genetic Approach to Knowledge

Modern psychology and logic have suggested that knowledge is not something that comes in neat packages, which can be traced to separate sources. Knowledge is a growth in which a living organism, with certain specific interests and drives, is in constant contact and interaction with a changing environment. This relation between the organism and its environment is sometimes described in terms of "stimulus and response". Out of this relationship awareness arises. The organism becomes aware of various specific things, relations, and events, and as a consequence acquaintance language, meaning and thinking emerge.

George Patrick in his book "Introduction to Philosophy" writes: The conditions of knowledge are "a self with certain innate interest, an environment with which the self enters into relations, an intelligent that

can fund, capitalize, and organize this experience and deal effectively with new and complicated situations. Knowledge is funded experience, but in the funding process mental powers and activities are the significant things-memory, thought, conceptual analysis, reflection, selective organization, creative synthesis. Knowledge is, therefore, not something which drifts in from a ready-made world in the form of impression, not is the distilled product of certain a priori universal principles of thought, but is a product of the interaction of the self and the environment, in which the remarkable powers of the self are the most significant factors". (Khanna, 1997)

2.3. INFORMATION SCIENCE

The very foundations of Information Science lie upon information and knowledge. Information Science is concerned with the science and practice of the provision of information. To this end, it includes the study of information from its generation to its exploitation, and of its transmission in a variety of forms through a variety of channels.

It was in the context of computers, mathematical information theory, operations research and other qualitative approach to behavioral and social phenomena that the term information science appeared in America in 1959. (Prasad, 1996). Subsequently the Russian term 'Informatics' was put forth in 1962 by Kharkevich, as a discipline of scientific Information. With the popularisation of these two terms, there were other terms to identify and designate the domain of Information Science as follows: informatology, informetrics, informatistics, informatics, information technology, information

systems engineering, documental informatics, documentary informatics, cybernetics etc.

Information Science has been taken to be a variety of activities like a group of technique, an applied discipline, a soft science, a synthetic discipline, an intellectual discipline, a basic area of enquiry and so on. Many Information specialists, librarians and investigators have been trying to define Information Science but no agreeable definition has been arrived so far. A single agreed upon universal definition for Information Science is yet to be arrived. Taylor (1963) defined Information Science as the study and technology of processing information for optimum accessibility and use. Foskett (1978) has defined Information Science as "the discipline that is emerging from cross-fertilization of ideas involving the ancient art of librarianship, new art of computing, art of new media of communication ...transfer of organized thought".

ASIS in 1975, defined Information Science – Information science is concerned with the generation, collection, organization, interpretation, storage, retrieval, dissemination, transfer and use of information with particular emphasis on the application of modern technologies in these areas. As a discipline it seeks to create and structure a body of scientific, technological and systems knowledge related to the transfer of information. It has both pure science (theoretical) components, which enquire into the subject without regard to the application and applied science component, which develops services and products. Wilson (1981) defined Information Science as "the set of practices and related disciplinary studies which is concerned with the generation, transmission, organization,

storage, retrieval and use of information together with studies of the area of information.

An analysis of the different definitions for Information Science show that there exists no consensus among the practitioners of Information Science about its conceptual framework. Thus the foundations of Information Science is still very weak and shaking, the fundamental reason being the lack of common or shared approach and understanding of the use of the terminology. However, the definitions are mainly from three perspectives namely communication perspective, semantic perspective and cognitive perspective. The present study takes into consideration mainly the cognitive perspective of Information Science – Information, Knowledge and Wisdom can be taken to be cognitive concepts.

An early attempt to lay the theoretical foundations to Information Science was made by Shannon and Weaver (1949). A paper 'Shannon's Information Theory' is universally known as a classic and the importance of its concept in laying theoretical foundations of Information Science was instantly recognized. Though it was expected that Shannon's magical formula would unlock countless information secrets and give a quantitative measure for laying out a scientific theoretical foundation for practically every major field lacking one, unfortunately, the extension was generally an intellectual exercise and 'information theory' matured into a 'mathematical specialty quite distinct from what is now Information Science'. Despite the inadequacies associated with Shannon's theory, a large number of information specialists believed that any truly theoretical framework for Information Science must include a basic quantitative measure along

Shannon's lines and that perhaps the development of such a measure should be given priority.

Fairthrone (1969) while discussing about what must be the first step towards a theory of Information Science states that any discipline must first define its own scope i.e., what matters it will study explicitly. Yovits (1969) points out that Information Science must have a number of different applications, which utilize the same general principles. Hillman(1969) has emphasized the need for standardization of the terminology. Kochen (1969) in his paper entitled "stability in the growth of knowledge" proposes that the heart of Information Science should be what he calls "epistodynamics". It is concerned with "lawful regulations governing the acquisition of information and its transformation into knowledge, the assimilation of knowledge into understanding the fusion of understanding into wisdom". Vickery (1973) in a paper entitled 'The nature of Information Science' examines Information Science to see if it shows any sign of becoming a science and emphatically declares it does.

However, some of the writers have been somewhat pessimistic regarding the development of solid foundations for Information Science. For example, Vagianos (1972) declares that there are no foundations for 'Information Science' and very little hope of there being any in the foreseeable future. The relation between "Information" and Information Science is considered as a complete, global, complex entity, with a holistic dimension.

The Institute of Information Scientists (UK) in 1976 developed a set of criteria for Information Science, which may be modified from time to

time to reflect the widening scope of the subject. These criteria are (1) Knowledge and its communication, which involved creation and growth of Knowledge, Nature, properties and characteristics of Knowledge, and Information flows. (2) Sources of information (3) Theory of information storage and retrieval. (4) Systems for information storage and retrieval (5) Dissemination of information (6) Management of information (7) Technology and its applications.

The first criteria i.e., creation growth, nature and properties of knowledge are of relevance to the present problem under study.

The International Federation for Information and Documentation, especially its technical committee on the Theoretical Foundations of Information (FID/RI) had conducted several studies on the theoretical aspects of modern Information Science. In this context, the two theories formulated by Mathew (1985) deserve special attention. The two theories are 1) The theory of Information/Knowledge Consumption-Production Correlation and 2) The Stage Theory of Information/Knowledge growth. Soman (2002) has conducted a study on the two theories in the specific context of Physical Sciences. These theories provide a purely materialistic interpretation for the theory of knowledge and hence it was considered as a basic Marxian approach towards knowledge, especially by the then Soviet Marxian theoreticians.

Four areas can be identified in Information Science (Vickery & Vickery, 1987). They are:

(1) The particular problems of the communication of Information in Science and Technology better called 'Science Information'.

(2) The use of technology, particularly computers and telecommunications in information handling – 'Information Technology'.

(3) The application of scientific method to practical information problems-'Information Systems Study' and

(4) The scientific study of the communication of information in society – "Information Science" in the sense of an academic discipline.

Scientific information has now been modernized in transition to the new Information Technology. So also the development of the modern systems of collection, processing, storage, retrieval, dissemination and use of information occur under the influence of the newest achievements in the field of Information Technology. Thus Information Science is by and large dependent on the developments of Information Technology.

Human mind – human being himself is of much relevance in Information Science. As the social information processes are in fact mediated by psychological processes, the findings of Cognitive Psychology are intensely relevant to Information Science. This idea has been discussed in detail in next chapter in the section dealing with Epistemological/Cognitive foundations of Information Science.

2.4. INFORMATION TECHNOLOGY

The society is currently experiencing a revolutionary change or transformation on a global scale. We live in a world that has become digital.

The complex rapid changes in the processes of information handling, transmission, storage and retrieval of information have paved the way for the new era of Information Technology revolution. Today, success in just about any field has become impossible without Information Technology. In farming, manufacture, education, policing, medicine, entertainment, banking or whatever, Information Technology is apparently set to change everything that human beings do in advanced societies.

Information Technology is an amalgum of electronics, computing and communication technology. These three technologies are converging and becoming closely related. Computers are becoming integral parts of communication system and many computer applications depend on computers communicating with each other. As the technology develop, the distinction between these systems have become more blurred. The terms Information Communication Technology (ICT) and Computer Mediated Communication (CMC) in use today indicate this fact.

The developments in microelectronics along with computer technology including computer software and hardware are setting the pace for Information Technology revolution. The race is still on between Japan and the US in building supercomputers -the fifth generation computers that exhibit 'artificial intelligence'. The new revolution in telecommunication and microelectronics has made possible the 'intelligent network'.

A giant leap in microelectronics was the development of the integrated circuit, the microprocessor in 1971 in Silicon Valley. An acceleration in microelectronics technology in integration (0.18 micron chips) in DRAM capacity (1, 024 megabits), and microprocessor speed (500+mega

hertz as compared to 150 in 1993) has been forecast for the year 2002.This, combined with dramatic developments in parallel processing using multiple microprocessors is relentlessly increasing computing capacity. The design of Apple I and later Apple II, the first commercially successful microcomputer, led for the age of diffusion of microcomputers, later called personal computers (PC). Bill Gates and Paul Allen adapted BASIC for operating Altar machine in 1976. Having realized its potential, they went on to found Microsoft. Since then they have been dominating the operating system software and in software itself for the exponentially growing microcomputer market as a whole.

To advances in microelectronics and software, one has to add major leaps in networking capabilities. Since mid 1980s, microcomputers cannot be conceived of in isolation: they perform in networks, with increasing mobility, on the basis of portable computers. This extraordinary versatility and the capacity to add memory and processing capacity by sharing computing power in an electronic network, decisively shifted the computer age in 1990s from centralized data storage and processing to networked, interactive computer power-sharing. Not only the whole technological system changed, but its social and organizational interaction as well.

Telecommunications have been revolutionized also by the combination of "node" technologies (electronic switches and routers) and new linkages (transmission technology). The progress in integrated circuit technologies had made possible the digital switch, increasing speed, power and flexibility while saving space, energy and labor vis-à-vis analog devices.

Major advances in opto electronics (fibre optics and laser transmission) and digital packet transmission technology dramatically broadened the capacity of transmission lines. The Integrated Broadband Networks (IBN) envisioned in 1990s could surpass. Integrated Services Digital Network (ISDN). While the carrying capacity of ISDN on copper wire was estimated at 144,000 bits, the 1990's Integrated Broadband Network on optic fibres, if and when they can be realized, though at a high price, could carry a quadrillion bits. This optoelectronics – based transmission capacity together with advanced switching and routing architectures such as the Asynchronous Transmission Mode (ATM) and Transmission Connection Protocol/Inter Connection Protocol (TCP/IP) are the basis of the so-called 1990's Information Superhighway (Castells, 1998).

It was in 1969 that the US Defense Departments Advanced Research Projects Agency (ARPA) set up a new, revolutionary electronic communication network that grew to become the current Internet. The Internet is a global information highway, which has evolved into one of technology's greatest democracies permitting the passage of all kinds of information with full freedom. It is a platform for sharing and providing information, and through this channel, millions of scholars, scientists, businessmen, librarians, journalists, artists and software developers are woven into a 'global village'.

In short, Information and Communication Technologies (ICT) have been the drivers of present day Knowledge Societies. They are providing newer and faster ways of delivering and accessing information, innovative ways for real-time communication and new ways to do business

and create livelihood opportunities. ICT offers vast potentials including Internet, e-mail, e-commerce, groupware, bulletin boards, newsgroups, video-conferencing and many more, with its far-reaching impacts.

2.5. CYBERSOCIETY

Information Technology is the single biggest shaper of contemporary society, and it will no doubt abide as a powerful catalyst of change in the future. All the developments in Information Technology and their impact on the society have given way to the new concept of 'Cybersociety'. Cybersociety is an emerging concept – it is taken to be the society of the future. The succession of transformations in the societies through the history of mankind since late 1950's were identified by terms like post capitalist society (1958), industrial society (1961), global village (Mc Luhn, 1964), the post-industrial society (Bell, 1971), super-industrial society (Toffler, 1971), information society (Toffler, 1980) and many more. These concepts in crude or unrefined form have laid the foundations for the new idea of cybersociety. Authors like Jones (1998), Rheingold (1998) Gibson(1985), Connery (1997), Stevale (1997), Castells (1998) and many others have put forward newer ideas to denote the contemporary societies as well as the societies of the future. These new concepts include cybersociety, virtual communities, network societies, cyberspace etc. Cybersociety is the future society dominated by highly digital communication and networking. In his work, 'In the Kingdom of Mao Bell', Neil Stephen says, "our concept of cyberspace, cyberculture and cyber everything is, more than we care to realize, a European idea, rooted in Deuteronomy, Socrates, Galileo, Jefferson,

Edison, Jobs, Wozniak, Glasnost, Perestroyka and the United Federation of Planets.

The many-to-many electronic communication modes represented by Computer Mediated Communication have been used in different ways and for different purpose, reinforcing the pre-existing social patterns. Beyond the performance of professional tasks, the uses of CMC reach the whole realm of social activities. Besides Internet, which is the backbone of global CMC, teleshopping, telebanking, e-mail, e-commerce, tele-education or virtual university have all become parts of the formation of 'virtual communities', which is generally understood as self defined electronic network of interactive communication organized around a shared interest or purpose. Thus dominant functions and processes in the cybersociety are increasingly organized around networks. These networks constitute the new social morphology of our societies and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power and culture.

Jones, (1998), who has given the term 'cybersociety', uses this term to indicate the new forms of community brought about by the Computer Mediated Communication (CMC) and the social formations. This notion depends on the ability to share thoughts and information instantaneously across vast distances in the new environment. Cybersocieties rely on the forms of Computer Mediated Communication allowed by current computer network structures. Through communication services like America Online, MCI Mail, the Internet, Usenet and numerous other mail, messaging and Bulletin Board Services (BBSs) electronically distributed, and most

instantaneous, written communication has for many people supplanted the postal service, telephone, even fax machine. There are over 2 million Internet host computers and it is estimated that some three million people use the Usenet news service accessible via Internet.

Howard Rheingold (1998), who is the author of virtual community, gives virtual community as a group of people who may or may not meet one another face to face, and who exchange word and ideas through the mediation of computer bulletin boards and networks. When these exchanges began to involve inter woven friendships and rivalries and give rise to the real-life marriages, births and deaths that bond people in any other kind of community, they begin to affect these peoples' lives in the real world. Like any other community, a virtual community is also a collection of people who adhere to a certain (loose) social contract and who share certain (eclectic) interests. It usually has a geographically local focus and often has a connection to a much wider domain.

Mark Poster (1995), in his book "The Second Media Age" says that we are currently experiencing a profound paradigm shift in the field of communication. He notes that with the incipient introduction of Information Super Highway and integration of satellite technology with television, computers and telephone, an alternative to broadcast model, with its severe technical constraints, will very likely enable a system of multiple producers/distributors/customers, an entirely new configuration of communication relations in which the boundaries between those terms collapse.

We understand cybersociety as a computer mediated community of the future, characterized by high-level digital communication and networking i.e., Computer Mediated Communication (CMC). Whatever developments the society acquires, there are certain basic elements or qualities that an ideal community should possess. The common elements of an ideal community are supposed to be:

1) One standard: Principle-centered goodness where people seek to live in righteousness, to live by principles with respect for law and order. People willingly adhere to natural laws and correct principles, knowing that lasting solutions to the very real social problems we face will be based on the principles of a shared vision and synergistic approach. It is characterized by honesty and trustworthiness.

2) One heart: Vision and direction – People in this community place great value on being of one heart – on true obedience, not conformity. Members acknowledge their inter dependency. They use the key to success – connections – to build infrastructure in every area of the society.

3) One mind: purpose, mission, and unity, not conformity: oneness, not sameness – people value differences, even see them as strengths. They seek first to understand, sincerely, without an intent to manipulate others for personal gain or to close a sale.

4) Economic equality: no poor among them – The principle is that healthy, wealthy communities help sick, poor communities.

However this is not going to be the case of the cybersociety. Several literatures on what is the fate of a future community indicates that global village/ cybersociety has not yet arrived, and even the prospects for greater economic and political unity seem diminished and overshadowed by the most intractable conflicts of the post cold-war era – those involving cultural meanings far beyond strictly economic or political concerns. Guidaini (1998) asserts that in this time of expanding diversity, we cannot have strong communities without wisdom capital and the values its sustains. Wisdom capital is the available store of thought collected over thousands of years that call us to live in ways that sustain well being for others. Across cultures and epochs, literature calls for justice, honesty, tolerance, compression, generosity, self-discipline and courage. Uninformed by the wisdom tradition, data, information, knowledge, intellect, expertise strategies, and even family or social groups can be organized to exploit, degrade or violate. Wisdom capital is the community common ground – it is the measure against which the goals of individuals and the community are tested. It guides us towards what we should do and what we should be.

A masterly survey, which reviewed the changes in American life from 1960's to 1990's, reveals that although much has improved, one area has worsened– personal responsibility. Rise in crime, drop in income given to charity, decrease in community service, increase in cheating – all suggest that we are less connected to ideals.

Fragmentation in inner cities and anomie in the suburbs – both show the need to recover the wisdom tradition and its beneficial effects. The critical work for those who will lead the communities of the future will be to

rediscover the high principles of the wisdom tradition expressed across the faiths and absorbed into constitutions, and to learn them as way both to confirm what we have in common across time and geography and to honour the diversity present in our work force and communities.

In the words of Theodore Groat (1995), what has happened is that the immediacy and intimacy of electronic communication have exposed people world wide to the personal lives of strangers and strange lifestyles. The invidious and hierarchical bifurcations of societies and nations into "them" and "us" is the great social trauma, that on a world wide basis seems to divide as much as to unite. Within our own society, modernization and greater affluence increasingly make it possible for people to live in "lifestyle enclaves" with others just like themselves (Bellah etal, 1985). But the postmodern communications revolution makes it possible for people to live within " cultural enclaves" as well. In relational communities united by the electronic media, members interact on the basis of self-defined cultural interests. With post modernity, images become superficial, Fragmentation and discontinuity become part of our everyday lives.

Ironically, the modernism that was to bring the world greater unity and tolerance seem to be changing simultaneously along two lines. First, the pastiche of images communicated by electronic media have helped create a post modern culture increasingly characterized by cynicism and meaninglessness, shallowness, superficiality, diversity, and weakened sense of history (Griswold, 1994). At the same time, however, the intrusions of postmodern culture are being met and resisted by counter-movements in the form of cultural enclaves, lifestyle cultures and so.

The preliminary investigation of the cybersociety reveals that in spite of high emphasis given to computer and communication network, the threats of alienation and anomie and thereby decline of values and ideals arise. The first element of an ideal community relies on adhering to natural laws and correct principles – the community characterized by honesty and trustworthiness. Such an ideal community can be made a reality by the revival of spiritual feelings only. This can be achieved through holy texts like the Bible and the Quran. The relevance of these holy scriptures and the values they sustain in the emerging cybersociety is quite evident.

2.6. THE BIBLE AND THE QURAN

Christianity and Islam being the two dominant religions of the world, the Bible and the Quran are being followed as the sacred texts of a large mass. So also, the Bible and the Quran has the significance of being a message, an operative force and a personified force for the whole population. The Bible and the Quran are considered as the words of God. All over the world, devout Christians revere the Bible in the same way devout Muslims revere the Quran, because the two scriptures are perceived as material transcriptions of divine revelation. The sacredness of Bible derives from the fact that it was written under divine inspiration. The Quranic revelation was made by Archangel Gabriel to Prophet Muhammad.

2.6.1 The Bible

The Bible is the Holy text of the Christians. It is a collection of many small booklets and letters (see Appendix I). The Bible has been divided into two main parts. The larger part is called "the Old Testament"

which is an account of the events occurred before Jesus Christ. The Old Testament has been written and compiled before the birth of Jesus. The second and the smaller part of the Bible is "The New Testament". It is a record of the life and teaching of Jesus and his disciples.

The Old Testament was created, selected, canonized and edited before the Birth of Jesus Christ. Jesus was born among Jews and Christianity arose as a Jewish sect. The Old Testament is the complete Bible of Jews, and it was the Bible of Jesus and his disciples also. But after the expiry of Jesus some other writings were added to the Jewish Bible. The new addition was called the 'New Testament' and since then the 'Old Bible' has been known as the 'Old Testament'.

The Old Testament (OT) is a collection of thirty-nine small books (excluding apocryphal books) which have been written by different authors on different occasions. The first five books of OT, known as the 'Pentateuch' is commonly called 'Books of Moses'. These were brought first together about 400 BC. OT was first written in Hebrew or Aramaic. Afterwards it was translated to Greek. The original Hebrew Bible consisted of thirty-nine books, but Greek version included some more books, known as 'Apocrypha'.

The Old Testament is a historical statement, though not accurate, of the people of Israel. Before it became a collection of books, it was a folk tradition that relied entirely upon human memory, originally the only means of passing on ideas. This tradition was sung. They sang for the most diverse reasons to which we find the accompanying songs in the Bible – eating songs, harvest songs, songs connected with work, wedding songs and

mourning songs. There are also Maxims and Proverbs (Books of Proverbs, Proverbs and Maxims of the Historic Books), words of blessing and curse, and the laws decreed to man by the Prophets on reception of their Divine mandate. These words were either passed down from family to family or channeled through the sanctuaries in the form of an account of the history of God's chosen people (Bucaille, 1996).

After Jewish people settled in Canaan at the end of 13th century BC, writing was used to preserve and hand down the tradition. There was not however complete accuracy, even in what the men seems to demand the greatest durability, i.e., the laws. Among these, the laws that are supposed to have been written by God's own hand, the Ten Commandments were transmitted in the Old Testament in two versions, Exodus (20.1-21) and Deuteronomy (5.1-30). There is also a concern to keep at large written record of contracts, letters, lists of personalities, lists of offerings and plunder. In this way, archives were created which provided documentation for the later editing of definitive works resulting in the books we have today.

It is believed that the words of the Bible have been inspired by the Holy Ghost. God Himself put his word in the mouth of a Prophet or on Apostle, or He inspired the idea in his mind. What the Prophet spoke, he spoke as God's mouthpiece; he prefaced what he has to say by the formula "Thus says the Lord". The Prophet was a man with a message from God, and at first the message was a word of mouth.

2.6.1.1 The Books of the Old Testament

The Torah or Pentateuch: Torah is the Semitic name. The Greek expression, which in English gives us 'Pentateuch', designates a work in five parts; Genesis, Exodus, Leviticus, Numbers and Deuteronomy. These were to form the five primary elements of the collection of thirty-nine volumes that makes up the Old Testament. This group of texts deals with the origins of world up to the entry of Jewish people into Canaan, the land promised to them after their exile in Egypt, more precisely until the death of Moses. The narration of these facts serves however as a general framework for a description of the provisions made for the religious and social life of the Jewish people, hence the name Law or Torah.

The Historical books: In these books we enter into the history of the Jewish people, from the time they came to the Promised Land (13^{th} Century BC) to the deportation to Babylon in the sixth century BC. Here stress is laid upon the event of the fulfillment of Divine word. The Book of Judges is centered on the defense of the chosen people against surrounding enemies and on the support given to them by God. The Book of Samuel and the two Books of Kings are above all biographical collections concerning Samuel, Saul, David and Solomon. Chronicles I and II, the Book of Ezra and the Book of Nehemiah have a single author, called 'the Chronicler'. Writing in the fourth century BC. The books of Tobit, Judith and Esther are classed among the Historical Books. The Books of Maccabees are of quite different order. They provide a version of events that look place in the second century BC.

The Prophetic books: Under this heading we find the preaching of various prophets who in the Old Testament have been classed separately from the first great prophets such as Moses, Samuel, Elias and Elisha, whose teachings are referred to in other books. The prophetic books cover the period from the Eighth to the second century BC. In the eighth century BC, there were the books of Amos, Hosea, Isaiah and Micah. The first of these is famous for his condemnation of social injustice, the second for his religious corruption which leads him to bodily suffering, like God suffering for the degradation of His people but still granting them His love. In the seventh century BC, Zephaniah, Jeremiah, Nahum and Habakkuk distinguished themselves by their preaching. The period of exile in Babylon at the beginning of sixth century BC gave birth to intense prophetic activity. The Book of Obadiah deals with the misery of a conquered Jerusalem. The Book of Jonah is also included in the prophetic books.

The Books of Poetry and Wisdom: These form collections of unquestionable literary unity. Foremost among them are the Psalms, the greatest monument to Hebrew poetry. A large number were composed by David and the others by priests and Levites. Their themes are praises, supplications and meditations and they served a liturgical function. The book of Job, the book of wisdom and piety par excellence, probably dates from 400-500 BC. The song of the songs, allegorical chants mostly about Divine love, the Book of Proverbs, collection of the words of Solomon and other wise man of the court, and Ecclesiastes or Koheleth, where earthly happiness and wisdom are debated are all included in the books of poetry and wisdom.

The Old Testament therefore is a collection of works with highly disparate contents written over at least seven centuries, using extremely varied sources before being amalgamated inside a single work. The books of the Bible (both Old Testament and New Testament) in their order of arrangement in the Scripture have been given in Appendix I.

2.6.1.2 The Books of the New Testament

The New Testament is the second part of the Bible. It was created after the expiry of Jesus. The period of its creation is 5-130 CE approximately, which may be called the second age of Christian faith. In this age Christianity ceased to be merely a Jewish sect and transformed itself into an independent religion. The twenty-seven books, which make up the New Testament, were written by perhaps as many as twelve different authors over a period of some fifty years. Although the books differ in content, a constant theme runs through all of them and joins them into a unity-God's love for man revealed in the person of Jesus Christ. The following are the books of the New Testament:

The Gospels: The New Testament consists of the Gospels of Mathew, Mark, Luke and John, which depict the life, teachings, deeds, death, and resurrection of Jesus. Of the four canonical books that record the 'good news' (*evangelium*, gospel) brought by Jesus Christ, the first three are so alike that they are called 'synoptic' (at one glance). The fourth gospel.i.e, the Gospel of John has some features peculiar that mark it off sharply from the Synoptics.The Gospel looks back on the earthly life of Jesus in the light of

deepened understanding. The great emphasis laid on 'knowledge' has given its vocabulary the sort of tinge to be found in later Gnostic literature.

Acts of Apostles: The Gospels are followed by the Acts of the Apostles, which traces the spread of the gospel for some thirteen years from Jerusalem to Rome, the capital of the empire. The letters of Paul were all written to meet, specific needs faced by early Christians. The only identification of the author suggested by church writers is Luke. Acts begins with Jerusalem where the faith takes firm root and the first community grows in grace and numbers. The faith spreads with Paul and Peter as apostles and finally reaches Rome, where Luke stops.

The Letters of Paul: The fourteen letters that follows, are the letters written by Paul to various churches during his missionary journey. They include letters to Romans, Corinthians, Galatians, Ephesians, Philippians, Colossians, Thessalonians, Timothy, Titus, Philemon and the Hebrews.

Letters to all Christians: There are seven letters in the New Testament that are not Pauline and are grouped together. Three of these letters are attributed to John, two to Peter and other two to James and Jude. Most of them are addressed to the whole Christian Church and not to particular communities or individuals.

The Revelation to John: The Greek title of this book is 'Apocalypse of John'. Any writing under the title Apocalypse claims to include a revelation of hidden things, imparted by God, and particularly a revelation of events hidden in the future.

2.6.2 Epistemological foundations of the Bible

A preliminary survey of the Bible and literature related to it showed that Information, Knowledge and Wisdom are dealt with the text at many occasions. In the New Testament John claims, "In the beginning was the Word and the Word was with God, and the Word was God. He was in the beginning with God; all things were made through him, and without him was not anything made that was made (John 1.1-3). Here, relating God with word stresses the significance of 'word' as the source of all knowledge. A few quotings from the Bible related to knowledge and wisdom are given below (The World Scripture: A Comparative Anthology of Sacred Texts, 1993).

> Does not wisdom call,
> Does not understanding raise her voice?
> On the heights beside the way,
> In the path she takes her stand
> Beside the gates in front of the town
> At the entrance of the portals she cries aloud.
> "To you, Omen, I call,
> And my cry is to the sons of man.
> O simple ones, learn prudence.
> O foolish men, pay attention
> Hear for I will speak noble things
> And from my lips will come what is right
> For my mouth will utter truth
> Wickedness is an admonition to my lips.
> All the words of my mouth are righteous;

There is nothing twisted or crooked in them
They are all straight to him who understands
And right to those who find knowledge
Take my instruction instead of silver,
And knowledge rather than choice gold;
For wisdom is better than jewels
And all that you may desire cannot compare
With her

(Proverbs 8.1-11)

"If any of you lack wisdom, let him ask God who give to all men generously and without reproaching, and it will be given him".

(James 1.5)

"The fear of Lord is the beginning of wisdom".

(Proverbs 9.10)

"Knowledge puffs up, but love builds up. If anyone imagines that he knows something, he does not yet know, as he ought to know. But if one loves God, one is known by him". (1.Corinthians, 8.1-3)

2.6.3 The Quran

The Quran for the Muslim, is the revelation of God in which His messages to man is contained. It is the Word of God revealed to Prophet Mohammed through the archangel Gabriel. The Prophet was therefore the instrument chosen by God for the revelation of His Word, of His Book of which both the spirit and the letter, the content and the form, is Divine. Not

only the content and meaning comes from God but also the container and form which are thus an integral aspect of the revelation (Hossein Nasr, 1966).

Quran was first revealed to the Prophet when he was spending some time as he often did, in a cave in the mountain of Hira, near Mecca. Suddenly the consciousness of the human receptacle was rent asunder by Archangel Gabriel, whose function in Islam is in many ways like that of the Holy Ghost in Christianity. He told the Prophet "Recite!" and with that word the descent of the Divine message began. To the command of Gabriel to 'recite', the Prophet answered by announcing that he did not have the ability to do so, being unlettered. But the Divine message had itself given him the power to 'recite' the Book of God and henceforth he became the human recipient of this message, which made known to the mankind. The revelation took place over a period of more than twenty years of the Prophet life, beginning with the first verses of Sura 96, and then resuming after a three year break for a long period of twenty years upto the death of the Prophet in 632 AD. The following was the first Revelation (Sura 96, Verses 1 to 5).

"Read: in the name of thy Lord, who created,
Who created man from a clot of congealed blood,
Read! Thy Lord is most Bounteous,
Who taught by the pen,
Who taught man what he knew not".

Whatever revelation has been received, it was committed to memory by Prophet and the Believers and they were accustomed to reciting the revealed text from memory. Whenever a fragment of Quran was revealed, the Prophet called one of his literate companions and dictated it to

him, indicating at the same time, the exact position of the new fragment in the fabric of what had already been received. Not long after Prophet's death (632 AD) his successor AbuBakr, the first Caliph of Islam, asked Mohammed's former head scribe Zaid Ibn Thabit, to make a copy, which he did. On Omar's initiative (the future second Caliph) Zaid consulted all the information he could assemble at Madinah, and the witness of Hafizun (who knew the whole of Quran by heart) and copies of the Book written on various materials to produce an extremely faithful copy of the Holy Quran. Caliph Omar, AbuBakr's successor in AD 634, subsequently made a single volume (mushaf) that he preserved. The third Caliph of Islam, Uthman entrusted a commission of experts in order to check the authenticity of the document produced under AbuBakr. The critical analysis of the authenticity of the text was carried out very rigorously whose result was a text containing an order of suras (chapters) that reflects the order followed by the Prophet in his complete recital of the Quran during the month of Ramadhan,the month in which Quran was first revealed.

The Quran consists of 114 suras or chapters arranged in decreasing order of length of which there are exceptions also. The chronological sequence of revelation is not followed, however in majority of cases, this sequence is known. The suras consists of Ayats (sentences), the total number in the whole text is 6666. A large number of descriptions are mentioned at several points in the text, sometimes giving rise to repetitions. Very frequently a passage will add details to a description that appears elsewhere in a complete form. Many subjects are dealt within the Quran, scattered throughout the book without any particular classification. The text is neither in poetic form nor that of a prose, but has a unique form of its own.

2.6.4 Epistemological foundations of the Quran

It is of great significance that the first word of Quran to be revealed was 'recite' for the supreme symbol of revelation in Islam is a book. It is also notable that one of the themes of this first revelation was the praise of the pen as a means of human knowledge. Similar mention of knowledge and wisdom occurs in several verses scattered throughout the text. A few of them taken from "The World Scripture: A Comparative Anthology of Sacred Texts" which is a project of the International Religious Foundation is given below: It includes Hadiths (sayings of Prophet Mohammed) also.

"(God) gives wisdom to whom He will, and he to whom wisdom is given has truly received abundant good. But none remember except men of understanding" (Quran 2:269)

"The search for knowledge is an obligation laid on every Muslim" (Hadith: Ibn Majah and Baihaqi)

...And say (O Muhammed); "My Lord, increase me in knowledge" (Quran 20:114)

"There is no greater wealth than wisdom; no greater poverty than ignorance; no greater heritage than culture" (Hadith: NahjulBalaga. Saying:52).

2.6.5 The Hadith

The second of the two main sources for an understanding of Islam, after the holy Quran are the Hadith. The collections of the recorded

words, actions and sanctions of the Prophet Muhammed, which make up the 'Sunna' are normally referred to as Hadith. As the holy Quran is the word of Allah it must be strictly followed; in the same way the teachings contained in the Prophet's 'Sunna' must be observed by all who profess to be Muslims. Thus the Sunna in the form of Hadith,is complementary to the holy book itself: it helps to explain and clarify the holy Quran and to present practical applications of its teachings. Without a study of Hadith a Muslim's knowledge of his faith remains incomplete.

There are a number of authentic hadiths giving the importance of knowledge and wisdom, acquisition of knowledge and many other aspects of knowledge and wisdom. However, considering the vastness of the Hadiths, the present study is limited to Quran for the study of the different aspects of information, knowledge and wisdom.

2.7. THE BIBLE, THE QURAN AND THE CYBERSOCIETY

The back ground study about the Bible and the Quran reveals that both the scriptures deals extensively on Information, Knowledge and Wisdom- in some cases explicitly and in other cases implicitly. The study of cybersociety reveals that the society is basically centered around or moved by knowledge and wisdom. Therefore cybersociety should be designated as knowledge and information based society, giving emphasis to wisdom, human and spiritual values.

A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY

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CHAPTER 3

REVIEW OF RELATED STUDIES

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CHAPTER 3

REVIEW OF RELATED LITERATURE

It is noticeable that the present study is a multidisciplinary one involving Epistemology, Cybersociety, Information Technology, Information Science, Bible and Quran. The purpose of the study is mainly to find out the theoretical foundations of these on the basis of the Biblical and Quranic approaches towards Information, Knowledge and Wisdom. The review of related literature therefore covers the epistemological aspects of two groups or entities, namely

1.Epistemological/Cognitive foundations of Information Science, Information Technology, Cybersociety,

2.Epistemological/Cognitive foundations of the Bible and the Quran.

Therefore the literature reviewed is given under these two main categories. The first category covers 23 reviews under four subheads- epistemological foundations of Information Science, Information Technology, Cybersociety respectively and Techno-spiritualism. The second category covers 21 reviews under two major heads of the Bible and the Quran.

The ideas like cybersociety and techno-spiritualism are comparatively of recent origin as they are more related to the future. Therefore literature available on these ideas are only very few. However, attempt has been made to cover maximum literature on these concepts also in this chapter.

3.1 EPISTEMOLOGICAL/COGNITIVE FOUNDATIONS OF INFORMATION SCIENCE, INFORMATION TECHNOLOGY AND CYBERSOCIETY

3.1.1 Epistemological/Cognitive foundations of Information Science

This section covers reviews on the epistemological/cognitive foundations of Information/Knowledge and also Information science.

According to Oeser (1995), the fundamental epistemological character of the concept of information became explicit in the technical field when data processing developed into more complex forms of knowledge processing. In biosciences, the turning of the research into higher cognitive functions of living beings, especially human beings have made the epistemological question unavoidable. From the point of view of Information Science, which in its theoretical core is an epistemological point of view, we are confronted with existing knowledge as residing in written documents, in electronic data media or human minds. We are in need of a fundamental theory of information that has to integrate and incorporate both the existing technical theories and biological, and neuropsychological information theories. A synoptic view of cognitive science provides the basis for linking and integrating the technical and neurobiological areas.

Shreider (1992) puts forward cognitive approach through knowledge engineering as a tool to resolve the opposition between technical and cultural aspects of knowledge. Knowledge Engineering works out methods for the conversion of knowledge into information. A knowledge engineer uses the expert's personal knowledge to develop knowledge – based

systems, thus bridging the gap between personal knowledge, which is implicit and social knowledge (information), which is explicit. Thus through the process of indirect communication, not the text (or computer memory) is conveyed, but the text is used to convey some orientations of the mind (e.g.: communicating prepositions, attitudes, heuristics etc) that cannot be represented in the text. The knowledge base or the text is used as a symbol pointing to particular orientation of mind.

Winfred Godert (1996), in his model for information communication combines the understanding of cognitive information processing as an act of information generation from sense impressions with communication theoretic considerations. In this model, the receiver of information being a human being, acquiring knowledge from an external information system requires a form of reception and any sense perception depends on the act of cognitive information processing. The three important consequences for information ethics are-1) The conceptualization of information as cognitive construction takes human beings into the focus of consideration and not technical means, processes or products.2) Information cannot be seen mainly as raw material or commercial commodity; the value of information has to be assessed only by the human beings themselves and 3) any individuum is responsible for its own cognitive information processing.

Kochen (1969) in his paper entitled "stability in the growth of knowledge" proposes that the heart of Information Science should be what he calls "epistodynamics". The epistemological foundations of Information Science basically lie in the contributions of epistemology to the development

of Information Science. Today, the meaning and field of study of epistemology is more restrictive. It is the science centred on the study of the characteristics of scientific discourse and on the evolution of scientific paradigms. It appears to be a more systematic and methodological reflection on the principal resources used by humans to pursue valid knowledge about reality. Thus epistemology is devoted specifically to scientific knowledge.

Information Science is very much related to Epistemology. Garcia Marco etal. (1993) says that the study of epistemology is quite essential for the design and implementation of better cognitive strategies for guiding the process of documentary analysis, particularly for indexing and abstracting scientific documents. The ordering and classifying of information contained in documents will be improved, thus allowing their effective retrieval only, if it is possible to discover the conceptual framework (terms, concepts, categories, propositions, hypotheses, theories, patterns and paradigms) of their authors from the discursive elements of texts (words, sentences and paragraphs).

As epistemology studies the historical evolution of scientific paradigms, it is concerned with a key element of these paradigms--the mapping and structure of knowledge, as it exists in each particular age. In this, field, it is crucial that emphasis be given to the analysis of scientific methodology and the classification strategies of nature through a branch of epistemology called taxonomy. Thus, the theory of taxonomic systems is very relevant to Information Science research. Scientific taxonomy is an aspect of documentary classification, because it shows the relationship of a scientific text to other texts and within its scientific context. Also, it helps to

maintain universal classification systems, thesauri, and terminological databases according to the general evolution of science and of each particular scientific discipline.

Finally, from a historical perspective epistemology is also the study of reflections and theories of science in an abstract and conceptual network, traced between man (subject) and nature (object) in the process of research and knowledge, within the limits and possibilities of understanding reality and its linguistic expression. This is accomplished without misjudgment of the volitional and emotional aspects of cognition. These authors believe that the advances in epistemology in this field make an important contribution to the development of Information Science, especially in its attempts to develop a theory of classification. This is because documentary classification systems are in close relationship with the two principal contemporary Western approaches to human knowledge--rationalism and logical positivism. In this sense, the Dewey Decimal and Universal Decimal Classification systems can be thought of primarily as the results of research in taxonomy as it was developed in the 18th century in the field of the natural sciences together with the development of phenetic hierarchical structures.

Information Science is related to other cognitive sciences as well. Marco (1993) and others in their study says that cognitive psychology is interesting for information scientists for two principal reasons. Firstly, Information Science and cognitive psychology are both cognitive sciences in a broad sense. Both are interested in the way that information produces knowledge, how information is processed and how a better adaptation of

reality is achieved. Secondly, psychological processes mediate the information cycle. This happens mainly in all kinds of interface activities those between humans and machines and those among humans.

Information Science has in some way modeled the representation of knowledge. The problem of Human – Machine Interaction (HMI) puts Information Science into the centre of the information processing sciences because it connects both tendencies: the study of human intelligence and the study of artificial intelligence.

Thus human mind – human being himself is of much relevance in information science. As the social information processes are in fact mediated by psychological processes, the findings of Cognitive Psychology and intensely relevant to Information Science.

3.1.2 Epistemological/Cognitive foundations of Information Technology

While the increase of human knowledge has so far promoted the genesis of technology, technology is now in turn, increasingly influencing the generation, storage, processing, distribution and utilization of knowledge. Knowledge has been technicalized and today, technology and knowledge is being amalgamated into cognitive – technical complexes – the amalgamation has caused the foundations of knowledge technology to become trans disciplinary themselves. A characteristic feature of the concepts of an 'information society' is the fact that modern technology has been applied to process knowledge. The epistemological/cognitive foundations of Information Technology lie in the treatment of information, knowledge and its various aspects in the fields of knowledge related to Information

Technology. Artificial Intelligence, Expert Systems, Knowledge Engineering, Cybernetics, Robotics, Cognitive science and Cognitive psychology are some among them.

Artificial Intelligence (AI) has been defined in two quite different ways today. AI (1) – The use of computers to solve problems that previously could only be solved by applying human intelligence. AI (2) – The use of a specific set of programming techniques known as heuristic or rule-based programming. In this approach human experts are studied to determine what heuristics or rules of thumb they use in solving problems (Somerville, 1983). Research work in AI has intended to follow two related but distinct paths. One path is the development of knowledge – based computer systems, which can tackle problems that are not amenable to solution by straightforward computational techniques. The other path is the developments of systems, which will help us, understand the nature of knowledge itself.

The search for Artificial Intelligence has improved the understanding of human cognition; it has also produced applied benefits such as Expert Systems. Expert Systems are computer systems with a very large knowledge base, which incorporates the knowledge of a human expert. An expert system is a program that contains a generalized inference engine and a rule base, takes input data and assumptions, explores the inferences derivable from the rule base, yields conclusions and advice, and offers to explain its results by retracing its reasoning for the user. Such programs have been painstakingly developed by computer scientists to who have essentially extracted knowledge in a subject area from a human expert and built into a

computer system designed to apply that knowledge (International Encyclopaedia of Psychology, 1996).

Cybernetics is the scientific study of communication and control as applied to machines and living organisms. It includes the concept of self-regulation mechanisms as in thermostats or feedback circuits in the nervous systems as well as transmission and self-correction of information not only in computers but also in persons who are communicating with each other. (Longman Dictionary of Psychology and Psychiatry, 1984).

Knowledge Engineering, which is patterned on the general principle of engineering sciences, uses human experts' personal knowledge to develop knowledge-based systems. In contrast to epistemology, which deals with the phenomenon of knowledge as such, knowledge engineering works out methods for conversion of knowledge into information. A knowledge engineer first finds out from the expert, which of a set of proposed alternatives he chooses at that stage in his investigation of the case, on the basis of which semi-intuitive rules that the expert reveals in his actions are formulated. This is followed by a formal analysis of the case using the rules obtained and the expert gives his own assessment of this 'semi-finished' knowledge. The process develops as a multistep interaction between the expert and a controlled knowledge base (Shreider, 1992).

Robotics is the science and technology of machines designed to function in place of a human being, especially to carry out tasks automatically. Practical robotics was used for industrial automation to handle parts for dye casting, injection moulding and metal-cutting machines. There

has been a continual evolution in robotics towards robots of greater precision. The main goal of robot research in artificial intelligence is to enable robots to sense and move intelligently around their environment. The third generation intelligent robots are experimental computerized machines designed to use artificial intelligence (the so-called knowledge based systems) to solve problems as human beings do. (Oxford Illustrated Encyclopedia of Invention and Technology, 1992)

Cognitive Science refers to the interdisciplinary study of the acquisition and use of knowledge. It includes as contributing disciplines, artificial intelligence, psychology, linguistics, philosophy, anthropology, neuroscience and education. Cognitive science is a synthesis concerned with the kinds of knowledge that underlie human cognition, details of human cognitive processing and the computational modeling of those processes. Five major areas of cognitive science include knowledge, representation, language, learning, thinking and perception (The Blackwell Dictionary of Cognitive Psychology, 1990).

Cognitive Psychology is concerned with the scientific study of human mental activities involved in the acquisition, storage, retrieval and utilization of information. Among its wide concerns are perception, memory, reasoning, problem solving, intelligence, language and creativity. Researches in these areas have widespread application, especially in the fields of artificial intelligence and law and in everyday world of decision-making. (International Encyclopaedia of Psychology, 1996)

3.1.3 Epistemological/Cognitive foundations of Cybersociety

The nucleus around which the network society is centered is information – information that is generated, stored, retrieved, processed and transmitted. The core of transformation we are experiencing in the current revolution refers to "technologies of information processing and communication". It is not the centrality of knowledge and information that characterizes the current technological revolution, but the application of such knowledge and information in knowledge generation and information processing/communication devices in a cumulative feedback loop between innovation and the uses of innovation (Hall and Preston, 1988).

Zobel (1998) sees the community of the future as evolving from and through the major forces shaping on lives today. Three of these forces are 1) Information technology and the knowledge society. 2) The emergence of poor nations and a bigger middle class in the global economy and 3) the growing democratization of the world. Knowledge is one of the most powerful glues for human fellowship and sharing. This is because communication is its essence, and communication fosters the sense of community. In a deeper way, knowledge society is bringing individuals a greater sense of common experience. In the new knowledge society, Information Technology has dramatically speeded up and enhanced the process of sharing knowledge. All societies, rich and poor alike can take point in the flow of information and knowledge. Absorption, cataloging, analysis and dissemination of knowledge have become an industry in its own right. Thus as the new technologies of communications and computers get

ever more sophisticated, so will knowledge communities flower around the world.

In the cybersociety, human mind has a very important role to play. For the first time in the history, human-mind is a direct productive force, not just a decisive element of the production system. Thus, computers, communication systems and genetic decoding and programming are all amplifiers and extensions of human mind. What we think and how we think, become expressed in goods, services, material and intellectual output, be it food, shelter, transportation and communication systems, computers, missiles, health, education or images (Castells, 1998).

In her seminal essay, Haraway (1985) theorises a new life form-part cybernetic, part organism, the CYBORG.Accompanying the cyborg is a breakdown in many traditional opposites, thoroughly disrupting our cultural value and meaning systems. As she notes, "late twentieth century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert".

Howard Rheingold (2001) is still hopeful that informed and committed people can influence the shape of tomorrow's cybersociety in a positive manner, although it has become increasingly clear that democratic outcomes won't emerge automatically. A humane and sustainable cybersociety will only come about if it is deliberately understood, discussed, and planned now -- by a larger proportion of the population, and not just the big business, media, or policy elites. The only thing we can know with any

degree of certainty about tomorrow's world is that technologies will be more powerful than they are today. And communication technologies, because of their ability to influence human perceptions and beliefs as well as their power to command and control automatic machinery, will continue to grow more powerful and persuasive, if not more true, authentic, and humane. It's too difficult to aggregate millions of people, and keep them aggregated, and too easy for people to roll their own online communities. The greatest value of virtual community remains in its self-organizational aspects. Unlike other aspects of the Internet, it takes months, even years, to grow valuable and sustainable virtual communities.

3.1.4 Techno- spiritualism

The idea of techno-spiritualism is of very recent origin. Terms like cyber-sacred and techno-spiritualism have not come into common use today as it is more related to the society of future, the cybersociety. The term denotes the combination of technology and spiritualism. A few literature available on techno-spiritualism have been included in the review chapter.

Margaret Wertheim (2001) says that many cyber-enthusiasts have techno religions yearnings and are convinced that cyberspace is a new kind a spiritual space. In her book 'The Pearly Gates of Cyberspace: A History of space from Dante to the Internet, Wertheim traces the history of western notions of space and how these have been informed by cultural and particularly religions concerns. From Dantes' Inferno to today's Internet, there is a connection in the dualistic Western conception where body and soul are seen as two distinct spheres. Within this tradition, the immaterial has always been equated with the spiritual. The cybernautic dreams of

transcending the limits of the physical body have been fueled by a fundamental philosophical shifts of recent years, the growing view that man is defined not by the atoms of his body, but by an information code – the belief that our essence lies not in our matter, but in an immaterial pattern of data – i.e., at core a human being is reducible to an array of data. While atoms can only construct the physical body, according to this cybernautic view, data can construct both body and mind.

This fantasic view imply that in the end we will not need physical bodies at all, for we will be able to reconstruct ourselves totally in cyberspace. Lest one imagine that cyber mortality fantasies are just in the minds of science fiction writers, we should note that much of the underlying philosophy is emerging from such real-life for fields as cognitive science and information theory. It's all the part of the same imaginative flux that produces the dream of 'artificial intelligence'.

A connection between cyberspace and the New Jerusalem has been spelled out explicitly by Michael Benedikt (1991). Religious dreaming about cyberspace begins with the Biblical vision of the Heavenly City from the Book of Revelation – the so-called New Jerusalem – that transcendent crystalline polis whose entrance is the legendary pearly gates. In Cyberspace: First steps, Benedikt explains that like Eden (which humanity experiences at the beginning of time), the New Jerusalem (which the viruous will experience at the end of time), is a place where man will walk in the fullness of God's grace. But there is a fundamental difference between these two poles of the Christian universe. As he puts it "where Eden (before the Fall) stands for our state of innocence, indeed ignorance, the Heavenly city stands for our state of

Wisdom and Knowledge. The New Jerusalem, then, is quintessentially a place of knowing, a place that, like cyberspace, Benedikt says is rooted in information. According to Benedikt, the Heavenly city could come into existence only as a virtual reality. Indeed, he says, it is nothing less than a 'religious vision of cyberspace". While Benedikt sees the New Jerusalem as a Christian prevision of cyberspace, reciprocally he suggests that cyberspace could be digital version of the Heavenly City. The impetus towards the Heavenly City remains. It is to be respected, indeed it can usefully flourish.... in cyberspace.

Carnegie Mellon's Hans Moravec (1988), a world renowned robotics expert, whose lab designs robots with cutting edge vision and 3-D mapping capability has suggested that digital mind-downloading will soon be possible. From the vision of creating an artificial mind inside a computer it is but a short step to imagining treat a human mind also might be made to operate inside a machine. In his book 'Mind children', Moravec imagines a scenario in which "a robot brain surgeon gradually transfers a human mind into a waiting computer. As you be there fully conscious, he describes how a robot surgeon would open your brain case and begin downloading your mind layer by layer using high-resolution magnetic resource measurements and other materials. Gradually, as your brain is destroyed, your real self that is your mind-would be transformed into a digital construct". Moravec writes breathlessly about the day when we will all have back up copies of ourselves stored on computer tape.

According to Davis (1998), with the continued ideological dominance of reductionist science and the socio-cultural dominance of its

technological spawn, the once glorious role of humanism is melting into a silicon sea. We find ourselves trapped on a cyborg sandbank, caught between the old, smoldering campfire stories and the new networks of programming and control. Perhaps the image of man as a machine holds more promise than especially if the image is not allowed to totally dominate our vision. For a certain breed of twentieth century seeker, the ancient goal of awakening is not served by a retreat into romanticism, religions orthodoxy or magical incantations. Instead of denying the mechanistic or automatic aspects of human being, they instead aim the psycho spiritual quest through the image of the machine, using the mechanism, as it were, to trigger its own wake-up alarm. To paraphrase the Sufi mystic, Hazrat Inayat Khan, one aspect of our being is like a machine, and the other aspect is like an engineer. In this view, the first step towards waking up is to recognize how zonked out and automatic we already are, such dispassionate and reductive observations help dispel delusions, reveal genuine possibilities, and thus paradoxically enable us to cultivate some of the most deeply human aspects of being. The machine thus comes to serve as an interactive mirror, an ambiguous. Other we both recognize ourselves in and measure ourselves against. This is the path of the spiritual cyborg, a path whose buzzing circuits and command overrides represent both the perils and promise of techgnosis.

Though possessing considerable variety, most models in cognitive science imagine mind as a construction created through the struggles and alliance of myriad small and densely interconnected symbolic sub-systems and agents, a vision that the artificial intelligence wizard Marvin Minsky calls the "society of mind". More recently, other cognitive scientists

have served up less hierarchical or symbolically dependent models, these picture the mind as the product of even more primitive and "asocial" mechanisms of sensation, perception, and memory. The ego, the self, the conscious sense of "me", is seen as an "emergent property", a vaporous afterimage of the complex computer-like machinations of glandular data gates, neurochemical sparks, and the logical structures that whir and buzz beneath the surface of thought.

Michel Bauwens (2001) puts forward some hypothesis on the relation between technology and spirituality. They are:

1) ***The technological quest is a spiritual quest.***

The quest for the transcendental is in fact 'wired' in the human psyche. Even if we are not spiritually or religiously inclined, we cannot escape thinking about our relationship with the 'totality' of existence, and forbid our souls to yearn for an escape from the humane condition and our inescapable death. The history of human civilization can be characterized by a kind of competition between spiritual transhumanism and materialistic or technological transhumanism. For thousand of years humankind has chosen the first route, believing that there was a transcendental 'supernatural' reality beyond the material world, but which could be accessed through inner development which gave rise to traditional societies. However, what used to be sought in the supernatural, was sought in material reality, and science and technology became a means to a achieve transcendence.

2. *The spiritual unconscious can cause damage if it is not brought to awareness*

Like all unconscious personal and societal content, it can cause damage when it is not brought under the light of reason and consciousness. Hence there is a lot of hubris in current technology (and the social forces promoting it) that could be detrimental to our human future, with an unspoken yearning to go beyond our bodily condition (the theme of the obsoleteness of the body), beyond our minds (replacing it with superior artificial intelligences) and in fact, beyond the human.

3. Technological transcendence is not real transcendence

It can be said that even if the current technological transhuman or posthuman aims, and things like extreme longetivity, mind downloading, are realizable, this technological transcendence is not real transcendence. Indeed, what techno-transhumanis achieve is longer life, more time; having control over more space, etc. Itall stays on the horizontal axis, stays within time and space, and doesn't actually go beyond it, doesn't move on the vertical axis. Hence technological transhumanism can in no real sense ever replace the need for genuine spirituality.

4. Technological development can/does stimulate spiritual awareness

There is a sense in which technology stimulates spiritual awareness. On the evolution of human consciousness through time, establishing a clear link between the psycho-genesis of the individual human mind, and the socio-genesis of civilizations, the globalising technology of the internet will in all likelihood lead to a 'jump' towards some kind of more

planetary consciousness, (this process, depending on the human will, maturation, and a host of subjective factors, is of course not automatic, and hence, regression would be possible, and catastrophic, and of course, we can all see the many really regressive forces at work, such as fundamentalism, cultism etc.), or in other words, when the 'hardware' changes, the software (our human minds) should follow. The new state of consciousness, which has been budding during this century and is being stimulated by the new technological infrastructure as "vision-logic", is the first transpersonal state beyond pure rationality.

5. Spiritual development is necessary to technological development

It seems pretty certain that with technology giving us 'transhuman' powers over our environment and ourselves, we do need an additional level of spiritual development as well. Technology has many negative influences over the quality of our life (an increase in the 'speed of life', is just one), where spiritual techniques can help. The rules of sacred architecture (and its power to create restful minds) could be used to create vivogenic (livable, life-enhancing) cyberspaces, a notion put forward by VRML – founder and techno-pagan Mark Pesce and practiced by Michael Heim. Spiritual psycho-technologies (and body-work techniques) such as meditation, contemplation, relaxation, concentration, yoga and such, will become necessary complements to our sedentary lifestyles, and the stress induced by hyper-technology. Technologies such as the Internet continuously draw out consciousness out to the external material world (or rather, the 'materialisation of our culture' in cyberspace format), and made it

ever so difficult to look at ourselves and our functioning, and a counterforce is an absolute necessity for mental and spiritual balance.

6. *Technological and spiritual transhumanism should not be opposed, but integrated*

Technological transhumanism is totally legitimate and will undoubtedly bring a number of important benefits for our social and bodily wellbeing. (in terms of better health, increased lifespans etc.)

7. *Spiritual transhumanism is equally necessary for our individual and social growth and further evolution*

Both can be complimentary. The central task of our current epoch is to spiritualise technology (by becoming conscious of the unconscious drives that push it forward, and using it in positive ways) on the one hand, and to 'technologise' spirituality on the other hand.

According to Fr. Vincent Rossi (2001), from the standpoint of Christian hesychasm, the sacred can only mean the presence of the ultimate reality, the absolute, the Tremendum, the Ground, the Real, God. It is not for nothing that the Divine Immanence present in all creation is called in the Christian Tradition the Holy Spirit. This clearly shows recognition that not all spiritual manifestation is holy or good or whole. Human nature is the unifying factor between technology and spirituality. Still, in order to understand the relationship, if any, between the technology of cyberspace and the reality of the sacred, we must clearly distinguish between the two. Technology is to spirituality as science to religion as matter is to spirit. Ultimately, these three pairs of terms point us to the reciprocal but

asymmetric relationship between the outward and the inward in the microcosm, the macrocosm and the metacosm.

The technological quest is not as such an authentic spiritual quest, but as a means of control and dominance of the natural, the human and the spiritual as, in other words, a reduction of the human to forces essentially non-human and artificial – it is a serious distortion of the spiritual quest. The hunger for transcendence which is part of the essence of what it means to be human can and has been channelled into inferior and material projects, so perhaps it is more correct to say that the technological quest is a materialization of the spiritual quest. The evolutionary inevitability of techno-spiritual development is a chimera. We must not let our wishful thinking about technological progress blind us to the hard realities of authentic spiritual growth. Spiritual growth is not an evolutionary process that develops by incremental quantities over time. Genuine spirituality involves through awakening the transcending of time. Time, space and evolution are not functions of spirituality intellect and will in one- pointed concentration attention prayer and meditation, illumination, the breakthrough of the eternal into the temporal, the piercing awareness of the Absolute in the relative- these are the trans-temporal, trans-spacial, transfiguring aspects of a spirituality conscious of the Sacred. To paraphrase the Muslim Shahada, which is very useful as a formula for expressing the inexpressible, there is no sacred if it be not the Sacred. The Sacred is the presence of God or it is nothing genuine.

3.2 EPISTEMOLOGICAL FOUNDATIONS OF THE BIBLE AND THE QURAN

3.2.1 Epistemological foundations of the Bible

The epistemological foundations of the Bible are covered under the following major heads-Christian Education, Knowledge-nature, validity and Importance and Christianity and Science.

3.2.1.1 Christian Education

The basic idea of Christian education is that God is our teacher. Thus the Psalmist writes, "Teach me thy way, O Lord; I will walk in thy truth..." and again, "Teach me good judgement and knowledge..." One may then say that God educates man, if one chooses and if one believes that such special divine revelation is available to us. It seems better to think of God's act of revelation and regeneration as 'gifts' as Christianity itself usually does – as some kind of divine aid to education rather than education itself. This world, among other things, accord with Acquinas' doctrine that faith, hope and love are not acquired by teaching, but by divine infusion. One can argue then, that education is important only because it is necessary or at least helpful as a preparation for God's act of grace; because it enables one to understand his revelation, or because it equips one to do His work in the world (Frankena, 1973).

Many speak against education because Jesus chose uneducated fishermen to preach his Gospel. They assert that He showed preference for the uneducated. But many learned and honorable men believed his teaching.

Had these fearlessly obeyed the convictions of their consciences, they would have followed Him. Their abilities would have been accepted and employed in the service of Christ, had they offered them. Christ was the light of the world. He was the fountain of all knowledge. He was able to qualify the unlearned fishermen to receive the high commission. He would give them. It seemed but a simple thing for Jesus to connect these humble persons with Himself but it was an event productive of tremendous results. Jesus did not despise education. The highest culture of mind, if sanctified through the love and fear of God, receives His fullest approval (White, 1877).

What wisdom of man can compare with the grandeur of the revelation of God? Finite man, who knows not God, may seek to lessen the value of the scriptures, and may bury the truth beneath the supposed knowledge of science. Those who boast of wisdom beyond the teaching of the word of God need to think deeper of the foundation of knowledge, that they may learn their real ignorance. There is a boasted wisdom of men, that is foolishness in the sight of God. This greatest ignorance that now curses the human race is in regard to the binding claims of the law of God, and this ignorance is the result neglecting the study of the word of God. Many pretended friends of education tend to divorce religion from the sciences. They could spare no pains or expense to impart secular knowledge, but they would not mingle with it knowledge of what God has revealed as constituting perfection of character. And yet training in the truth of God would develop the mind, and impart secular knowledge as well; for the very foundation of true education is in the fear of Lord. Says the Psalmist, "The fear of the Lord is the beginning of wisdom" (White, 1888).

3.2.1.2 Knowledge – nature, validity and importance

The understanding of Jesus Self is based on a simple first principle: we have two fundamental ways of knowing and of knowledge – one is factual knowing and knowledge and the other is knowing and knowledge of the spirit. The factual knowledge, the most obvious way of knowing is effective and eminently useful as it transforms our material world daily before our own eyes. But the factual knowledge is humanly injurious, unless coupled with its less obvious partner, knowledge and knowing of the spirit. We see factual knowledge at its most refined in the 'hard sciences' and its most demonstrably 'real' in the applications of technology in thousands of ways all around is, effecting every moment of our modern lives in a cacophony of persuasion. Factual knowledge possess a quality of discomfort that the more facts we know, the more we find ourselves ignorant, the less we seem in control and are their incomplete all over again. If this kind of knowledge is man's only hope and if the reality defined and alterable by factual knowledge is the only kind of reality, then human beings are indeed very imperfect and primitive stages.

Once we experience spirit knowing and knowledge, we realize that factual knowing and knowledge has not been and can never be the prime nourishment of our humanness. Spirit knowing the knowledge leads us to acknowledge, not that we are aliens until we make the alien objects and things our own, but that we are in an eternal duality which guarantees us to be ourselves both with and in spite of the alien objects and things our own, but that we are in an eternal duality which guarantees us to be ourselves both with and in spite of the alien objects and things of our universe of man. We,

men and women and things are in firm duality – we and the love that makes us and all things possible. Further, there is no removing, of that duality, except at the cost of undoing our humanness. The spiritual knowledge is the first basic principle of Jesus Self. Without it, the Jesus self cannot be and with the impossibility of the Jesus self is born the despair of humans (Martin, 1975).

The idea of the wisdom (sapentia) of the fool always stand in contrast to the knowledge (scentia) of the learned or the 'wisdom of the worldly'. The classical archetype for the figure of the wise fool is Socrates whom later theorists constantly invoked. Socrates account of human ignorance, in attributing true wisdom only to the divine, anticipates Saint Paul's claim that God has made foolish the wisdom of the world (I Corinthians 1:20, 3:19). The Pauline concept of Fool in Christ, which is given its fullest exposition in the Epistles to the Corinthians, affirms the worthlessness of worldly wisdom in contrast to the wisdom of the Christian, which to the world appears folly. Claiming that we are fools for the Christ's sake but are wise in Christ (I Corinthians 4:10), he argues that "the foolishness of God is wiser than men" (I Corinthians 1:25) and he says of unbelievers "professing themselves to be wise, they become fools" (Romans 1:22). "Let no man deceive himself;" he exhorts, "if any man among you seemeth to be wise in this world, let him become a fool, that he may be wise" (I Corinthians 3:18). Christ Himself had exemplified this foolish wisdom, not only when as a child, He answered the doctors in the temple, but also later when He confronted the scribes and Pharisees in their wisdom. Once man has stripped himself of the false claims to wisdom, he becomes a proper

receptacle to receive the wisdom of Christ, which is the only true wisdom (Kaiser, 1973).

Wisdom is personified as a Woman in the Bible. It is represented in several ways throughout the Bible. Where is Wisdom found? Wisdom has divine origins, no less, together of God before anything was created. She is the divine consort (Wisdom 9: 4). She is also intensely involved with human beings and world (Job 28:27 appears to indicate that God singled out wisdom to place it in the world that God oversees, v 24). She may even have been a craftswoman or child (Proverb8:30; 3:19 and Wisdom 7:22, suggest some kind of role in creation). She cajoles and preaches to those who stand in need of her, and she even offers to feed them (Proverb1 and 9). The above gives a thumbnail sketch of personified wisdom. Woman wisdom is as worldly as she is divine. She is not merely a communication outwards from God but also can be traced back to God. The wisdom of God is a symbol, not anthropomorphism. It is not a metaphysical description, but a symbol that is 'ontologically vehement'. Wisdom portrays not a static divinity but a God who is communicative of self. Wisdom has been choked off at the limit of human conduct and experience; anything other than this is dismissed, uneasily perhaps, but safely disregarded. Personified wisdom is, as it were, the limit situation beyond which the mysterious God, ineffable, transcendent, and (paradoxically) impervious to wisdom herself. The bold personification of wisdom as a woman serves to crack open the culturally conditioned language that refers to the Lord in a totally masculine manner (Murphy 1994).

The human soul itself in its basic inclination towards the true and the good is a valid and genuine source of knowledge. This knowledge is a spiritual knowledge, which must be clearly distinguished from all kinds of sensible knowledge and from intellectual knowledge itself, if such knowledge is taken to refer to our ideas, judgements, and reasoning about materials things. Christian philosophy, while retaining interest in the study of the intellect as a chief source of knowledge, has recognised the importance of both sensible knowledge and spiritual knowledge, gained not only by intellectual operations, but by 'natural inclination', which is called connatural knowledge by St.Thomas Aquinas. It can also be called 'knowledge of the heart'. The heart of man is the source of his conscious personality, intelligent and free where the unwritten law resounds and where the action of God in one's soul is felt. Many preserved the word and mediated on it in her heart (Luke 1, 19, 2, 51). Aristotle has distinguished three distinct operations of mind, which constitute the study of logic; the concept or idea, the judgement and the reasoning process. The knowledge of heart plays its role in the validity of these three operations of kind and of intelligence itself, which is the task of the epistemological part of the philosophy of knowledge. The rise and spread of Christianity had given a new injection to human thought and investigation. As opposed to the skeptics of whatever caliber, Christian philosophers regarded human knowledge including connatural knowledge in its most basic sense as valid, together with that of faith or divine revelation. To discover the truth, one must enter into himself and know himself (Klauder, 1997).

Knowledge exists subject to three conditions, according to Teilhard. (1) It is founded in energy (2) all things are cosmic and (3) all

things evolve. Reflected energy and self-knowledge are identical. Ultimately, all cosmic energy will be reflected or self-aware. The noosphere is an area where cosmic energy is converted into self-knowledge. For full development of self-awareness, the possession of every item of knowledge is essential. Nor is knowledge newly discovered simply added onto self-awareness; it is incorporated in recast self-awareness. The accumulation represents not an addition, but an organic formation. Since one energy pervades the entire cosmos, rooting itself in the past and projecting itself into the future, and since everything is an expression of that energy, then everything must be a representation of the entire cosmos and, theoretically at least, no element may be displaced without rending the web of the universe. It must be understood that all elements are cosmic. There is an existence of a principle which controls and unifies individual perceptions – a cosmic capacity for knowing, an Absolute, a centre which is the centre of all centres, and without which the entire edifice of thought would disintegrate into dust. Everything evolves. Living organisms, ideas, institutions, religions, languages, ... the constituent elements of matter, physics, sociology, philosophy – all branches of knowledge. Nothing is exempt. Teilhard sees knowledge as subordinate to action. Yet, action is also subordinate to knowledge, for knowledge increases our capacity for action. Knowledge is not objective, but subjective. Because the knower is co-extensive with the cosmos, everything he knows is an extension of himself, an aspect of his own being – a restructuring of energy takes place in the act of knowing (Lavin, 1994).

3.2.1.3 Christianity and Science

The essential philosophical basis of modern science was established during the great scientific revolution in Europe during the sixteenth and seventeenth centuries that was the Reformation period. All the major scientists participating in this revolution were Christians. Some of them were quite devout and some also very learned in the Scriptures.Coppernicus, Galelio, Descartes, Kepler, Newton were the prominent figures among them. The post-reformation period, especially nineteenth century, was surnamed as " the great century "in the leading history of Christian missions, that most of the major Christian denominations of the West set out to evangelize the globe. It was from the mission schools founded in the nineteenth century that a disproportionately high number of revolutionary leaders emerged. The confrontation between traditional Christian beliefs and the discoveries of modern science engaged the attention of the churches. The works of Charles Darwin , Origin of species(1859) and Descent of man(1871) called into question the traditional Christian belief in a special creation of the human species in the image of God as based on the Biblical accounts of creation in the book of Genesis (The Encyclopaedia of Religion, 1987).

Teilhard defines knowledge as the systematized perception of total space-time. The branches of knowledge therefore, correspond to angles of vision in the center of perceptions, they are both expressions of reflected energy, and tools by which reflected energy might operate in its environment. Branches of knowledge fall in four categories. In category one are abstraction, logic, choice and invention, all activities of reflection itself. In

category two are science and history, which is considered to be analytic and retrospective. In category three are philosophy, society, live and space-time, all of which seem to deal with the totality. In category four are mathematics and art, branches which seem to epitomize evolution itself. All the four activities in the first category are activities of an energy that knows itself, possesses itself, is able to act upon itself and is concerned with the economy of its own revolution.

Both science and religion attempt to discover the very source of cosmic energy, the source of that energy that is reflected in man. Science, therefore a branch of self-knowledge science made two mistakes in its approach to reality, the first in its point of departure, the second in its method. The quest of science for universal coherence has always begun with matter. It therefore only views the outer crust of things. Science has always subjected matter to the pressure of analysis. Its particular point of departure and method of procedure, has led it deeper and deeper into a world of chance, of large numbers, if the dissipation of energy and of organic collapse. Mathematics is an expression of granular reality, a language and a tool. Structurally, mathematics operates according to the same principle as evolution itself. Art is an expression of cosmic energy; to act is willingly to further evolution through synthesis. Action, refined, becomes research sucks everything into its own self, then it would appear that it is the mechanism by which cosmic energy is converted into reflection (Lavin, 1994).

3.2.2 Epistemological foundations of the Quran

The epistemological foundations of the Quran have been given under the heads-Acquisition of Knowledge, Knowledge-meaning and validity and Islam and Science.

3.3.2.1 Acquisition of Knowledge

Acquisition of knowledge requires firmness, patience, humility and openness of mind, among other sacrifices, but these are well paid for. No one has perfect knowledge. Even the most favoured persons may learn from others. Prophet Musa, who enjoyed special favours from God, was shown a more knowledgeable teacher. Thus, being learned should not be a matter of pride; it should rather enhance humility and kindness to others. The acquired knowledge should be used in the worship of our Lord and Creator, Allah who created humankind precisely for the purpose of that worship. The acquired knowledge should also be extended to others, which may be done by teaching, or by participating in actions of common welfare or both. Quran says that only very little knowledge has been communicated to human beings (Al-Isra, 17:85) and this knowledge has been distributed in such a way that none has a complete share (Bah, 1997).

From the Quranic vantagepoint, the universe is created with a purpose and its meaning and significance can be grasped through empirical probing. It is a firm pronouncement of the Quran that reality of the universe and its purpose can be grasped by every individual if he seeks knowledge in earnest, because the demonstrative proofs of the Lord of the Universe are

scattered allover. In the chapter entitled Ar-Rahman in the Quran, no less than 31 themes of investigation have been recommended as the decisive evidences of the Providence and in different parts of its tact at 13 places, issues of common knowledge have been mentioned followed by "Can you not see it with reason?" 'Tawhid' (Oneness of Allah) which is the keynote of the Quran has an ontological implication – the unity of the mundane and the serene. The physical existence is linked up with the spiritual domain so that the life of man is a continuum from pre-mundane through mundane to post mundane, which confers on our lives in this world a meaning. The universe of knowledge is, therefore, comprehensive and unified. It is a sort of spectrum on which the manifest (shahada) and the latent (ghayb) are arranged. Whatever is accessible to humans is the manifest and whatever is beyond their purview is the latent. For example, the science and the art of creation and the total comprehension of the world hereafter lies beyond the human quest for knowledge (Quraishi, 1997).

The basic premise of the Sufi is to know the Final Truth, to know the Creator. Knowledge of truth led Sufi to find its manifestations in the universe. Quest for truth turns the Sufi to his inner self. His knowledge of truth creates in him self-realization and self-discipline. He begins to find himself at peace with all that is related with the Creator. Sufi does not acquire knowledge through words or experimentation, he goes beyond words; he tries to find the spirit. What he arrives at, is no ordinary knowledge, it is spiritual knowledge. The Sufi therefore makes a distinction between worldly knowledge and spiritual knowledge. He sets his eyes on the life hereafter. The spiritual knowledge consists in the realization that Allah is omnipotent and omniscient. Worldly knowledge is acquired by reason (aql), but the

spiritual knowledge is gained through heart (Qalb). Mind distracts, heart concentrates. Therefore in Sufi discourse heart becomes the local point for attaining spiritual knowledge (Jamaluddin, 1995).

The glorious Quran had been a principal motivator of Muslims in their quest for knowledge right from the inception of historical Islam. Islam lays emphasis on attainment of spiritual and secular knowledge as long as such knowledge will be a benefit to mankind and would not encourage a satanic pattern of behavior. Islamic faith regards acquisition of knowledge of prime importance. It considers knowledge as the criterion of superiority of man amongst God's creatures (The Quran 2: 30-34). On account of Adam's superiority to the angels in knowledge, they were ordered by God to bow to him even though he was created long after their creation (The Quran, 2: 33-34). The Quran encourages careful and contemplative observation and study of God's creatures, for such an intellectual exercise is regarded as essential for men of intellect to understand the greatness of God (The Quran, 2:164,24:41-45,30:42). A few of the sayings of the prophet Muhammad on the imperativeness of acquiring knowledge similar to Quranic stipulations are given.

The Prophet says:

1. Seek knowledge even if it is China.
2. The acquisition of knowledge is compulsory for every Muslim male and female
3. Learned people are the heirs of Prophets.

4. For anyone who treads on a path in order to seek knowledge, God will facilitate the path to Paradise.

(An Nawawi: 449-53 and As Suyuti 1954: 44 & 54).

The very first portion of the Quran to be revealed to the Prophet Muhammad is related to the idea of reading in the Name of Allah, the All-knowing who created man and taught him how to read and write by means of the pen (The Quran, 96: 1-5) (Oscent, 1997).

3.3.2.2 Knowledge – meaning and validity

Revelation is the highest and most authentic form of knowledge, very essential form of knowledge, very essential for the guidance of human reason. Revelation is the highest form of communication on spiritual level between the Creator and His servant who submits his whole self to the Supreme Will. It cannot be acquired by one's intellectual capabilities; it is not contaminated by any element of human desire, or an idea, or imagination. Hence Holy Quran calls it True knowledge. Intellect, which solves most of the problems of human life, is a valuable faculty that has helped man to rise above the animal level. But there are a number of questions that human intellect cannot answer unless it accepts the validity of a source of knowledge or wisdom, which is in every respect transcendal to itself. Revelation invites man to understand all those laws and principles, that are at work in the phenomenon of Nature. Sama, Basar and Qalb are the gates of knowledge (Haq, 1991).

Of the numerous blessings showered upon man; the most remarkable one is that he is created on the disposition of Allah Himself. As regards mission of man, it is vicegerency of Allah on earth. He is asked to perform this role by establishing and promoting here a civilization, based on high moral standards as well as on the principles of truth, justice and universal brotherhood of mankind in return for which he is promised success both in the world and Hereafter with a view to enabling man to fulfill his responsibility to the fullest possible extent, Islam inspired him to unravel the secrets of Nature. Instead of demanding from him to have blind faith in its message by suspending his rational and intellectual faculties, it seeks to convince them of the truth by sharpening and stimulating them. Quran says, "It is the scholars among His servants who fear Allah alone. Lo Allah is Mighty, Forgiving" (35:28) which shows the scientific spirit of Islam. That man has been urged time and again in the Quran to apply his brain and reason to attain knowledge is clearly evident from the fact that the word 'ilm' (knowledge) and its derivatives have occurred 805 times, the word 'altab' (mind) has occurred 16 times and the word 'aql' (reason) and its derivatives have occurred 49 times in the Book. No one can deny that the first five verse revealed to the Prophet commanded him to read and learn (Ansari, 1999).

From the Islamic point of view, knowledge means the knowledge of Qur'an and Sunnah and all that we can deduce from the two as well as those that assist us in understanding them. The Glorious Quran and the books of Hadith and Sunnah would guide us as to what kind of knowledge we are supposed to cultivate. Knowledge according to Prophet Muhammad means nothing but Islamic knowledge. The ultimate goal in one's life should not be the material world, but the life Hereafter. The life in

the Hereafter is eternal and lasting compared to this temporal world. Worship of Allah is the very purpose of our existence in this world and in the absolute sense, knowledge means Knowledge regarding Allah, knowledge of the purpose of our creation; the end which will result in the Hereafter (Mababaya, 1996).

The belief in Tauhid and the belief in the life hereafter are the two most important elements of Sufi concept of knowledge. Belief in the oneness of Allah makes the believer resign to the will of Allah and the belief in eternal life makes him do good things despite all odds and temptations of material life. In Sufi epistemology distinction is made between cognition (ilm) of God and feeling (hal) of God. According to Sheikh Hujwiri, Gnosis of God is of two kinds: Cognitional (ilmi) and emotional (hali). The real gist of gnosis is to recognize that to God is the kingdom. When a man knows that all possessions are in the absolute control of God, there is no business with mankind that should be veiled from God by them or by himself. All such veils are the result of ignorance. Knowledge also includes action Hujwiri holds that knowledge and action are complementary to each other (Jamaluddin, 1995).

3.3.2.3 Islam and Science

Islam provides great incentive for the pursuit of empirical knowledge and this should greatly support and facilitate the promotion of science in Muslim societies. Islamic ideology and worldview became the most powerful sources of inspiration of the Muslim people's quest for knowledge. The movement for scientific progress led by Muslims, started

from 8th century AD when the Muslim science and learning began and lasted for several centuries and lowering scientific genius was produced within a relatively short period. George Salton in his "Introduction to the History of Science", has acknowledged the contributions made by Muslims. Naming each half century period after one key scientific figure eg: age of Plato, age or Aristotle, from 750 to 1100 AD, for 350 years he names in unbroken succession the ages of Jabir, Khawrizmi, Razi, Mausdi, Wafa, Al-Beruni, Ibn Sina, Ibn-al Haithan and Omar Khayam. For another 250 years, the honors are still shared by the Muslims with scientists from other nations. Paradigms are starting points, the perspective from which we observe the world. While the Muslims made notable contributions to science and technology during, the millennium starting with the second century Hijra, a period of decline set in from about 7th century Hijra which culminated in near stability by 10th century Hijra. The units and institutes of Futurology, which may be established in the Muslim world, should be manned by technologists, cultural anthropologists, economists and system specialists (Hashmi, 1994).

Ashraf (1997) outlines the current scientific conception of the origin of the universe and the conformation of Quran with these ideas. The conventional notion of the universe was essentially a static system of planets, stars and nebulae held fixed in orderly arrangements. This was drastically changed by Einsteinian revolution, quantum mechanics and Edwin Hubbles' proposal (1925) of an expanding universe. They revealed a state of dynamically changing and evolving universe. The cosmos became debris of gigantic explosion. Observations and discoveries also point out that the universe is an expanding one. Distant galaxies are receding away from each other at a rate that increases with their separation. Discoveries by Bell

Laboratories, New Jersey, USA shows that the whole universe is emitting a background radiation. This discovery also reinforced the theory that universe evolved from an initially dense state of starting temperature of approximately 100 billion degree Celsius. Then explosion took place with a blinding flash, and this Big Bang marked the creation of matter and space. The ideas of Big Bang and expanding universe have been dealt in the following areas of the Quran.

"Do not the disbelievers see that the heavens and the earth were one solid mass which we split them asunder and that we made every living thing out of water?" (21:30).

"We built heavens a manifestation of several of our attributes and surely we go on expanding the universe" (51:48).

After the Big Bang, the universe started to cool down. The early universe was filled with radiation and plenum of matter, originally hydrogen and helium formed from elementary particles in the dense primeval fireball. The Quran speaks as if it were dealing with this situation "He turned to the sky, which was smoke, and to it and to the earth He said, "Come both of you willingly or unwillingly. 'We do come willing', they answered (41:11). Gravity took over and condensed matter into galaxies and stars that compose them. The Quran claims that the origin of universe is neither haphazardly or accidental but based on perfectly determined. "He ordains all things (13:2). We have created all things according to a measure (54:49). The Quran points to the originator with respect to the precise arrangements. "It is Allah who keeps the heavens and earth from falling. Should they fall, none could hold them back but He" (35:41). Today, virtually every scientist

working in particle physics and cosmology is convinced that the world had a beginning.

Science does not conflict with Islam, for anything science can prove has already been mentioned directly or indirectly in the Quran. According to Prophet Muhammad, knowledge consists of three things, the decisive verses (Quran), authentic hadiths and prescriptions rightly deducted from the two (Hadith, Abu Dawud and Ibn Majah). Each field of science is recognized in Islamic education system, each field dealing with one position of the Holy Quran or Hadith. The scientific method required that we suspend our personal opinions and begin studying by observation, experimentation etc. and then draw conclusions, which will remain valid until disproved by scientific study. The same method forms the Islamic foundation also. i.e., if we get rid of personal opinions and make sound observations, we shall see that all things (living and non-living) in the universe are interconnected into a unit, which is governed by a power, which, alone is worth worship. There is no conflict between science and Islam, but that exists is between scientists and Islamic teaching. An example for this is Darwin's theory of evolution that modern species descend from other species. A recent study on human fossil conducted by British scientists has opposed this theory (CNN News). Similarly the results of another study of bird's fossils conducted by Kansas University scientists also negate the theory that modern birds have descended from dinosaurs. The scientists who provided such evidence did not aim at confirming any Quranic verse but science did vindicate the truth mentioned in the Quran namely that beings were created separately. "Of them, there are some that creep on their bellies; some that walk on four, Allah creates what He wills; for He has power on all things (Al Nur: 45). There have been

material losses and failures due to scientific innovations, which negates the teachings of Quran, example being the mad cow disease of Britain. Islam forbids eating the meat of animals found dead and, as logically follows, suggests not to feed animals from which we directly get food items, with other animals found dead. The purpose of the innovation feeding dairy and beef cattle with other ruminant's remains was to increase profits. But the outcome was human and material losses along with repercussions in international relations (Bah, 1997).

The review of related studies show that the epistemological/cognitive foundations of Information Science, Information Technology and Cybersociety stresses on the importance of the human component. Man or the human mind itself is the central factor in all these areas under consideration. Technology and spiritualism are quite related and technological quest can be seen as a materialisation of spiritual quest. Both the Bible and the Quran give utmost importance to knowledge and wisdom and they extensively deal with them. The survey of literature on the epistemological aspects of the Bible and the Quran not only served the purpose of getting a prior idea of the concepts, but also provided very important theoretical information to conduct the study. The review of related studies helped in creating an idea on the epistemological background of the problem under study.

A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY

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CHAPTER 4

METHODOLOGY

4.1 Statement of the problem
4.2 Objectives of the study
4.3 Sources of data
4.4 Methods of data collection
4.5 Methodology
4.6 Techniques of research
4.7 Methodological Problems

CHAPTER 4

METHODOLOGY

The present study is a comparative study of the treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the emerging cybersociety. The title itself implies that this is a multi-disciplinary research involving data from different fields like Religion, Philosophy, Psychology, Sociology, Information Technology and Futurology. The study is a highly theoretical one with a qualitative approach. The different aspects involved in the study are:

1. The treatment of information, knowledge and wisdom in the Bible and the Quran.

2. Tracing out of a unifying element in the two religious scriptures.

3. Incorporating this unifying element in the modern information – based cybersociety and

4. Identifying the applicability of this unifying element in Information Science and Information Technology.

Thus the study can be included under exploratory research where the purpose is to generate a new idea, the idea being that of the unifying element discussed above. It just attempts to see what is there. The study is primarily based on the Bible and the Quran. The nature of the study suggests a naturalistic methodology to be undertaken where the researcher

does not select or operationally define the constructs to be studied. In one sense the study can be considered to be a historical one also. Here history can be considered to be a actuality, as written as a record, the two scriptures essentially dealing with these aspects of documentary and other primary evidence of history as actuality. History as written is presumably based on history as record and consists of various kinds of narratives or amounts of a portion of history as actuality. The present study is also a comparative study of two religious texts with regard to the factors information, knowledge and wisdom in the emerging cybersociety, letting aside all other religious aspects.

4.1 Statement of the Problem

The study is entitled "A Comparative Study of the Treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the Emerging Cybersociety".

4.2 Objectives of the study

The following are the objectives of the present study:

1) To study the Bible and the Quran with regard to their treatment or approach towards information, knowledge and wisdom.

2) To make a comparison between the Bible and the Quran with regard to their treatment of information, knowledge and wisdom.

3) To examine the validity of the treatment of information, knowledge and wisdom dealt in the Bible and the Quran within the context of the emerging cybersociety.

4) To examine the practical importance of the approaches of the Bible and the Quran towards information, knowledge and wisdom in solving the basic developmental problems of the humanity.

4.3 Sources of Data

The two primary sources of data are the Bible and the Quran. The Bible includes both the Old Testament and the New Testament. The New Jerusalem Bible published in India by the Bombay Saint Paul Society, Bombay has been taken for the exhaustive study of the Biblical text. The Holy Quran- English Translation of the meanings and commentary by Abdullah Yusuf Ali printed and published by King Fahd – Holy Quran printing complex, Kingdom of Saudi Arabia, has been taken for doing the exhaustive survey of the Quranic text. Other literature including approved and authentic commentaries and interpretation of texts are also taken as sources of data. They include

Bible:

1) The New American Standard Bible (La Habra, California: The Lockman Foundation, 1977)

2) King James Version (Cambridge: Cambridge, 1769)

3) The Bible Knowledge Commentary (Walvoord, John F and Zuck, Roy B).

Quran:

1) The Noble Qur'an. English Translation by Marmaduke Pikthall

2) The Noble Qur'an. By Muhammed Taqi-ud-Din Al-Hilali and Muhammed Muhsin Khan.

3) The Meaning of the Qur'an. Translation and Commentary by Syed Abu-Ala' Maududi.

The views of experienced persons and experts in the field and also related literature on the epistemological aspects of Bible, Quran and Cybersociety prove to be valuable sources of data for conducting the study. The literature on the Bible and the Quran reviewed in the previous chapter also proved to be very useful for the study. Though material on the epistemological aspects of cybersociety are only few, they proved to be helpful in knowing the latest developments.

4.4 Methods of Data Collection

The methods of data collection basically included exhaustive study of the Bible and the Quran, survey based on the views of the Biblical and Quranic experts and literature survey. A thorough exhaustive study of the Bible and the Quran has been made to search out the various sections dealing with different aspects of Information, Knowledge and Wisdom. A deeper survey of commentaries and translations of the Holy Scriptures were also conducted in order to obtain more explanation on them.

Structured interview of Biblical and Quranic experts were conducted on the problem under study. Six experts from the Kerala State, three each from Christianity and Islam have been interviewed. The interview mainly covered questions on two aspects: 1) The approaches of the Bible and the Quran towards information, knowledge and wisdom and 2) The relevance

of these approaches in the emerging cybersociety. Responses from these experts on the various aspects of the study and from different angles provide valuable data for the conduct of the study. The comments of Bible scholars on Bible and also on Quran as well as the comments of Quranic scholars on Quran and also on Bible will help to derive the unifying element and thereby reach generalizations.

The literature survey involves the analysis of documents and historical records. This included survey of related literature on both the Bible and the Quran in addition to cybersociety.

4.5 Methodology

As a first step in the analysis procedure, thorough analysis of the Bible and the Quran is conducted to find out the various chapters and sections dealing with information, knowledge and wisdom. As the next step, these ideas are categorised into ten different heads or themes. Based on these themes, the analysis is carried out.

The data analysis involves: a) count analysis, b) content analysis and c) analysis of experts' views. The count analysis is conducted by taking the count of the ten themes on knowledge and wisdom in the Bible (OT and NT) and the Quran and their comparison--between Old Testament and New Testament and also between the Bible and the Quran. The word count of the terms Knowledge and Wisdom for the two texts is also taken and the analysis is conducted similarly.

The content analysis procedure involves a thorough analysis of these themes as dealt in the two texts, following which the basic approach

of the individual texts regarding each theme is arrived at. A comparison of these approaches in different categories is conducted to find out whether similarity or differences exist, if any, in all these aspects. The analysis of this data helps in searching out the basic approaches of the texts towards Information, Knowledge and Wisdom.

The next step in the content analysis involves the identification of the unifying element, if any, in both the scriptures, based on these approaches. Integration of this unifying element with the concerned aspect of Information Science, Information Technology and Cybersociety will help to find out the theoretical foundations of these ideas. The applicability of this unifying element in the emerging cybersociety is determined and this will prove the relevance of the approaches of the Bible and the Quran in the cybersociety.

The analysis of the views of the experts involves the analysis based on the structured interview of the experts. Their views supplement the Biblical and Quranic views arrived at by carrying out the content analysis of the two texts. This proves to be helpful in finding out the theoretical foundations of the areas under study.

4.6 Techniques of Research

The present study is not a theological one, but an interdisciplinary one. Therefore the techniques of research also involve those from different fields, or it uses a combined research technique. The study is a historical one; the data analysis involves content analysis of documents i.e. the Bible and the Quran and other commentaries and translations, in addition

to review of related literature. The content analysis is carried out by careful study of each and every sentence of the two texts, scanning from the very beginning to the end. The Old Testament and the New Testament are taken separately for the Bible to conduct the study. This will facilitate the comparison of the OT and the NT regarding their count as well as content.

Techniques in Futurology were also used to some extent in the study. The study reflects visions of the future, i.e, to what extent the Biblical and Quranic approaches towards information, knowledge and wisdom are relevant in the emerging cybersociety. Forecasting and insights and impressions of the researcher prove to be essential to undertake the analysis and to reach a conclusion.

The study also makes use of techniques in field research as a supportive measure. Personal interview of the experts in both the fields using structured interview schedule was found to be very useful. Analysis is also conducted on the theme count of the various themes on knowledge and wisdom discussed above and word count of the terms 'Knowledge' and 'Wisdom' in both the Bible (OT and NT) and the Quran.Hence it also makes use of bibliometric techniques, especially in conducting count analysis.

Thus a combined research technique has been made use of in the conduct of the study. Analysis of data is conducted making use of these techniques. The findings of the analysis are given in detail in the following chapter.

4.7 Methodological Problems

The study faces some methodological problems. No similar or parallel studies have been undertaken so far. The investigator has developed a methodology of her own. So also almost all the studies are oriented towards past rather than future. The present study is a future oriented one. So intuitive elements, projection and forecasting techniques have been employed to a limited extent in order to reach generalization. Imagination and vision about the future is reflected in the study. Moreover, cybersociety is an emerging concept and Information Communication Technologies (ICT) are not always continuous and may be influenced and shaped by unforeseen events and are therefore difficult to predict and control. All these factors suggest that no clear-cut methodology can be followed for the study.

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CHAPTER 5

ANALYSIS OF DATA AND MAJOR FINDINGS

5.1 Count analysis of the Bible and the Quran
5.1.1 Theme count for OT, NT and Quran
5.1.2 Theme count for OT
5.1.3 Theme count for NT
5.1.4 Theme count for Quran
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5.3 Analysis of Experts' views
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CHAPTER 5

ANALYSIS OF DATA AND MAJOR FINDINGS

The prime objective of the present study is to examine the treatment of Information, Knowledge, Wisdom and the different aspects related to them in the Bible and the Quran. The relevance of the Biblical and Quranic approach towards Information, Knowledge and Wisdom in the cybersociety is to be explored. By exploring the theoretical aspects of Information, Knowledge and Wisdom, we can build up the very theoretical foundations of Information Science and Information Technology-for they are primarily concerned with information and knowledge as cybersociety deals with wisdom. Such a study has special significance in the realm of Information Science, Information Technology and cybersociety.

With these objectives in mind, data has been collected by making a detailed analysis of the original and authorized versions of the Bible and the Quran with regard to Information, Knowledge and Wisdom. The English translations of the scriptures often use the words knowledge and wisdom interchangeably, but occasionally they are spoken of as separate and distinct. The term 'Information'does not appear frequently in the texts-either the term 'knowledge' is used as a synonym for 'information'or it is expressed implicitly in the texts. Hence the analysis has been mainly centred on Knowledge and Wisdom. Based on the preliminary study of the two scriptures, the various aspects of Knowledge and Wisdom have been categorised under the following heads:

1) Origin of Knowledge and Wisdom
2) Importance/Advantage/Purpose of Knowledge and Wisdom
3) Attributes/Characteristics of Knowledge and Wisdom
4) God as related to Knowledge and Wisdom
5) Origin of the Universe/Creation/Science and Technology
6) Sources of Knowledge and Wisdom
7) Search for/Acquisition of Knowledge and Wisdom
8) Types/divisions of Knowledge and Wisdom
9) Meaning of Knowledge and Wisdom
10) Reasoning/Thought/Intelligence.

The data analysis chapter includes the analysis of the Bible and the Quran under each of these heads. The different sections (chapters, sentences and sentence numbers) in both the texts dealing with these have been listed out following a thorough exhaustive study of the two texts.

The analysis includes count analysis, content analysis and the analysis of the expert's views. The first section deals with count analysis of the ten themes for the Bible and the Quran.The second section deals with content analysis of the texts based on the ten themes and the third section deals with the analysis of the experts' views on the approaches of Bible and Quran towards knowledge and wisdom and also on the relevance of the approaches of the Bible and the Quran regarding information, knowledge and wisdom in the cybersociety.

5.1 COUNT ANALYSIS FOR THE BIBLE AND THE QURAN

Theme count for Old Testament, New Testament and the Quran

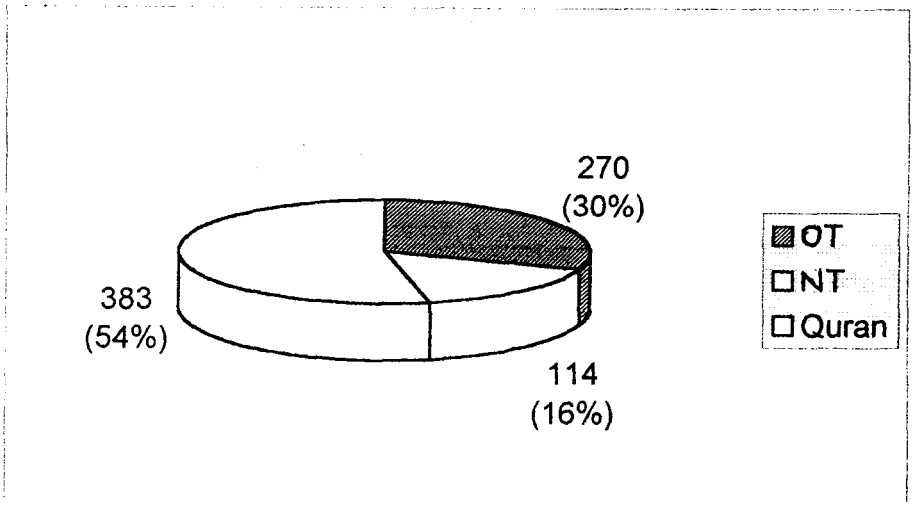
5.1.1 Table 1 gives the count of the different themes related to knowledge and wisdom in Old Testament, New Testament and the Quran. Figure 1 shows the theme count for the three texts taken collectively.

Table 1

Theme count for Old Testament, New Testament and Quran

Sl. No.	Theme (Knowledge and Wisdom)	Count		
		O T	NT	Quran
1.	Origin	12	15	9
2.	Importance/Advantage/Purpose	39	9	10
3.	Attribute/Characteristics	38	10	32
4.	God as related to	39	43	152
5.	Origin of universe/Creation/ Science and Technology	64	9	109
6.	Sources	22	9	31
7.	Search for/Acquisition of	31	7	7
8.	Types/Divisions	4	3	5
9.	Meaning	16	5	14
10.	Reasoning/Thought/Intelligence	5	4	14
	Total	270	114	383

Figure 1. Theme count for OT, NT and Quran



From Table I and Figure I it is clear that OT, NT and the Quran deal extensively with different aspects of knowledge and wisdom. All the ten categories including the Origin, Importance, Attributes of knowledge and wisdom, God as related to knowledge and wisdom, Sources, Search, Types, Meaning, Reasoning are being covered in all the three texts in addition to the themes Origin of the Universe, Creation and Science and Technology. This suggests that the present study based on the Biblical and the Quranic approach towards information, knowledge and wisdom will help in finding out the theoretical bases for Cybersociety as well as Information science and Information Technology.

The theme count is seen to be highest for the Quran (54%) when the three texts OT, NT and Quran are taken separately. It is followed by Old Testament (30%) and then by New Testament (16%).

Table II, Table III and Table IV give the theme count for the scriptures taken individually- The Old Testament, The New Testament and the Quran. They have been represented graphically in figure II, figure III and figure IV respectively.

Table 2
Theme count for Old Testament

Theme (knowledge and wisdom)	Count	Percentage
Origin (O)	12	4.44
Importance/Purpose/ Advantage (I/P/A)	39	14.44
Attributes/Characteristics (A/C)	38	14.07
God as related to (G)	29	14.44
Origin of universe/Creation/ Science and Technology (O/C/S)	64	23.70
Sources (S)	22	8.14
Search for/Acquisition of (S/A)	31	11.48
Types/ Divisions (T/D)	4	1.48
Meaning (M)	16	5.93
Reasoning/Thought/ Intelligence (R/T/I)	5	1.85

Figure 2

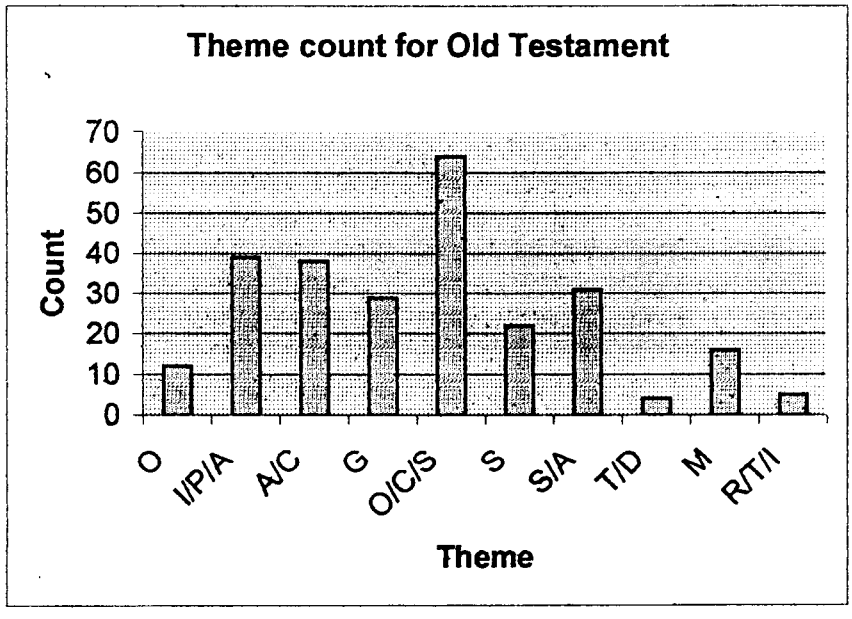


Table 3
Theme count for New Testament

Theme (knowledge and wisdom)	Count	Percentage
Origin (O)	15	13.16
Importance/Purpose/ Advantage (I/P/A)	9	7.89
Attributes/Characteristics (A/C)	10	8.77
God as related to (G)	43	37.72
Origin of universe/Creation/ Science and Technology (O/C/S)	9	7.89
Sources (S)	9	7.89
Search for/Acquisition of (S/A)	7	6.14
Types/ Divisions (T/D)	3	2.63
Meaning (M)	5	4.39
Reasoning/Thought/ Intelligence (R/T/I)	4	3.51
Total	114	100.00

Figure 3

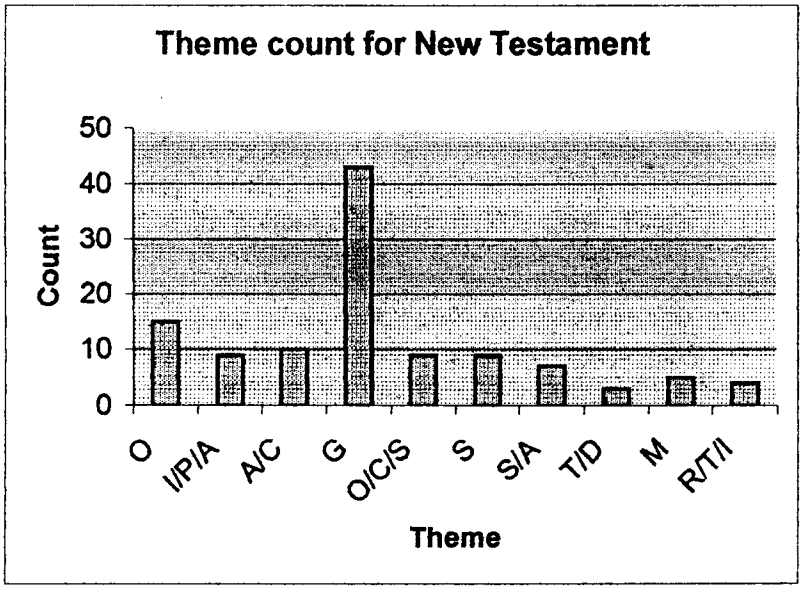
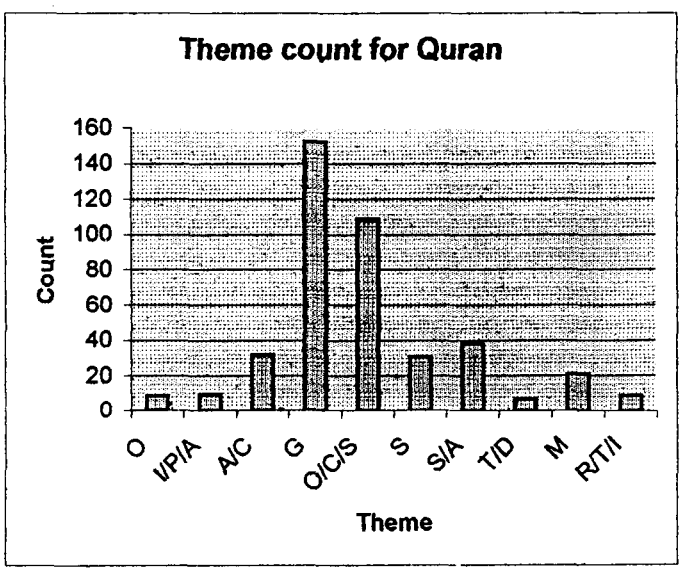


Table 4
Theme count for the Quran

Theme (knowledge and wisdom)	Count	Percentage
Origin (O)	9	2.15
Importance/Purpose/ Advantage (I/P/A)	10	2.39
Attributes/Characteristics (A/C)	32	7.66
God as related to (G)	152	36.36
Origin of universe/Creation/ Science and Technology (O/C/S)	109	26.08
Sources (S)	31	7.42
Search for/ Acquisition of (S/A)	38	9.09
Types/ Divisions (T/D)	7	1.67
Meaning (M)	21	5.02
Reasoning/Thought/ Intelligence (R/T/I)	9	2.15
Total	418	100.00

Figure 4



5.1.2 Table II and Figure II show the theme count for The Old Testament taken individually. It can be seen that the maximum count is for the theme on the Origin of the universe/Creation/Science and Technology. The count for the themes – Importance, Attributes, God as related to knowledge and wisdom and Search /Acquisition of knowledge and wisdom shows no much variation (between 29 &39). All other themes are also dealt within the text to some extent.

5.1.3 Theme count for New Testament taken individually as given in Table III and its graphical representation in Figure III reveals that the maximum count is for the theme God as related to knowledge and wisdom (43). The other themes number below ten only except for the themes Origin and Attributes of knowledge and wisdom.

5.1.4 Table IV and Figure IV give the count of the Quran for the different themes. The table and the figure show that the maximum count is for the theme God as related to knowledge and wisdom and they number quite high (152) as compared to other themes. The second place in the count goes for the theme on Origin of the Universe/Creation/Science and Technology (109). The counts for other themes range between 7 and 38.

5.1.5 Comparison of the Theme counts of OT and NT

A comparison between OT and NT in the theme count can be made from Table V and Figure V. It can be seen that the themes have been dealt with more in the Old Testament than in the New Testament except for the themes Origin of knowledge and wisdom and God as related to knowledge and wisdom. The count is quite high for OT as compared to NT for the themes Importance/Purpose/Advantage, Attributes/Charecteristics, Origin of Universe/Creation/Science and technology and Search /Acquisition. The count shows no much variation in the case of Origin, Types/Divisions and Reasoning/Thought/Intelligence. The counts differ by around 30 for the themes Importance/Purpose/Advantage and Attributes/Charecteristics.

5.1.6 Comparison of the theme counts of the Bible and the Quran

A comparison between the theme counts for the Bible (OT + NT) and the Quran can be had from Table VI and Figure VI. The figure shows that Bible has more count for the themes Origin, Importance/Purpose/ Advantage and Search/Acquisition. For the themes Attributes/ Charecteristics, Types/Divisions, Meaning and Reasoning/Thought/ Intelligence, the count shows no much variation. The count remains 31 for the theme Sources of knowledge and wisdom for both the texts. The count for Quran numbers significantly more for the themes God as related to knowledge and wisdom and Origin of Universe/Creation/ Science and Technology as compared to the Bible.

Table 5

Theme count for Old Testament and New Testament

Theme (knowledge and wisdom)	OT	NT
Origin (O)	12	15
Importance/Purpose/ Advantage (I/P/A)	39	9
Attributes/Characteristics (A/C)	38	10
God as related to (G)	39	43
Origin of universe/Creation/ Science and Technology (O/C/S)	64	9
Sources (S)	22	9
Search for/Acquisition of (S/A)	31	7
Types/ Divisions (T/D)	4	3
Meaning (M)	16	5
Reasoning/Thought/ Intelligence (R/T/I)	5	4

Figure 5

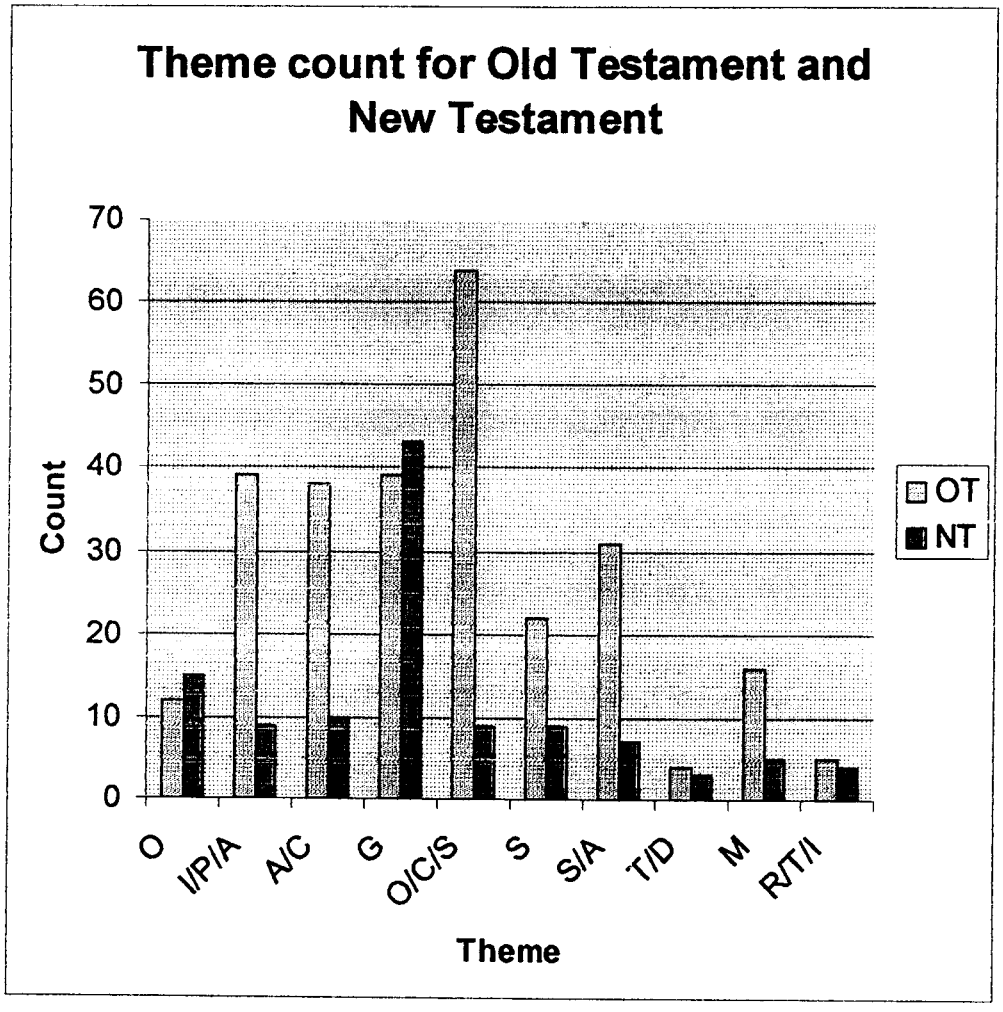
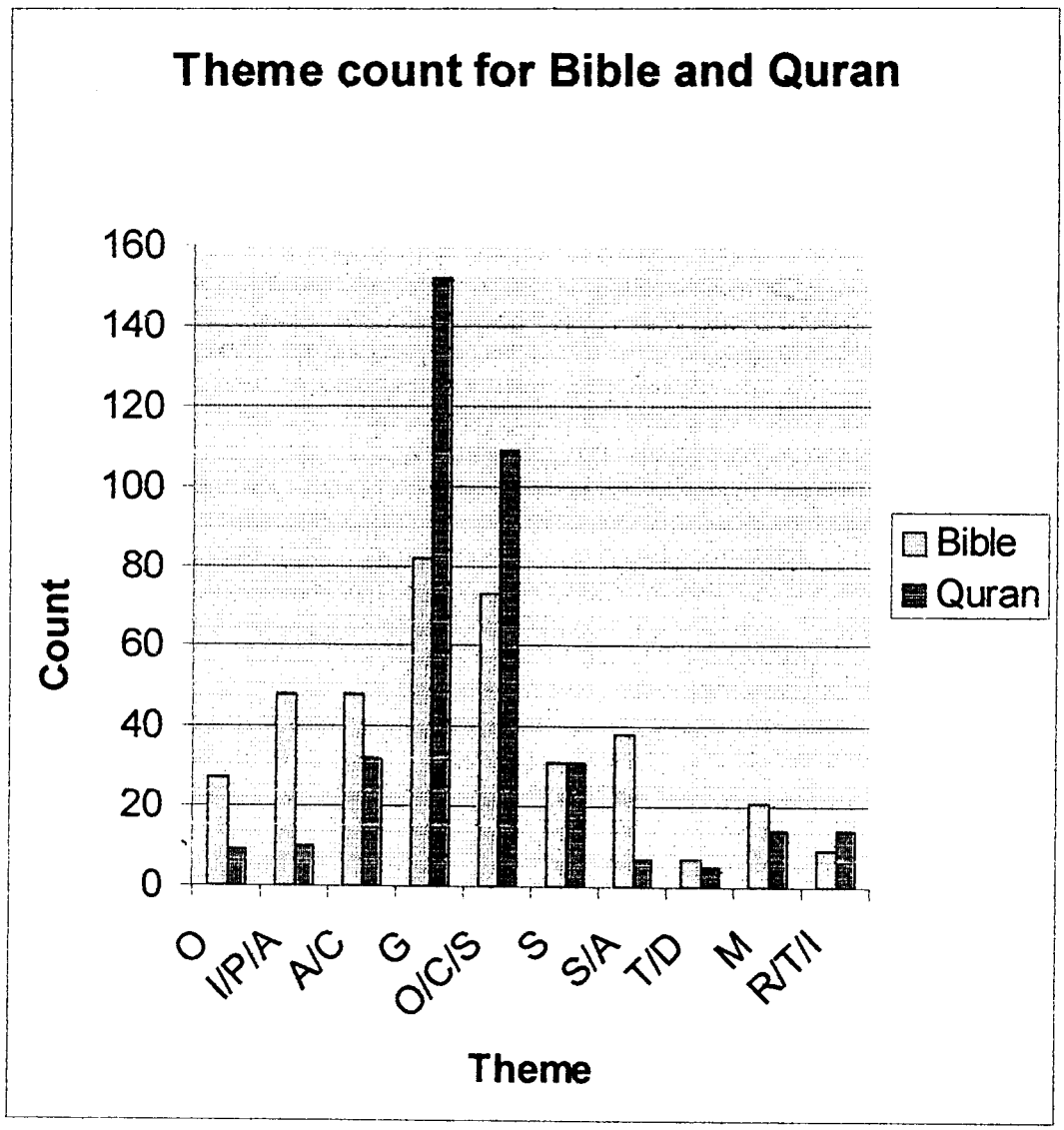

Theme count for Old Testament and New Testament
70
60
50
40
30
20
10
0
Count
O
I/P/A
A/C
G
O/C/S
S
S/A
T/D
M
R/T/I
Theme
OT
NT

Table 6

Theme Count for Bible and Quran

Theme (knowledge and wisdom)	**Bible**	**Quran**
Origin (O)	27	9
Importance/Purpose/ Advantage (I/P/A)	48	10
Attributes/Characteristics (A/C)	48	32
God as related to (G)	82	152
Origin of universe/Creation/ Science and Technology (O/C/S)	73	109
Sources (S)	31	31
Search for/ Acquisition of (S/A)	38	7
Types/ Divisions (T/D)	7	5
Meaning (M)	21	14
Reasoning/Thought/ Intelligence (R/T/I)	9	14

Figure 6


Theme count for Bible and Quran
160
140
120
100
80
60
40
20
0
Count
O
I/P/A
A/C
G
O/C/S
S
S/A
T/D
M
R/T/I
Theme
Bible
Quran

5.1.7. Word count for 'Knowledge' and 'Wisdom' in the Bible and the Quran

In addition to the count of the themes, the count of the words 'Knowledge' and 'Wisdom' are also determined. Table VII gives the count of the terms ' Knowledge' and 'Wisdom' in Old Testament, New Testament and Quran. Figure VII gives the comparative term count of the three texts for the term 'Knowledge' and Figure VIII shows the comparative term count for the term 'Wisdom' regarding the three texts.

From the Table VII and Figures VII and VIII it can be seen that for the term Knowledge, the count is the highest for the Quran (124). It is followed by OT (84) and then by NT (40). For the term Wisdom, the term count is highest for OT (86), which is followed by NT (30). For the Quran it is 27.

Table 7
Term count for "Knowledge" and "Wisdom"

Term	Bible				Quran	Percentage
	OT	Percentage	NT	Percentage		
Knowledge	84	33.87	40	16.13	124	50.00
Wisdom	86	60.14	30	20.98	27	18.88

Figure 7

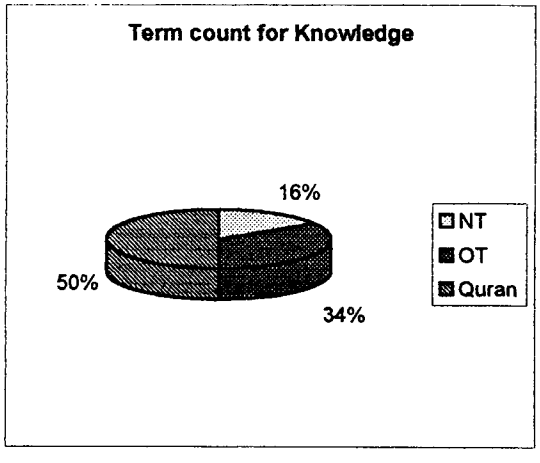
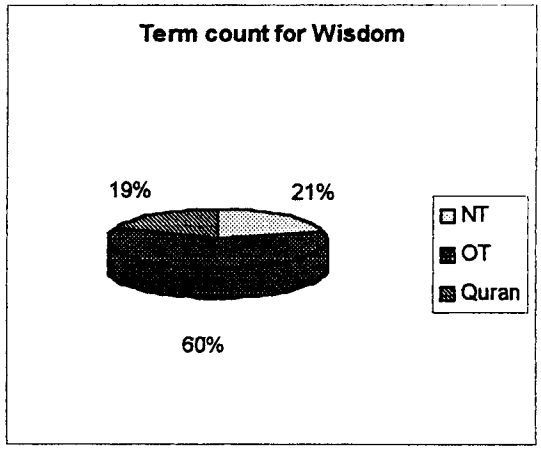


Figure 8



5.2 CONTENT ANALYSIS OF THE BIBLE AND THE QURAN

In this section of the chapter, the quoting from the Bible and the Quran has been examined in detail under each heading and has been given separately for each text. This helps in finding out the basic view of the texts and also in comparing the views. The comparison of the views is given under each heading. The quoting of the Bible is given in the order of chapter name followed by the section number and sentence number. For the Quran it is the Sura number (Chapter Number) followed by the Ayat (sentence) number. The list of Books of the Bible-Old Testament and New Testament, along with the chapters has been given in the Appendices. Similarly the list of different Suras (chapters) of the Quran has also been given in the Appendices.

I Origin of Knowledge and Wisdom

5.2.1.1 Bible

The Bible-both Old Testament and New Testament speaks about the origins of knowledge and wisdom. From the different quoting of the OT and NT the approach of the Bible towards the origin of knowledge and wisdom has been made clear.

OT:

1) In Ecclestiasticus 1.10, a collection of maxims on the origin of wisdom says:

All wisdom comes from the Lord
She is within him forever.

.....

.....

Wisdom was created before everything

.....

One only is wise, terrible indeed,

Seated on his throne, the Lord

It was he who created, inspected and weighed her up.

And then poured her out on all her works".

2) Proverb. 2.6 also says that Wisdom originated from God:

For Yahweh himself is giver of wisdom,

from his mouth issue knowledge and understanding

3) Proverb. 8. 22-26 says,

Yahweh created me, first fruits- of his fashioning,

Before the oldest of his works.

From everlasting, I was firmly set

from the beginning, before the earth came into being.

The deep was not when I was born

nor were the springs with their abunding waters

Before the mountains were settled

before the hills, I came to birth.

4) Ecclestiasticus 24.9 reads that "from eternity, in the beginning he created me, and for eternity I shall remain."

NT:

1) In the beginning was the Word:
the Word was with God
and the Word was God. (John.1.1-3).

2) The Word was the real light
he was coming into the world
He was in the world
That had come into being through him (John.1.10)

3) But to those who have been called, whether they are Jews or Greeks, a Christ who is both the power of God and the wisdom of God. (1.Corinthians 1.24)

The OT speaks of Wisdom as the first of God's creations. Wisdom was created from eternity and she will remain forever for eternity within the Lord. Even before the earth came into being, wisdom was originated. It was the only and the only wise Lord who created, inspected and weighed up wisdom in measures and poured out on all his creations. Wisdom appeared on earth only when Lord gave it through his servant Jacob to Israel (Baruch 3, 36)

The NT, especially John in his gospel, says that knowledge and wisdom originated from God. Word existed before the world, in God. The Word became flesh and lived among us (John.1.13). Here Word signifies Jesus Christ, who was the Wisdom of God. He was sent to the earth with a

mission by the Father. (John.3.17, 3.34,5.36,5.43,6.29,7.29,8.42,9.7,10.36, 11.42). We can infer that according to NT, Wisdom originated through Jesus Christ, who was sent by God.

Thus we see that OT and NT is consistent regarding the origin of knowledge and wisdom.

5.2.1.2 Quran

Quran is of the view that the origin of knowledge and wisdom is from the Lord, the Creator Supreme. The following verses indicate this: Quran says,

1) 'Is not He who created
The heavens and the earth
Able to create the like
Thereof? -Yea, indeed!
For he is the Creator Supreme,
Of skill and knowledge (infinite)! (Sura.36.81)

2) 'Had it not been for a Word that went forth before from they Lord, their difference would have been settled between them' (Sura 10.19).

Here Word is the Decree of Allah, the expression of his Universal Will of Wisdom that comes from him.

3) 'Say: Enough
for a witness between me

And you is Allah, and such

As have knowledge of the Book' (Sura 13.43)

That is, those who have knowledge of the Revelation will recognize Allah's or God's revelation in the holy Quran.All knowledge of the Book comes from Allah and Quran also bears witness to me. Revelation (The Book) is the source of knowledge according to the Quran and this knowledge comes from Allah.

4) In Sura 34.6, Quran says,

'And those to whom

Knowledge has come see

That the (revelation) sent down

To thee from thy Lord".

This verse also stresses that revelation or knowledge comes from the Lord.

5.2.1.3 Comparison

The Bible, both the Old Testament and the New Testament says that wisdom and knowledge originated from the Lord. It was the first of his creations and was created from eternity. Quran is of the same view regarding the origin of the knowledge and wisdom. The Word, which signifies the Wisdom of the Lord originated from the Lord.

II Importance/Advantage/Purpose of Knowledge and Wisdom

5.2.2.1 Bible

Bible gives utmost importance to wisdom and knowledge. A whole chapter 'Wisdom' in addition to the chapter 'Proverbs' in the OT discusses the importance and advantages of knowledge and wisdom in detail. Bible views knowledge and wisdom as the most precious thing – more than even silver or gold. This has been said at several occasions in the O T. (Proverb3.13-19, Proverb16.16, Proverb20.15 Proverb7.11-14, Proverb8.6-21 etc). The following are a few quoting from OT, which gives the Importance/purpose/advantage of Knowledge and Wisdom.

OT:

1) In Proverb 8, Wisdom herself says,
"Accept my discipline rather than selves
and knowledge of me in preference to finest gold.
For wisdom is more precious than jewels, and
nothing else is so worthy of desire".

2) Glory is the portion of the wise,
all that fools inherit is contempt. (Proverb3.35)

3) Wisdom speaks,
'And now my children listen to me.
Happy are those who keep my ways.
Listen to instruction and become wise,

Do not reject it
Blessed, whoever listens to me
Who day after day keeps watch at my gates
to guard my portals.
For whoever finds me finds life,
And obtains the favour of Yahweh;
But whoever misses me harms himself,
All who hate me are in love with death.'(Proverb8.32-36)

4) Wisdom makes the wise stronger than a dozen governors in a city. (Ecclesiastes7.19)

5) Wisdom is as good as a legacy,
profitable to those who enjoy the light of the sun.
For as money protects, so does wisdom,
and the advantage of knowledge is this:
that wisdom bestows life on those who possess her. (Ecclesiastes 7.11, 12)

In the section were the King Solomon has been dealt with, Solomon the King, asked God for nothing else but wisdom and a discerning judgement for himself, when God offered him anything he wished (1 Kings 3.5-13; 1 Kings 4.29-34; Wisdom 7.8,9). In Wisdom 8.3, Solomon envisages not only beauty, but also divine nobility to wisdom, than as a source of knowledge, wealth, efficiency, uprightness and experience.

Wisdom speaks as a warning to the heedless that those who have hated knowledge will have to eat the fruits of their own ways of life; but whoever listens to her may live secure (Proverb.1.30-32). Wisdom acts as a safeguard against bad company (Proverb.2.6-15). Those who acquire wisdom will be guarded by God himself. Good advice and prudence belongs to wisdom (Proverb.8.20, 21) whoever finds wisdom, finds life and the favour of Yahweh (Proverb.8.32-34). Just as honey is sweet to taste, wisdom is to one's soul, so find it – says the sage (Proverb.24.13, 14). From the first man Adam to Moses, throughout history, wisdom has played a very decisive role in saving the upright. Wisdom enables the poor to stand erect and gives him a place with the great (Ecclesiasticus 11.1). Baruch, the prophet exhorts Israel to learn what knowledge is and where understanding and strength exists. Daniel says, that on the day of resurrection, those who are wise will shine as brightly as the expanse of the heavens and those who have instructed many in uprightness, as bright stars for all eternity. (Daniel 12.3,4).

The New Testament, in which Christ is represented as the wisdom of God, takes birth and his mission was revival of the human kind. NT gives several advantages of leading a virtuous life, following the path of Jesus Christ. The following verses show this:

1)'So do not let anyone lead you astray. Bad company corrupts good ways. Wake up from your stupor as you should and leave sin alone; some of you have no understanding of God; I tell you this to instill some shame on you' (1.Corinthians.15.34).

2) 'Grace and peace be your's in abundance through the knowledge of our Lord' (2.Peter.1.2)

3) 'By his divine power, he has lavished on us all the things we need for life and for true devotion, through the knowledge of him who has called us by his own glory and goodness...With this in view, do your utmost to support your faith with goodness, goodness with understanding, understanding with self control,... and kindness to the brothers with love. The possession and growth of these qualities will prevent your knowledge of our lord Jesus Christ from being ineffectual and unproductive.'(2.Peter1.3-8).

4) '...until we reach the unity in faith and knowledge of the Son of God and form the perfect Man fully mature with the fullness of Christ himself.'(Ephesians.4.13)

All these verses either give the advantages and importance or the purpose of knowledge and wisdom as per the NT.Thus we can see that both OT and NT stress the importance of knowledge and wisdom.

5.2.2.2 Quran

Quran also consists of numerous verses, which give the importance and purpose of knowledge and wisdom. In Sura 39.9 Quran says,

'Are those equal, those who know
And those who do not know?

It is those who are endued with understanding
That receive admonition'.

For those who believe and who have been granted knowledge, in the kingdom of Allah, they receive leadership and rank according to the degree of knowledge. Sura 58.11 says,

'Rise up: Allah will
Raise up, to (suitable) ranks
(And degrees), those of you
Who believe and who have been granted knowledge'.

'That is the Truth
And that it guides
To the path of the exalted
(In might) worthy
Of all praise'. (Sura 34.6)

The purpose of sending Quran is that human beings may learn wisdom. Sura 12.2 reads,

We have sent it down
As an Arabic Quran,
In order that ye may
Learn Wisdom.

'Here is a book which
We have sent down
Unto thee, full of blessings,
That they may meditate

On this signs, and that

Men of understanding may receive admonition'. (Sura.38.29)

The purpose of revealing Quran, again Allah, the Lord says that it might lead mankind from darkness to light. (Sura 14.1). The prophets were sent to rehearse to the people His signs, to purify them and to instruct them in the Book and Wisdom. (Sura 62.2).

The Wise Lord instructs wisdom both through written scriptures, and in other ways, for e.g. by means of knowledge of life and its laws, and understanding of His wonderful Universe. According to Quran, for man, the aim of life is, success in the Hereafter, towards which he has to gain knowledge and wisdom in this world through the various means. Thus the importance of knowledge and wisdom lies in the fact that it is the decisive element in the success and failure of a man's life. The purpose of knowledge and wisdom is to cast or mould the man for a better Hereafter life throughout his life in this world.

5.2.2.3 Comparison

Bible, especially NT gives numerous expressions on the importance of knowledge and wisdom. The purpose of knowledge and wisdom is the revival of human beings and lead him through the right path. Quran, on the other hand, does not straightforwardly list out many expressions on the importance or advantage of knowledge. Instead it implicitly, through different Ayats (sentences) gives the importance and purpose of knowledge and wisdom. Knowledge means knowledge of God, and for each and every person, it is necessary to gain knowledge since it leads to the success of this

life as well as the hereafter. This is the view of Quran on knowledge and its importance and purpose.

There exists no inconsistency within OT and NT or Bible and the Quran regarding the importance/advantage/purpose of knowledge and wisdom. When Bible says that it is the most precious treasure, Quran says that human beings will be ranked in the Hereafter according to the degree of his knowledge. Both the texts say that those who acquire wisdom will be guarded by God himself. Christ – his life and mission, which is wisdom according to NT, is the revival of mankind, says Bible. So does Quran say that the purpose of its revelation and prophets was to lead human kind from darkness to light.Thus both the texts stress the importance of knowledge and wisdom. They are also of the same view regarding the purpose of knowledge and wisdom- i.e. to lead the humankind through the right path in order to attain salvation.

III Attributes/Characteristics of Knowledge and Wisdom:

5.2.3.1 Bible

The attributes and characteristics of knowledge and wisdom as Bible describes it can be found in the quoting given below:

OT:

1) Deep waters, such are human words:
a gushing stream, the utterance of wisdom. (Proverbs.18.4)

2) Wisdom will never enter the soul of a wrong-doer,
nor dwell in a body enslaved to sin. (Wisdom.1.4)

3) Wisdom is a spirit friendly to humanity

though she will not let a blasphemer's words go unpunished. (Wisdom.1.6)

4) Eulogy of Wisdom:

For within her is a spirit intelligent, holy,

Unique, manifold, subtle,

mobile, incisive, unsullied,

……

……,

penetrating all intelligent, pure

and most subtle spirits.

For wisdom is quicker to move than any motion

She is so pure, she pervades and permeates all things. (Wisdom.7.22-24)

NT:

1) '…so that your faith should depend not on human wisdom but on the

Power of God.'(1.Corinthians.2. 5)

2) Yet wisdom is justified by all her children.(Luke .7.35)

3) If, after we have been given knowledge of the truth, we should deliberately commit any sins, then there is no longer any sacrifice for them. (Hebrews.10.26)

In OT, Job 28 and Baruch 3.9-4.4, wisdom is represented as a thing distinct from God or human beings desirable in itself. In Proverb1.20-23, Proverb. 3.16-19 and Proverb 8-9 it is represented as a person. She is a caring hostess in Proverb 9. (1-6). Here Wisdom herself reveals her origin (created before all other creatures), her active part in creation and the function she discharges among human beings in leading them to God. Wisdom 7.22 and Wisdom 8.1 gives the impression that Wisdom, an outpouring of Gods' glory, has a share in the divine nature.

Discipline and understanding goes along with knowledge (Proverb.12.1, Proverb.21.30). Wisdom 6.22 describes both its nature and origin, first of all by listing the characteristics of the divine spirit possessed by Wisdom – (there are 21 attributes given) and then by explaining the relationship between Wisdom and God. In Wisdom 7.27-30 various characteristics of Wisdom are pointed out and concludes by identifying it with divine providence (Wisdom. 8.1). Wisdom takes the role of teacher in Wisdom 8.6-8, as a councellor in Wisdom. 8.9-16 and a role of an educator in Eccleciasticus 4.11-19. Wisdom is not accessible to many (Ecclesiastus.6.22). A sensible person recognizes wisdom and will respect anyone who has found it. Those who can understand sayings are those who have toiled for their wisdom (Ecclesiasticus 18:28,29). The wise gains advancement by words. Wisdom was created to shine and to enlighten people, to conceal her is to fall short of ones calling. (Ecclesiasticus 4.23, Ecclesiasticus 20:30,31; Ecclesiasticus 41:15). An intelligent and wise person will put faith in the Law (Ecclesiasticus 33.2).

The doctrine of wisdom as outlined in OT is resumed in NT by applying it to the person of Christ. Jesus is referred to as wisdom itself, the wisdom of God. (Mathew.11.19, Luke.11.49, Mathew.23.34-36). Like wisdom in OT, he participates in the creation and preservation of the world. John in his Gospel attributes the characteristics of creative wisdom to the Word. In the New Testament, Mathew (11.19) says that wisdom is justified by her deeds. In spite of human lack of good will, God's wise design is justified by the conduct of John, the Baptist and Jesus. Jesus' works especially that is, less miracles, either convince or condemn. Jesus is compared to Wisdom also in Mathew 11; 28-30, 12.42, 23.24 and 1 Corinthians 1: 24.

5.2.3.2 Quran

The Quran does not personify Wisdom as Bible does. Quran sees knowledge and power as the rewards of God for those who do right. Sura 12.22 reads

> When Joseph attained
> His full manhood, We gave him
> Power and knowledge: thus do We
> Reward those who do right.

Most of the verses showing the attributes of knowledge and wisdom stresses on the limitedness of human knowledge. Quran, in many an occasion describes the state of human knowledge. The following verses make this clear:

'For how canst thou
Have patience about things
Which are beyond your knowledge?'(Sura.18.68)

'It is the promise of Allah.
Never does Allah fail
From his promise: But most men know not'. (Sura.30.6)

'But of that that they have no knowledge: they merely conjecture.'(Sura. 45.24)

Man's knowledge is nothing is compared to God's knowledge; it is far reaching (Sura 53.35, Sura 54.5 Sura 16.101, Sura 16.8, Sura 18.65, Sura 30.6, Sura 36.36, Sura 39.29, Sura 45.24, Sura 52.47, Sura 53.28). Human Knowledge is very limited. It is quite often repeated throughout the text that "but most man know not".

Sura 16.70 reads:
And of you there are
Some who are sent back
To a feeble age so that
They no nothing after
Having known much
For Allah is All- knowing, All-powerful

Those who receive knowledge from God, they fall down in prostration and walk on earth with humility (Sura 17.107, Sura25.63, Sura28.80). It is man without knowledge who disputes about Allah (Sura 22.3, S 31.20) and people who have knowledge understand Allah's signs.

(Sura 29.43, Sura29.49). Thus for unbelievers, their knowledge is in doubt and uncertainty (Sura 27.66). Those endowed with spiritual knowledge include those who received revelations and are free from corrupt ideas. They fear the Lord who has bestowed knowledge on him (Sura 26.132, Sura 39.10, Sura 65.10). Knowledge goes along with faith (Sura 30.56) and for those who fear Lord, things will be made easy for them (Sura 65.4). He who receives guidance or knowledge benefits his own soul (Sura 39.41).

Sura 39.18 reads,

"And those who listen to the Word
And follow the best of it.
Those are the ones who Allah has guided, and
Those are the ones endued with understanding".

The people of knowledge are those who listen to the word. Word, here means Allah's word. People of understanding receive admonition. One should not repulse those who ask for Wisdom (Sura 93.10).

5.2.3.3 Comparison

Bible (OT) represents Wisdom in various forms. Wisdom is represented at times as a thing distinct from God or human beings. In other places, wisdom is personified as a woman – she speaks out herself of her origin, role in creation, and her function among human beings in leading them to God. In many other occasions it takes the role of teacher, councellor, educator or any more.

There exists no inconsistency between OT and NT regarding the attributes of Wisdom and Knowledge since the concept of wisdom is applied to the person of Christ in NT as a continuation to OT. Jesus is referred to as the Wisdom himself – the wisdom of God; like wisdom, he participation in the creation and the preservation of the world.

The Quran on the other hand does not personify Wisdom. It is viewed, as something possessed by God alone. Knowledge and power are considered as rewards of God for those who do right. Men with faith and knowledge are the believers of the God. Human knowledge is too little and is uncomparable with the Knowledge of God. Quran, which is the revelation from God, is the Book of Wisdom, which God has sent to set him a complete code of life. Attaining spiritual knowledge is to be the aim of every human being.

Setting aside the matter of personification the characteristics and features of wisdom and knowledge are almost the same in the Bible and the Quran. Both consider Gods' knowledge as the knowledge supreme and that it cannot be reached by human beings. God gives only a part of his knowledge to only those who please him.

IV God as related to Knowledge and Wisdom

5.2.4.1 Bible

OT:

1.Yahweh is a wise God. So do not talk much proudly.
(1.Samuel.2.3)

2) The Lords knowledge is holy and he sees everything. (2.Maccabees.6.30)

3) How countless are your works, Yahweh,
all of them made so wisely! (Psalm.104.24)

NT:

1) 'Let light shine out of darkness,' that has shone into our hearts to enlighten them with the knowledge of God's glory, the glory on the face of Christ. (2.Corinthians.4.5)

2) For the wisdom of the world is folly to God (1.Corinthians.3.19)

3) And as the child grew to maturity, he was filled with wisdom, and God's favour was with him. (Luke.2.40)

The verses from OT and NT given above makes clear the Biblical view of God's relatedness to Knowledge and Wisdom. In the Bible, wherever wisdom and knowledge is spoken of, it is related to God-of Gods' knowledge itself or God bestowing knowledge on his creations or on human beings. Even where wisdom speaks herself, it is of divine nature. In Wisdom 7.25, 26, Solomon speaks of Wisdom as

"She is a breath of the power of God
pure emanation of the glory of the Almighty
so nothing impure can find its way into her.
For she is the reflection of the eternal light

Untarnished mirror of God's active power,
and image of his goodness".

Wisdom 8.3,4 says that she shares the secrets of God's knowledge and she chooses what He will do. God is the supreme possessor of wisdom and knowledge (Job 28.23-28, Prov.22.12, Job 38.39, Job 11-6, Wisdom 9.9). Gods' wisdom is so vast that it cannot be compared with human wisdom at all. He has created the whole universe and the countless works out of wisdom and he bestows wisdom to his creatures (Psalm 136.5, Prov.3.19, Eccleciasticus 15-18, Eccleciasticus17.7, Jeremiah 1.15). Wisdom and knowledge God gives to those who please him and those who have acquired her has won Gods' favour and friendship. Wisdom is actually fear of Lord and Intelligence is avoidance of evil (Job.28.28). Solomon, realizing that he could never possess wisdom unless God gave her to him, appeals for divine inspiration and prays to God to grant him wisdom and understanding to govern his people and for correct judgment (Wisdom 8.17-21, Wisdom 9.6). Daniel, who was given knowledge and skill in every aspect by God, praises the Lord and says that Wisdom and power was God's alone. (Daniel 2.19-23). In Hosea 6.6, God says that he likes divine knowledge or knowledge of God by his people and not offerings from them.

The NT speaks of the word of God and of his Wisdom, present with God before the world was made (John 1.1-5). By it all things were created; it is sent to earth to reveal the hidden designs of God; it returns to him with it work done. This is quite consistent with the view of OT. Jesus is referred to as wisdom itself – the Wisdom of God (Mathew 11:9, Luke 11.49, Mathew 23.34-36, 1. Corinthians 1.24-30). Throughout his Gospel, John represents

Christ as the Wisdom of God. In the first letter of St.Paul to the church at Corinth, St.Paul writes: -

"I am continually thanking God about you, for the grace of God which you have been given in Christ Jesus; in him you have been richly endowed in every kind of utterance and knowledge, so firmly has witness to Christ taken root in you". (1 Corinthians 1.4).

Thus OT and NT are consistent in their views regarding God as related to knowledge and wisdom.

5.2.4.2 Quran

The quoting in this category numbers the most with respect to Quran. This shows that God is the most related to wisdom and knowledge. Wisdom and knowledge originates from God, who has created the whole universe. Allah is the possessor of the whole of wisdom and knowledge and he is the giver of wisdom and knowledge to human beings.

Sura 4.113 says so:
'For Allah has sent down
To thee the Book and Wisdom
And taught thee what thou
Knewest not (before)'.

In Sura5.110 Allah says to Jesus,
'Behold! I taught thee
The Book and Wisdom,
The Torah and the Gospel'.

'And Allah gave him
Power and Wisdom
And taught him
Whatever (else) He willed' (Sura 2.251)

Sura 96.4,5 reads.
"He who taught (The use of) the pen –
Taught man that which he knew not".

Allah has full knowledge of everything. Very often Quran reminds us that he is the supreme possessor of all knowledge. Verses like "And Allah heareth and knoweth all things", "He is exalted in power, wise", "And he knoweth all things", "He is acquainted with all things", "And Allah is full of knowledge and wisdom" are repeated several times throughout the text. He in his Wisdom and Plan may grade his creatures and give one superiority over another. Allah's Knowledge is absolute, and is not conditional by Time or Space. To us, His creatures, these conditions always apply. His Knowledge and our knowledge are therefore in different categories and our knowledge only gets some reflection of Reality when it accords with His will and Plan. (Sura 2.255).

"Allah gives degrees of Wisdom to human beings according to his wish. He guides whoever he pleases" (Sura 14.4, Sura 35.8, Sura 39.23).

"We raise to degrees (of wisdom) whom we please, but over all endued with knowledge is one, the all-knowing "(Sura 12.76).

Allah says that on those whom He has bestowed knowledge may learn that the Quran is the Truth from thy Lord and their hearts may be made humbly open to it. (Sura 22.54). Solomon had miraculous power over winds and he could make them obey his order. The power behind this was, and is from Allah, who granted man intelligence and the faculties by which he can tame the most unruly forces of nature (Sura 21.81). Solomon instead of working for his own selfish or worldly ends, he used the higher magic of the Book – of the spirit to transform the throne of Bilquis for her highest good, and also the highest good of her subjects, by the divine light. Thus he shows his gratitude to Allah for the grace He had given him.

Allah gave wisdom to the Prophets. Prophet Mohammed was asked to say to his people that if he received any guidance, it was because of the inspiration of his Lord to him (Sura 34.50). "Knowledge" means such knowledge leads up to the higher things in life, the Wisdom that was shown in their decisions and judgements and the understanding that enabled them to fulfill their mission in life.

Revelation is knowledge and thus knowledge is from Allah, says the Quran.

"It is We who
Have sent down the Quran
To thee by stages" (Sura 76.23)

'The Book', 'The Pen', 'The Message', 'The Tablet Preserved' are all symbolical foundation of the Revelation to man. It is Allah who teaches

man knowledge every now and then. (including science, self-knowledge, spiritual understanding).

5.2.4.3 Comparison

Both the OT and NT and the Quran regards God as the supreme thing related to knowledge and wisdom. He is the creator of knowledge and wisdom, the possessor of it and the giver of it to the human beings. He has created and He maintains the whole universe in his Knowledge, Wisdom and Power. He is the all-knowing and all wise. He is the knower of the seen and the unseen. Human beings should fear the Lord and pray to him in order to acquire wisdom.

V. Origin of the Universe/Creation/Science and Technology

5.2.5.1 Bible

5.1.1 Origin of the universe and the creations

The Bible gives a detailed description on the creation of the universe and the human race in the chapter 'Genesis'.

In the beginning God created heaven and earth. Now the earth was a formless void, there was darkness over the deep, with a divine wind sweeping over the waters. (Genesis. 1,2).

He created the heavens and the earth in six days. God created light and darkness, heaven, earth, seas, the vegetation in the first three days. He created the two great lights- the sun and the moon and smaller light, the stars in the fourth day. The animal kingdom, originating with a swarm of living

creations in the waters, birds and animals were created on the fifth day. He created man the sixth day in his own image and was made the masters of the earth (Genesis 1.26,27). God rested on the seventh day. In addition, NT gives several parables of different creations of God at various sections, especially in the Gospels.

5.1.2. Creation of Man

Yahweh God shaped man from the soil of the ground and blew the breath of life into his nostrils and man became a living being (Genesis 2.7).

Yahweh God fashioned the rib he had taken from the man into a woman and brought her to the man. And man said: This one at last is the bone of my bones and flesh of my flesh. She is to be called woman, because she was taken from man (Genesis 2.23). Thus says the Bible regarding the creation of man.

5.1.3 Science and Technology

The descriptions on Science in the OT are related to vegetation, clouds, the sun and the moon, and other wonders of nature. (2 Maccabees 7.20-23, 7.28, Job 38, Ecclesiastes 42, 43). The Gospels contain a few passages, which are connected with science. The miracles carried out by Jesus – healing the sick, and the insane, blind and paralytic, the healing of lepers, resurrection of Lazarus as well as the purely material phenomena that lie outside the laws of nature, e.g. Jesus walking on water, immediate calming of storm, the miracle catch of fish etc. are all on a divine scale and cannot be

compared to a human one. The NT sees the Christ as the heart of all creation (Colossians 1.15- 20). It reads,

> He is the image of the unseen God
> the first-born of all creation
> for in him were created all things
> in heaven and on earth.

5.2.5.2 Quran

There are many instances in the Quran, which indicates the origin of Universe and other creations including man. Several verses either give hints to or explain the scientific facts including the modern science as well.

5.2.1 Origin of the Universe and other creations

Quran does not provide a unified description of the creation. Instead of a continuous narration unlike Bible, there are passages scattered all over the Book which deals with certain aspects of creation and provide information on the successive events marking its development with varying degrees of detail. In Sura 7.54, Quran reads as follows:

"Your guardian Lord is Allah who created the heavens and the earth in six days."

The creation of the heavens and the earth are dealt with in sura 41 also. In Sura 41, verses 9-12 God speaks to the Prophet:

"Say, Is it that you deny Him who created the earth in two days? And do you join equals with Him? He is the Lord of (all) the worlds.

He set on the (earth) Mountains standing firm, High above it, bestowed blessings on the earth, and measured therein. Its sustenance in four Days. Alike for (All) who ask.

Then he turned to the sky And it had been (as) smoke He said to it and to the earth Come you together willingly or unwillingly They said. "We do come (Together) in willing obedience".

So He completed them as seven firmaments in two days, and He assigned to each heaven its duty and command. And we adorned the lower heaven with lights and provided it with guard such is the Decree of (Him). The exalted in Might, full of knowledge".

This passage describes the creation of the formless matter of the earth and the gradual evolution of the form of the earth, its mountains and seas and its animal and vegetable life with the 'nourishment in due proportion', proper to each. Most of the descriptions in the Quran does not present a sequence in the creation of the heavens and the earth, however in sura 79. Verses 27-33 some sequence is given.

The formation of the Universe in presented briefly in Sura 21.30 as follows:

"Do not the Unbelievers see that the heavens and the earth were joined together (as one unit of creation), before we clove them asunder? We made from water every living thing. Will they Not then believe?"

The Quran also explains the plurality of heaven and earth (Sura 2.29; Sura 23.17, Sura 67.3, Sura 71.5,6 Sura 78.12) and the intermediary creation between the heavens and the earth (Sura 20.6, Sura 25.59, Sura 32.4, Sura 50.18).

5.2.2 Creation of man

Regarding the creation of man, Quran says, that Allah created man from clay (Sura 6.2, Sura 15.26). After saying that Allah created man from sounding clay, from mud moulded into shape, Sura 15, verse 29 reads:

"When I have fashioned him
(In due proportion) and breathed
Into him of My Spirit".

Allah says that he created man as a vicegerent on earth. (Sura 2.30) and the angels were asked to bow down to Adam, the first man. This shows that Allah has placed man in high rank, right from his creation itself. He was made the inheritors of the earth (Sura 6.165).

5.2.3. Quran and Science

In addition to creation, Quran also contains numerous reflections in science. They include Astronomy, which includes general reflections concerning the sky (Sura 31.10, Sura 13.2; Sura 55.7; Sura 22.65), the subjection of the heavens to divine order (Sura 23.86; 45.13; Sura 55.5, Sura 6.96, Sura 14.33). Astronomy in Quran also includes nature of heavenly bodies – the sun and the moon (Sura 25.61, Sura 71.15,16, Sura 78.12,13), the stars (Sura 86.1-3, Sura 37.10), planets (Sura 24.35, Sura 6.76, Sura 82.1-

2) and the solar system (Sura 37.6), celestial organization (Sura 27.33, Sura 36.40), the sequence of day and night (Sura 7.54, Sura 36.7, Sura 39.5, Sura 31.29).

In the expansion of the Universe, Sura 51.47 reads –

"The heaven, we have built it with power
Verily We are expanding it"

The conquest of the space is indicated in Sura 55.33, Sura 15.14,15 referring to what one day will become a reality and an event which describes the human reactions to the unexpected spectacle that travellers on space will see.

There are different verses on earth, which include general statements on earth (Sura 2.22, Sura 2.164, Sura 13.3, Sura 15.19-21, Sura 27.61,Sura 67.15). Specific subjects on earth include the following:

i) Water Cycle and seas. (Sura 23.18,19; Sura 15.22, Sura 35.9, Sura 7.57, Sura 45.5, Sura 39.21, Sura 36.34)
ii) Seas – (Sura 14.32, Sura 31.31, Sura 36.41-44, Sura 25.53, Sura 35.12)
iii) The earths' relief (Sura 71.19,20; Sura 51.48, Sura 78.6,7; Sura 79.32, Sura 31.10).
iv) The earths' atmosphere (Sura 6.125, Sura 13.12,13; Sura 16.81, Sura 16.48, Sura 25.45, 46).

Descriptions on the origin of life (Sura 21.30, Sura 20.53, Sura 24.45), which says that life originated from water and on the vegetable and

animal kingdom, are also present in the Quran. The animal kingdom includes statements on different animal communities like bees, spiders, birds, and also animal milk and animal reproduction. Another topic extensively covered in the Quran is on human reproduction. Quran draws attention to several points concerning reproduction, which include.

i) Fertilization performed by only a very small volume of liquid (Sura 16.4, Sura 75.37, Sura 23.13)
ii) The constituents of the fertilizing liquid (Sura 75.37, Sura 86.6, Sura 32.8, Sura 77.20).
iii) The implantation of the fertilized egg (Sure 22.5, Sura 23.14, Sura 40.67, Sura 75.37,38).
iv) The revolution of the embryo (Sura 23.24, Sura 32.9, Sura 53.45,46, Sura 35.11)

5.2.5.3 Comparison

Both the Bible and the Quran gives descriptions on the origin of the Universe and creation, but in its own manner. The two texts in some occasions share the same view but in other cases differ with each other. Both the texts agree on the matter that it was God who created the whole universe and all the creations in it (in six days). They agree that the origins of the life were from water and that human beings were created from clay. While Bible says that man was created in God's own image and was made the masters of the earth, Quran says that God fashioned him and breathed into him of his spirit. He was created as a vicegerent on earth. The Bible and the Quran

differ in the matter of the sequence of creations in many an occasion. Bible gives a sequence while Quran gives no definite sequence of events.

The Gospels and the Quran gives us the same description of Jesus' biological origins. Jesus' is a unique case. Mary was a virgin mother. Jesus is thus a biological exception according to the texts. In addition, the miracles performed by Jesus are something divine where God intervenes in his omnipotent power and is achievable by God alone and not human beings. The texts are of the same view regarding this matter also.

VI. Sources of Knowledge and Wisdom

5.2.6.1 Bible

The following quoting from OT and NT shows the Biblical view on this aspect of knowledge and wisdom:

OT:

1) God alone understands her path
and knows where she is to be found. (Job.28.23)

2) The basis of wisdom is to fear the Lord. (Ecclesiasticus.1.14)

3) God gave Solomon immense wisdom and understanding, and a heart as vast as the sand on the sea-shore. (1.Kings4.29)

NT:

1) '...ever since you were a child, you have known the holy scriptures-from these you can learn the wisdom that leads to salvation

through faith in Christ Jesus. All scripture is inspired by God and useful for refuting error, for guiding people's lives and teaching them to be upright. (2.Timothy.15-17)

2) May the God of our Lord Jesus Christ, the Father of glory, give you a spirit of wisdom and perception of what is revealed, to bring you to full knowledge of him. (Ephesians.1.17)

3) Any of you who lacks wisdom must ask God, who gives to all generously and without scolding; it will be given. (James.1.5)

According to the OT, Yahweh or the God is the source of all knowledge and wisdom. (1 King 4.29, Tobit 4.19, Job 28.23). One learns knowledge and Wisdom from God's precepts. Pslam.119.97, 98 reads :

"One learns wisdom from God's precepts
One should ponder over Yahweh's commandments
All day long to make him wiser".

There is a spirit residing in humanity, which is the breath of God conferring intelligence (Job.32.8, 9,10). For humans, heart is the seat of knowledge. Wisdom is found in the life of the discerning (Proverb.10. 13,14). The mouth of the upright utters wisdom (Proverb.10.31) and she is seen only with the humble and in an understanding heart (Proverb.11.2, Proverb.14.33). Since the basis of Wisdom is the fear of Lord, she will be seen only with those who fear him and keep his Laws and commandments (Proverb.19.7, 8; Ecclesiastes 1.14).

According to NT, Jesus Christ is the Wisdom of God itself. Hence his teachings, his conduct, his life itself are a source of Wisdom for human

beings. Wisdom is not the fruit of human effort 'according to the flesh'. It is found in a member of human race who appeared in the " fullness of time". Christ, whom we must win in order to find in him all the treasures of wisdom and knowledge. (Colossians.2.3)

Thus, according to both the texts, OT and NT, God is the supreme source of all knowledge and wisdom.

5.2.6.2 Quran

The Quran says that the ultimate source of wisdom and knowledge is Allah, or God (Sura 15.21, Sura 21.79, Sura 21.74) with whom is the source and treasure of all life.

'And there is not a thing
But its (sources and) treasures
(Inexhaustible) are with Us
But We only send down
Thereof in due and ascertainable measures (Sura.15.21).

Allah is the source of all Knowledge of which only a little is communicated to man (Sura 17.85, Sura 8.7, Sura 67.13, Sura 65.12, Sura 17.85). The Quran exhorts to follow Allah's revelation for wisdom and guidance. Sura 2.170 reads,

When it is said to them:

"Follow what Allah hath revealed:"
They say: "Nay we shall follow
The ways of our fathers".

What! even though their fathers

Where void of wisdom and guidance?

Thus Quran is the source of knowledge and wisdom for human kind (Sura 46.4, Sura 36.2). Allah sent his messenger to provide knowledge for the ignorant bedouin Arabs (Sura 9.97). Thus prophets are also the sources of knowledge for the ignorant. Sura 43.86 speaks of prophets like Jesus:

'...only he who bears witness to the Truth, and with full knowledge'

The Quran often uses the term 'The Book' to denote the revelations sent down to the prophets'. Sura 17.2 reads,

"We gave Moses the Book and made it a guide to the children of Israel".

In Sura 19.12, God says:

"Oh Yahya! take hold of the Book with might.

And we gave him Wisdom even as a youth".

Thus revelations to prophets had been the sources of knowledge for people at different times. For human beings, heart is the seat of all knowledge Sura 94.1 reads: "Have we not expanded thee thy breast?" Here breast is symbolically the seat of knowledge.

5.2.6.3 Comparison

The Bible and the Quran share the same view regarding the source of knowledge and wisdom. Both the Bible and the Quran are of the view that the prime source of knowledge and wisdom to human beings is God himself. God is the keeper of the whole treasure of knowledge and wisdom and he

confine wisdom on those who please him. While Bible says that one learns wisdom from God's percepts, Quran says that one can learn wisdom from Allah's signs or Ayats. Both the texts say that heart is the seat of all knowledge for the humans. The upright or those who are humble and have an understanding heart are men of wisdom according to the Bible. The New Testament views Christ as the Wisdom of God itself. Allah's revelation or the Quran is the wisdom or the source of knowledge for human beings – says the Quran. The messengers of Allah who are the Prophets are also sources of knowledge for the ignorant according to Islamic viewpoint.

VII Search for /Acquisition of /Requirements of Knowledge and Wisdom

5.2.7.1 Bible

OT asks everyone to go in search of knowledge and wisdom and to acquire wisdom (Tobit 4.18, Proverb.4.5-9. Ecclesiastes 6.18,19 Ecclesiastes 6.27, Wisdom 6.12-17). Proverb.4. 3-9 reads as follows:

> "Acquire wisdom, acquire understanding
> Never forget her, she will keep you safe.
> love her, she will watch over you.
> The first principle of wisdom is: acquire wisdom
> at the cost of all you have, acquire understanding"

Wisdom.6.13, 14 reads,

She anticipates those who desire her by making herself known first.
Whoever gets up early to seek her will have no trouble

But will find her sitting at the door.

Search for her, track her down; she will reveal herself.
Once you hold her, do not let her go. (Ecclesiasticus 6.27)

Proverb 3 verse 1to 12 gives details on how to acquire Wisdom. It says that trust in Yahweh, faithful love and constancy, acknowledging God in every course that one takes, not congratulating oneself on ones Wisdom, fear of Yahweh and turning ones' back on evil are the key factors in acquiring Wisdom. One should put no faith on his own perception and not scorn correction from Yahweh.

Whoever is seeking Wisdom, should fear the Lord and pray to God. In the Psalm of David and Solomon's quest for wisdom (Wisdom 7.7), they pray to the Lord to bestow wisdom and knowledge in them. Fear of lord means devotion to God (Proverb.11.7, Psalm 90.12, Prov. 3.1-12). For Jesus, son of Sira, Wisdom and observance of law go together (Ecclesiasticus1.26). A person of understanding acquires wisdom through instruction, as wisdom begins with the sincere desire for instruction (Prov.21-11, Wisdom 6.12-17). After having applied himself to acquiring wisdom and observing every activity taking place in the world, Quholeth, son of David reaches the conclusion that one cannot get to the bottom of everything taking place under the sun. (Ecclesiastes 8.16). So also once he has acquired wisdom one should not let it go.

The NT also exhorts each and everyone to go in search of knowledge and wisdom. In Philippians.1.9, Paul prays to the God to increase in knowledge and complete understanding. Similarly in Colossians.1.9, 10 Paul writes,

'...and ask that through perfect wisdom and spiritual understanding you should reach the fullest knowledge of his will and so be able to lead a life worthy of the Lord'.

2.Peter 3.18 reads,

'Continue to grow in the grace and in the knowledge of our Lord and Savior Jesus Christ.'

Thus both the Old Testament and New Testament urges man to go in search of knowledge and wisdom. There exists no inconsistency between the texts in this regard.

5.2.7.2 Quran

The Quran asks each and every individual to go in search of knowledge. According to Islamic viewpoint, knowledge means spiritual knowledge.

"Opportunities should be provided, even if they are enemies, for hearing the word of Allah" (Sura 9.6).

Quran says,
Invite (all) to the way
Of they Lord with Wisdom
And beautiful preaching (Sura 16.125)

'To the way of thy Lord' here means gaining spiritual knowledge. Quran exhorts man to pray to God always, "O my Lord. Increase me in knowledge" because he is the given of knowledge and wisdom (Sura 20.114,

Sura 26.83). God instructs his wisdom through many ways – through written scriptures or by means of knowledge of life and its laws or by an understanding of the Universe.

Moses went in search of knowledge (Sura 18.60). He prayed to God to increase his knowledge. Thus reads Sura 20.25:

(Moses) said: "O my Lord!
Expand me my breast"

The gift of highest spiritual insight is what Moses prays for. So were Solomon and David thankful to their Lord. Jesus came with clear signs to the people. He asked his people to fear the Lord and to obey him (Jesus) in order to attain wisdom (Sura 43.63)

Moses was learned in all wisdom of the Egyptians. Even so that wisdom did not comprehend everything, even as the whole stock of knowledge of present day including the science, arts and literature if gathered in one individual, does not include all knowledge. Divine knowledge is unlimited. Constant effort is necessary to keep our knowledge square with the march of time; Moses shows to make such effort. The mysterious man of Knowledge he meets, Khidhr, is the type of that Knowledge which is even in contact with life as it is actually lived.

5.2.7.3 Comparison

Both the Bible and the Quran exhort each and every person to go on search for wisdom and knowledge. This is in fact, the necessity of every human being. Only through knowledge and wisdom will man realize God and his vastness of wisdom and knowledge. He is the one and only possessor

of all knowledge. Bible says that the first principle of wisdom is to acquire wisdom. So what is left to human beings is to Fear the Lord, trust him and be faithful to Him. He should pray to the Lord to bestow wisdom on him and strictly observe his law. One cannot acquire all the knowledge under the sun; still he should try to acquire more and more knowledge. Quran is of the same view that in order to acquire wisdom one should fear the lord and constantly pray to him and follow his laws. It also shares the view that though Gods' Knowledge is unattainable by human beings, he should constantly try to multiply his knowledge with the time.

VIII Types/Divisions of Knowledge and Wisdom

5.2.8.1 Bible

According to the Bible, wisdom is ultimately the Wisdom of God or the divine wisdom. In OT, in Job 32.7,8, Elihu contrasts 'charismatic wisdom' revealed by the spirit with the wisdom of experience and says that great age does not give wisdom. The first one is purely divine and insists on God as the giver of wisdom. The latter is human wisdom or knowledge. Bible, many a times speaks of true and false wisdom of human kind (Ecclesiasticus 37.16). The true wisdom is one, which is based on reason and reflection and having won the favour of the Lord. Those who claim to be wise and are devoid of these features possess false wisdom. Thus knowledge is primarily of two types– spiritual knowledge and human knowledge. The scientific knowledge and other worldly knowledge fall in the second category.

OT speaks of true and false wisdom elsewhere in Ecclesiasticus 19.20-23 where wisdom is considered as entirely constituted by the fulfilling of the Law and whoever keeps the law will master his instincts.

The chapter Genesis speaks of knowledge to be avoided by humans. In Genesis2.17, the tree of knowledge of good and evil is given. This knowledge is a privilege which God reserves to himself and which man, by sinning, will usurp. Adam and Eve, by eating the forbidden fruit of this tree, had sinned. It was an attack on God's sovereignty, a sin of pride.

In the New Testament also, in 1 Corinthians, 1.17-18, St.Paul distinguishes between true wisdom and false wisdom.He writes,

'The world was unable to recognize God through wisdom; it was God's own pleasure to save believers through the folly of the Gospel. Christ is both the Power of God and Wisdom of God. He was made Wisdom from God for us'.

In the letter of James (James 3.13), he speaks of true wisdom as wisdom devoid of jealousy, selfish ambition, trustfulness and hiding of truth. One who is wise should from a good life, give evidence of deeds done in the gentleness of wisdom. The kind of false wisdom is not that which comes from God but is earthly, human and devilish. The wisdom that comes from above is essentially pure, peaceable, kindly and considerable, full of merry and shows itself by doing good.

In Romans16.19, St.Paul warns man to be learned only in what is good and unsophisticated about all that is evil. In James 3.13-17, James contrasts the wisdom from above and from below. He writes,

'Anyone who is wise or understanding among you should from a good life give evidence of deeds done in the gentleness of wisdom. But if at heart you have the bitterness of jealousy, or selfish ambition, do not be boastful or hide the truth with lies. This is not the wisdom that comes from above, but earthly, human and devlish. Wherever there are jealousy and ambition, there are also disharmony and wickedness of every kind whereas the wisdom that comes from above is essentially pure, it is also peacable, kindly and considerate'.

Thus both OT and NT basically divide knowledge into true knowledge and false knowledge.i.e, spiritual knowledge and human knowledge.

5.2.8.2 Quran

Quran also identifies two types or divisions of knowledge – spiritual knowledge and human knowledge. Spiritual knowledge or divine knowledge is that possessed by God. It is unlimited. Human knowledge is incomparable with divine knowledge. It is only minute as compared with God's Knowledge – God imparts a portion of his knowledge to human beings. This idea has been covered a very large number of times throughout the text.

In Sura 16.74, Allah says.

"Invent not similitude for Allah, for Allah knoweth and ye know not".

Science, Technology, Arts, Literature and all other knowledge that human beings possess are given by the Supreme creator, the Lord. Sura

102.5,6,7 discusses of three kinds of 'Yaquin' or certainity of knowledge. They are

1) Ilm-ul-yaqiin or certainty by reasoning or inference – which is the probability or certainity resulting from the application of mans' power of judgement and his appraisement of evidence.
2) Ain-ul-yaqiin or certainty by personal inspection – i.e., certainty of seeing something with our own eyes.
3) Haqq-ul-yaqiin or certainty of assured truth – it is the absolute truth, with no possibility of error or judgement or error of the eye.

The three kinds of 'yaqin'(certainty of knowledge),the first one is the certainty of mind or inference. It refers to our own state of mind. We should value the deeper things of life better, rather than ephemeral things. If we do not use our reasoning faculties now, we shall see with our own eyes, the penalty for our sins. i.e, the certainty of the second kind. We shall see Hell. The third certainty that is of assured Truth is not liable to any human error or psychological defects.

5.2.8.3 Comparison

Bible speaks of true wisdom and false wisdom. True wisdom is essentially the Wisdom of God that comes from above and false wisdom is the wisdom that is earthly and human. Wisdom of God is purely, peaceable, kind considerate while false wisdom is wisdom mingled with jealousy and self-ambition. Men who are wise receive Gods' Wisdom. It is constituted by fulfilling the Law of God. Quran also speaks of Wisdom and Knowledge as two – spiritual, i.e. Wisdom of God and human i.e., earthly wisdom. The

latter is incomparable with the former. Of the sum total of the divine knowledge, only a small part is that ordinary mortals can understand. Thus Bible and Quran one of the same view regarding the type/divisions of Knowledge and Wisdom.

XII. Meaning of Knowledge and Wisdom

5.2.8.1 Bible

The OT gives many equations to knowledge and wisdom.

1) For the fear of the Lord is wisdom and instruction. (Ecclesiasticus. 1.27)
2) The basis of wisdom is to fear the Lord. (Ecclesiasticus.1.14)
3) The fullness of wisdom is to fear the Lord. (Ecclesiasticus.1.16)
4) The crown of wisdom is to fear the Lord. (Ecclesiasticus.1.18)
5) The root of wisdom is to fear the Lord. (Ecclesiasticus.1.20)
6) Fear of Yahweh means hatred of evil. (Proverb.8.13)

Wisdom is equated to fear of Lord and Intelligence to avoidance of evil. (Job.28.28, Eccleciasticus 1.27, Prov.15.33). Elsewhere, Bible says that fear of Yahweh is the beginning of knowledge (Prov.1.7). Fear of Yahweh is given to be as any of these- as the root, as the basis, as the school, as the crown or as the fullness of wisdom, at many places. (Psalm 111.10, Eccleciasticus 1.14, Ecclesiasticus 1.16, Eccleciasticus 1.18).

Thus, Wisdom = fear of Yahweh = hatred of evil.

Baruch describes wisdom as the book of God's commandments, the law that stands forever). The wise means one who is seeking God (Psalm 5.32).

Bible uses the terms Knowledge and Wisdom interchangeably, but at some occasions they are spoken of as separate concepts. The verse 1.Corinthians12.8 makes this clear:

'To one is given from the spirit the gift of utterance expressing wisdom; to another the gift of utterance expressing knowledge, in accordance with the same spirit'

In Bible's Wisdom Literature, being wise means being skilled in godly living. Having God's wisdom means having the ability to cope with life in a God–honouring way. Both OT and NT speak about true wisdom and false wisdom, which has been dealt in the previous section. Knowledge and wisdom actually means true knowledge and true wisdom. i.e., Wisdom means Wisdom of God. i.e., Fear of the Lord.

5.2.8.2 Quran

Quran views Revelation from Allah as knowledge and wisdom i.e., the Quran. The Prophets' teachings (Hadiths) are also the true knowledge and wisdom. According to the Quran, true knowledge is the knowledge related to the Hereafter, i.e., life after death. It is the divine knowledge of Allah.

But those who have been granted
(True) knowledge said: "Alas
For you! The reward of Allah

(In the Hereafter) is best

For those who believe and work righteousness: but this

None shall attain, save those who steadfastly persevere (in good)"(Sura 28.80).

Men of knowledge and faith know all along of the true values – of the things of this ephemeral life and things that will endure and face them at the end (Sura 30.56). Men of knowledge are those who fear Allah. They have the inner knowledge that comes through their acquaintance with the spiritual world. It is such people who truly appreciate the inner world and it is they who know that the fear of Allah is the beginning of wisdom. Sura 35.28 reads:

Those truly fear Allah,

Among His Servants

Who have knowledge.

Therefore men of understanding should fear Allah because Allah has sent down to them a Message. Divine wisdom is placed before us through the revelation to prophet (Sura 44.4). Those who have received knowledge are the believers of Allah and ignorant are those who oppose truth. (Sura 47.16, Sura 100.4).

5.2.8.3 Comparison

According to Bible, wisdom for human beings is the fear of the Lord. Fear of the Lord is again equated to hatred of evil. The wise is one who is seeking God. Quran also views wisdom and knowledge as the fear of

the Lord. True knowledge is gaining spiritual knowledge i.e., knowledge of the Hereafter – life after death. Success in the life of this world is attained through divine knowledge of the revelations and the teachings of the Prophet will result in the success of the hereafter life, which forever exists. Hence Bible and Quran are both of the view that meaning of wisdom is to fear the Lord and attaining spiritual knowledge.

X Reasoning/Thought/Intelligence

5.2.10.1 Bible

Reason should be the basis of every activity and reflection must come before any undertaking. Ecclesiastes 37.16-18 reads:

> Reason should be the basis for every activity,
> Reflection must come before any undertaking.
> Thoughts are rooted in the heart,
> And this sends out four branches:
> Good and evil, life and death,
> and mistress of them always is the tongue.

The tree of knowledge of the good and evil as spoken of in Genesis2.17, this knowledge is the power of deciding for himself what is good and what is evil and of acting accordingly, a claim to moral independence by which man refuses to recognize his status as a created being.

Elihu, in his words to Job, asks him to reflect on the marvelous works of God. Thus, according to Bible, all the creations and everything that

takes place in the world are all works of God's Wisdom. In order to understand them man should act with reason. Thus Bible finds reasoning and thought as something that goes along with knowledge and wisdom.

5.2.10.2 Quran

The Quran gives utmost importance to reasoning and thought. It very often asks man to apply his reason and to think. Verses given below, often-repeated makes clear this fact.

"Indeed there are signs for people who are wise"
(Sura 2.164, Sura 16.67, Sura 16.12, Sura 89.5)

"Verily in that are signs for those who reflect"
(Sura 30.21)

"There are indeed signs for men of understanding"
(Sura 3.190)

"In that are signs for those who know"
(Sura 27.52)

Wisdom, knowledge, understanding, reflection are all thus quite interrelated. The most precious gift of all to man is the faculty of distinguishing between the right and the wrong. Sura 55.4 reads,

"He has taught him an intelligent speech".

Intelligent speech is the power of expression, i.e., the capacity to understand clearly the relations of things and to explain them. Man is further

helped by teachings of great messengers, the true meaning of which can be understood by means of the 'reason'.

There are many verses in the Quran, which explain that, the creations of the heavens, earth and everything between them should awaken man's thinking process and he must 'reflect'. The subjective starting point should be "I think; therefore I am." All these can be realized by extended knowledge and highest wisdom.

5.2.10.3 Comparison

The Bible views that each and every creation and everything that takes place in the world are works of God's Wisdom. In order to understand them man should act with reason and reflect on them. Reason should be the basis of every activity. The Quran also shares the same view regarding reasoning and thought. Man has been given the power to judge between right and wrong, helped by the Quran and the teachings of the Prophet. True meaning of those can be understood only if he applies his 'reasoning' power. It is the most precious gift from God to man.

5.3 ANALYSIS OF THE EXPERTS' VIEWS

In addition to the detailed content analysis of the Bible and the Quran, the views expressed by the experts on the Bible and the Quran were analysed.This was carried out by conducting structured interview of three experts on the Bible and three on the Quran.All the six scholars were from the Kerala State itself. The interview schedule for the experts has been included in the Appendices.

The interview mainly covered questions on the views regarding the two aspects, namely

1) The approaches of the Bible and the Quran towards information, knowledge and wisdom.

2) The relevance of these approaches of the Bible and the Quran in the emerging cybersociety.

It can be seen that the first section of the interview is based on the knowledge and understanding of the experts on the two scriptures. The second section is regarding their views on various issues based on the background of these texts. The responses have been given in a tabular form for the two sections of the interview so as to conduct the analysis easily.

5.3.1 Experts' view on the treatment of knowledge and wisdom in the Bible and the Quran

Table VIII shows the experts' views regarding the ten themes in the Bible and the Quran, already dealt with in the count and content analysis parts. The responses have been tabulated under three options-Agree (A), Disagree (D), No idea (N).

Table 8 Experts' view on the approaches of Bible and Quran towards K/W

Sl. No.	Themes on knowledge and wisdom (K/W)	Biblical Experts			Quranic Experts		
		Expert 1	Expert 2	Expert 3	Expert 1	Expert 2	Expert 3
1	K/W is divine in its origins	A	A	A	A	A	A
2	Importance of K/W is highly stressed in the Bible	A	A	A	A	N	N
3	Importance of K/W is highly stressed in the Quran	N	N	N	A	A	A
4	The purpose of K/W is to lead human beings through right path in order to attain salvation	A	A	A	A	A	A
5	Bible personifies wisdom	A	A	A	A	N	N
6	K/W is divine in Nature	A	A	A	A	A	A
7	Human knowledge is nothing as compared to God's knowledge	A	A	A	A	A	A
8	God is the supreme creator/possessor/giver of all K/W	A	A	A	A	A	A
9	Bible gives explanation on the origin of universe and creations	A	A	A	A	A	N
10	Quran gives explanation on the origin of universe and creations	N	A	N	A	A	A
11	God is the source of all K/W	A	A	A	A	A	A
12	Bible exhorts man to go in search of K/W	A	A	A	A	N	N
13	Quran exhorts man to go in search of K/W	N	N	N	A	A	A
14	Knowledge is of two types- spiritual and human	A	A	A	A	A	A
15	Knowledge means attaining spiritual knowledge i.e. fear of Lord	A	A	A	A	A	A
16	Reasoning power is God given and reason should be the basis of every activity	A	A	A	A	A	A

A – Agree
D – Disagree
N – No idea

It is surprising to note that almost all Biblical scholars have no basic idea about the Quran as the Quranic scholars with regard to the Bible. The responses to questions2, 3,5,9,10,12 and 13 indicate this. This suggests that knowledge of the experts regarding their counterpart religious scriptures is very limited.

It is clear from the table that neither of the Biblical and the Quranic experts disagree on any of the views of the two texts regarding knowledge and wisdom. Both the Biblical and Quranic experts agree on most of the views of the Bible and the Quran regarding the origin, purpose, nature, source, types and meaning of knowledge and wisdom. From the content analysis of the two texts it is known that excepting minor variations, the approaches of the Bible and the Quran remain almost the same.

5.3.2 Experts' view on the relevance of the approaches of the Bible and the Quran towards information, knowledge and wisdom in the emerging cybersociety

The second section of the analysis of experts' views is regarding their views on various issues based on the background of these texts. It covers responses on the relevance of the approaches of the Bible and the Quran regarding information, knowledge and wisdom in the emerging cybersociety. Table 9 gives the responses of the experts on this part of the interview schedule. Response on each issue has been sought separately for Bible and Quran from experts on both the texts. The responses have been tabulated under three options- Agree (A), Disagree (D) and No idea (N).

Table 9

Experts' views on the relevance of the approaches of Bible and Quran in the emerging cybersociety

Sl. No	Theme (Knowledge and Wisdom)	Biblical Experts			Quranic Experts		
		Expert 1	Expert 2	Expert 3	Expert 1	Expert 2	Expert 3
1	Bible gives explanations on the developments in Science/ Technology	A	A	A	N	N	N
2	Quran gives explanation on the developments in Science/Technology	N	N	N	A	A	A
3	The approach of the Bible helps in solving the developmental problems of the society	A	A	A	N	A	A
4	The approach of the Quran helps in solving the developmental problems of the society	A	A	A	A	A	A
5	The Biblical approach has an important role in eliminating rivalries between people and community	A	A	A	A	A	A
6	The Quranic approach has an important role in eliminating rivalries between people and community	A	A	A	A	A	A
7	The approach of the Bible proves to be highly valuable for the emerging cybersociety	A	A	A	A	N	N
8	The approach of the Quran proves to be highly valuable for the emerging cybersociety	N	N	A	A	A	A

A – Agree
D – Disagree
N – No idea

The ignorance of the Biblical experts about the Quran as the Quranic experts regarding the Bible is evident in the responses to the first two and the last two (7&8) questions. Almost all the experts agree on the high importance and relevance of the approaches of the Bible and the Quran regarding knowledge and wisdom in solving the developmental problems of the society and eliminating rivalries between people and communities. This shows that all the experts are of the view that religious texts are meant for the sublimation of the human beings only.

The findings of the analysis of the count and the content of the Bible and the Quran following a thorough exhaustive study of the texts and analysis of the views of the experts in both the fields helped the investigator in reaching certain generalizations, thus fulfilling the objectives of the study. The findings of the analysis have been summed up in the next chapter.

A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY

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CHAPTER 6

SUMMARY OF FINDINGS AND CONCLUSIONS

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CHAPTER 6

SUMMARY OF FINDINGS AND CONCLUSIONS

6.1 Resume of the study

The study is an attempt to trace out the epistemological and cognitive foundations of the Bible and the Quran by conducting a thorough study of the Bible and the Quran and thereby comparing them with regard to their treatment or approach towards information, knowledge and wisdom. Based on these approaches, an attempt has been made to examine the validity of the treatment of information, knowledge and wisdom dealt in the Bible and the Quran within the context of the emerging cybersociety.

The study is also intended to examine the practical importance of the approaches of the Bible and the Quran on information, knowledge and wisdom in solving the basic developmental problems of the humanity. It is also expected that the study will also provide some theoretical basis for Information Science and Information Technology.

The Bible and the Quran can prove to be effective sources of knowledge and wisdom for the emerging cybersociety. The present study is an attempt to explore the knowledge and wisdom hidden in the Bible and the Quran in the context of the cybersociety. The study has special significance in understanding both the Bible and the Quran and thereby Christianity and Islam in the context of the emerging cybersociety.

6.1.1The Problem

The study is entitled "A Comparative Study of the Treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the Emerging Cybersociety".

6.1.2 Major objectives

The major objectives of the study are:

1. To study the Bible and the Quran with regard to their treatment or approach towards information, knowledge and wisdom.
2. To make a comparison between the Bible and the Quran with regard to their treatment of information, knowledge and wisdom.
3. To examine the validity of the treatment of information, knowledge and wisdom dealt in the Bible and the Quran within the context of the emerging cybersociety and
4. To examine the practical importance of the approaches of the Bible and the Quran towards information, knowledge and wisdom in solving the basic developmental problems of the humanity.

6.1.3 Major Hypotheses

The study tested the following hypotheses:

1. The basic treatment of information, knowledge and wisdom in the Bible and the Quran remains the same.
2. The approaches in the Bible and the Quran with regard to information, knowledge and wisdom encourage the growth, development and application of information technology in the modern age.

3. The present study will provide a theoretical foundation for Information Science, Information Technology and Cybersociety.

6.1.4 Methodology in brief

The methods of data collection basically included exhaustive study of the Bible and the Quran, survey based on the views of Biblical and Quranic experts and literature survey of documents and historical records.

The analysis of data involves a thorough analysis of the Bible and the Quran to find out the various chapters and sections dealing with information, knowledge and wisdom and the categorization of these ideas into ten different heads or themes. The data analysis includes a) count analysis, b) content analysis and c) analysis of experts' views. The count analysis is conducted by taking the count of the ten themes on knowledge and wisdom in the Bible (OT and NT) and the Quran and their comparison. Word count of the terms Knowledge and Wisdom for the two texts is also taken and analysis is done similarly. The content analysis procedure involves a thorough analysis of these themes as dealt in the two texts, following which the basic approach of the individual texts regarding each theme is arrived at. The analysis of this data helps in comparing the basic approaches to find out whether any similarity or differences exist in the approaches. The analysis of the views of the experts is based on the structured interview of the experts. Based on the count analysis, content analysis and analysis of experts' views findings are arrived at and conclusions are drawn.

6.2 Summary of Findings

The following are the major findings arrived at on the basis of the analysis of the data in the Bible and the Quran regarding their treatment of information, knowledge and wisdom following the count and content analysis.

6.2.1) Wisdom and Knowledge are very extensively dealt within the Bible and the Quran. The Wisdom Books almost fully deals with various aspects of Wisdom and Knowledge. In Quran, these ideas are scattered throughout the text.

6.2.2) Both the Bible and the Quran often uses the words Knowledge and Wisdom interchangeably, which also includes Information implicitly. But occasionally they are spoken of as separate and distinct.

6.2.3) God as related to Knowledge and Wisdom is the theme most discussed in the Bible and the Quran.

6.2.4) The New Testament depicts Christ as the incarnation of the Wisdom of God. His life and teachings thus represent the Wisdom of God.

6.2.5) Quran describes itself as the Revelation or Wisdom from God. Thus all the teachings and principles in the Quran represent the Wisdom of God and they are Wisdom for human beings.

6.2.6) The origins of Wisdom and Knowledge are from God according to the Bible and the Quran.

6.2.7) Both the Bible and Quran give utmost importance to and Knowledge and Wisdom. They consider Knowledge and Wisdom as the basis of human life.

6.2.8) The purpose of Knowledge and Wisdom, according to the two texts is to lead mankind from darkness to light i.e, realization of God and thus attain salvation.

6.2.9) Bible represents Wisdom in various forms. It is represented as a thing distinct from God or human beings somewhere while elsewhere it is personified as a woman, a hostess, a teacher, an educator, a counsellor and in many other forms.

6.2.10) Quran views Knowledge and Wisdom as a thing possessed by God. Human beings receive it as a reward for their righteous deeds.

6.2.11) Both the Bible and the Quran views Knowledge and Wisdom to be of divine nature. God is the supreme creator, possessor and the giver of Wisdom and Knowledge to human beings.

6.2.12) Human beings should fear the Lord and pray to him and strive hard in order to acquire Knowledge and Wisdom.

6.2.13) Both the Bible and Quran give explanations to the creation of the universe and other creations including living and non-living.

6.2.14) The sources of Knowledge and Wisdom are God's percepts and his commandments according to the Bible and according to Quran, it is the Quran itself and the teachings of the Prophet Mohammed (Hadiths).

6.2.15) Heart is the seat of Knowledge for human beings according to the Bible and the Quran.

6.2.16) Both the Bible and the Quran exhorts man to go in search of Knowledge and Wisdom.

6.2.17) The basic requirements for attaining Knowledge and Wisdom are fear of the Lord, prayers to him, trust in him, avoiding evil ways and possessing intense desire for Knowledge and Wisdom.

6.2.18) Both the Bible and the Quran basically divide Wisdom into Godly Wisdom (Divine Wisdom) and Humanly Wisdom.

6.2.19) According to the Bible, Wisdom means fear of Yahweh, which means hatred of evil. Quran gives the meaning of Wisdom as knowledge of the Hereafter, i.e., attaining of spiritual knowledge.

6.2.20) The Bible and the Quran say that reason should be the basis of every activity and human beings should reflect on God's works of Wisdom.

The Bible and the Quran has been analysed in detail regarding their treatment of Information, Knowledge and Wisdom. The findings of the analysis will help in tracing out the basic approaches of the two texts towards

Information, Knowledge and Wisdom. The basic approaches of the two texts based on the findings have been derived under separate heads:

6.3 The basic approach of the Bible towards Information, Knowledge and Wisdom

Bible is the holy text of the Christians. Though it upkeeps the religious values for the humanity, it has its own approach towards Information, Knowledge and Wisdom. The prime thing that Bible reflects is that Knowledge and Wisdom is divine or godly. It is eternal and remains to be so. Fear of Lord and hatred of evil, keeping the morals and living an evil free life is the basis of knowledge and wisdom. Thus human values – fear of Lord, hatred of evil, love, empathy, brotherhood all thus forms the roots of knowledge and wisdom. Man should go in quest of knowledge and wisdom everywhere and always – or else, he will be among the downtrodden or the fools. Continuous and wholehearted prayer to God to bestow wisdom and efforts from the part of the self to enquire more and more information and knowledge and thus gain wisdom is to be the aim of human beings. This is the basic approach of Bible towards Information, Knowledge and Wisdom

6.4 The basic approach of the Quran towards Information, Knowledge and Wisdom

Quran, which is the holy text of Muslims, also has its own approach towards Information, Knowledge and Wisdom. The Quranic approach of Information, Knowledge and Wisdom relies on the knowledge of the Hereafter, i.e, life after death. Human beings are given birth in this earth

only to remember God and to act according to His Will. This, he can achieve only through acquiring knowledge and wisdom. Knowledge – he can attain through God's creations in this whole universe, by using his reason and reflecting on them. This is what the science, technology, literature, arts and other divisions of human knowledge do actually present. Man, in this attempt to understand the universe is helped by the Quran and the teachings of the Prophet. The prime aim of human beings is success in the Hereafter life and this is achieved through knowing God. Prayers to the Almighty and leading a good life according to God's Will and constant attempt from the part of the human beings to acquire knowledge and wisdom is what is left to the human beings to do in this world. This is the basic approach of Quran towards Information, Knowledge and Wisdom.

6.5 Comparison of the basic approaches of the Bible and the Quran towards Information, Knowledge and Wisdom

Letting aside very minor differences, the basic approach of the two texts remain the same. Both the texts uphold the human values attaining through leading of a moral life in this world through realization of God. This is the basis of knowledge and wisdom according to the two texts. Thus both the Bible and the Quran give utmost importance to religious values and principles. The basic approach of the texts towards knowledge and wisdom are also related to these religious values – the basic human values. They are meant for the uplift of the humanity.

6.6 Interpretations for the findings

Based on the basic approaches of the Bible and the Quran, and the analysis of the experts' views, the following interpretations can be given for the findings:

6.6.1. The treatment of information, knowledge and wisdom in the Bible and the Quran will be of high value in the emerging cybersociety:

It is known from the section dealing with the theoretical aspects and the epistemological/ cognitive foundations of the cybersociety that the emerging society is going to be a knowledge and wisdom based one. In other words, knowledge and wisdom are considered to be the most important resources in the emerging cybersociety. From the findings of the study, we understand that knowledge and wisdom are dealt with in abundance in the Bible and the Quran. Thus the value and importance of the two scriptures will only increase in the emerging cybersociety.

Even though generations have passed by and given rise to various societies, one thing has never changed – the human values. Human nature, perceptions, expectations, fear, desire, emotions etc are of the same order, passing on through the ages. Some basic human values have been given utmost importance and they remain permanently – the values of love, affection, and common brotherhood. The Bible and the Quran ultimately deals with these values. So the value and importance of the two scriptures will exist in any society.

6.6.2. The approaches in the Bible and the Quran with regard to information, knowledge and wisdom encourage the growth, development and application of information technology in the modern age:

We know from the findings that the Bible and the Quran exhorts man to go in search of knowledge and wisdom. The intensive treatment of knowledge and wisdom in the two texts encourage the pursuit of intellectual knowledge that ultimately leads to the development of science and technology.

From the sections 'Christianity and Science' and 'Islam and Science' in the chapter Review of related studies, we see that scientific and technological contributions from both the religions were the most when the respective religious learning and understanding was at its maximum. History says that Reformation helped the emergence of Renaissance, which paved the way for speedy and faster developments in science and technology. Similarly Muslim contributions to science and technology were at its peak (750-1100AD), when Islamic ideology and Muslim learning was at its maximum. Thus we can generalize that the Bible and the Quran having an intellectual element in them, and the modern age demanding more and more knowledge and wisdom, the approaches in the Bible and the Quran with regard to information, knowledge and wisdom encourage the growth, development and application of information technology in the modern age.

6.6.3. The approaches of the Bible and the Quran towards information, knowledge and wisdom are very important in attaining greater understanding between people and communities:

We see from the comparison of the basic approaches of the Bible and the Quran that the basic approach of the texts towards knowledge and wisdom are related to the religious values-the basic values to be possessed by the humanity. These are the moral values of love, affection, brotherhood and the human conduct.

The present state of decline of values is the result that human beings have gone long way from understanding the gist of these scriptures, clinging to the peripheral things. The study reveals that the essence of the Biblical and Quranic approach towards information, knowledge and wisdom is meant for empowering the humanity. Thus attaining a correct understanding of the approaches helps in achieving greater understanding between people and communities and thereby eliminating rivalries between people and communities.

6.6.4. The present study may help to derive the theoretical foundations of Information Science, Information Technology and Cybersociety:

The three ideas revolve around information, knowledge and wisdom. From the findings of the study it can be inferred that the unifying element in the Bible and the Quran as discussed in the methodology chapter is that of the human values or the human beings itself. From the chapter - review of related studies, it is seen that the epistemological/cognitive foundations of Information Science, Information Technology and Cybersociety stress the

human component or the human mind. Latest studies on theoretical foundations of information also indicate that information is a cognitive construction and takes human beings into focus of consideration and not technical means, processes or products. The three branches of study concerned with the human component, the theoretical foundations of these concepts can be derived from the present study.

6.6.5 The approaches of the Bible and the Quran towards information, knowledge and wisdom will help in solving the basic developmental problems of the humanity:

While discussing the common elements of an ideal community in chapter 2, the first and foremost value to be possessed was that of principle centred goodness i.e., righteousness, living by principles, adhering to natural laws and correct principles characterized by honesty and trust worthiness, knowing that the lasting solution to the very real social problems we face will be based on the principles of a shared vision and synergetic approach.

It should be realized that the most growing problem that the humanity faces in the cybersociety is that of social exclusion and the digital divide resulting from the current socio-economic transformation process. The causes behind these problems are understood as homelessness, ageism, racism, unemployment, poverty, bad health, high crime environments, poor educational attainment, sexuality etc. The digital divide characterized by the technological advances assuring affluences for a selected few and poverty for the rest, the balancing force of the nature is disturbed. The reason for this being the widening gap between the information rich and the information

poor due to lack of proper access to information and inability to make use of the information by a larger section of the society.

The root cause of all these happenings is found directly or indirectly related to the decline of religious values. Importance of human values and the brotherhood of man is the main theme of the Bible and the Quran. The basic approach of Bible and the Quran is based on this itself. In order to narrow down this gap, the proper study making these approaches understood to the human beings is necessary. Thus any developmental strategy should be based on the brotherhood of man with emphasis on the love for the human kind. Strategy, if redefined on this basis, we can transform the existing societal framework into a more just and equitable one.

6.7 Tenability of the Hypotheses

The study "A Comparative Study of the Treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the emerging Cybersociety"was carried out with a set of objectives and hypotheses. The validity of the hypotheses is tested herewith.

Hypothesis 1

The first hypothesis is "The basic treatment of Information, Knowledge and Wisdom in the Bible and the Quran remains the same".

The analysis of data and its findings and the comparison of the approaches of the Bible and the Quran as discussed in section 6.5 substantiates this hypothesis.

Hypothesis 2

The second hypothesis is "The approaches in the Bible and the Quran with regard to information, knowledge and wisdom encourage the growth, development and application of information technology in the modern age".

The analysis of data and its findings and its interpretation in the section 6.6.2 substantiates this hypothesis.

Hypothesis 3

The third hypothesis is "The present study will provide a theoretical foundation for Information Science, Information Technology and Cybersociety".

This hypothesis is proved to be valid on the basis of the findings provided in this chapter and its interpretation in section 6.6.4.

6.8 Conclusions

The present study is entitled "A Comparative Study of the Treatment of Information, Knowledge and Wisdom in the Bible and the Quran within the context of the emerging Cybersociety". Even though there are several studies based on the Bible and the Quran, no major study has so far been conducted from the point of view of the cybersociety because such a study is a future oriented one. Almost all the studies are past oriented. This is a major distinguishing factor of the present study.

The present study is a pioneering study on the Bible and the Quran from the point of view of Information Science and Information technology. The study has helped to trace out the epistemological and cognitive foundations of the Bible and the Quran.The study may help to trace out the theoretical foundations of the knowledge and wisdom based cybersociety. The present study reveals that the value and importance of the Bible and the Quran will increase along with the developments in the knowledge and wisdom based cybersociety.

Even though Christianity and Islam are two dominant religions of the world, people who have deep knowledge of both the Bible and the Quran are very limited. A correct in-depth knowledge will give correct interpretations of the Bible and the Quran based on the basic human values. The ignorance or the rejection of the human values by the practitioners of the religion is the root cause for the unnecessary clashes between the people within the religion or between the religions. A proper and balanced study of the Bible and the Quran will definitely help the formation of a mature, balanced and democratic society rather than a narrow or fanatic one.

6.9 Suggestions for further research

The present study is a multidisciplinary one and is purely a scholarly one within the framework of modern Information Science and Information Technology. It emphasizes on the academic and intellectual value of both the Bible and the Quran within the context of the emerging cybersociety. Hence this can be considered to be a pioneering work in his field and it has opened the gateways for in-depth research on different aspects. The areas of further research as located by the present study are given below.

1. There is an urgent need for conducting further studies on the Bible and the Quran so as to formulate the theoretical foundations of Information Science, Information Technology and Cybersociety.

2. Further studies can be conducted on the actual role of the Bible and the Quran in the development of Science and Technology.

3. More studies have to be conducted regarding the nature and characteristics of the cybersociety.

4. Detailed studies on the importance and relevance of the Bible and the Quran can be conducted from different angles.

5. By taking into account the emergence of the knowledge and wisdom based cybersociety, there is a need for developing new approaches in Christian and Islamic theology and religious studies.

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A COMPARATIVE STUDY OF THE TREATMENT OF INFORMATION, KNOWLEDGE AND WISDOM IN THE BIBLE AND THE QURAN WITHIN THE CONTEXT OF THE EMERGING CYBERSOCIETY

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APPENDIX I

LIST OF THE BOOKS OF THE BIBLE

THE OLD TESTAMENT

THE PENTATEUCH
Genesis (Gn)
Exodus (Ex)
Leviticus (Lv)
Numbers (Nb)
Dueteronomy (Dt)
THE HISTORICAL BOOKS
The Book of Joshua (Jos)
The Book of Judges (Jg)
The Book of Ruth (Rt)
The Book of Samuel (S)
The Book of Kings (K)
The Book of Chronicles (Ch)
The Book of Ezra (Ezr)
The Book of Nehemiah (Ne)
Tobit (Tb)
Judith (Jdt)
Esther (Est)
The 1st Book of Maccabees (1M)
The 2nd Book of Maccabees (2M)
THE WISDOM BOOKS
Job (Jb)
The Psalms (Ps)
The Proverbs (Pr)
Ecclestiastes/Qoheleth (Qo)
The Song of Songs (Sg)
The Book of Wisdom (Ws)
Ecclesiasticus/Ben Sira (Si)
THE PROPHETS
Isaiah (Is)
Jeremiah (Jr)
Lamentations (Lm)
Baruch (Ba)
Ezekiel (Ezk)
Daniel (Dn)
Hosea (Hos)
Joel (Jl)
Amos (Am)
Obadiah (Ob)
Jonah (Jon)
Micah (Mi)
Nahum (Na)
Habakkuk (Hab)
Zephaniah (Zp)
Haggai (Hg)
Zechariah (Zc)
Malachi (Ml)

THE NEW TESTAMENT

Gospels
Matthew (Mt)
Mark (Mk)
Luke (Lk)
John (Jn)

Acts of Apostles (Ac)
Paul
Romans (Rm)
1 Corinthians (1 Co)
2 Corinthians (2 Co)
Galatians (Ga)
Ephesians (Ep)
Philippians (Ph)
Colossians (Col)
1 Thessalonians (1 Th)
2 Thessalonians (2 Th)
1 Timothy (1 Tm)
2 Timothy (2Tm)
Titus (Tt)
Philemon (Phm)
Hebrews (Heb)
James (Jm)
1 Peter (1 P)
2 Peter (2 P)
1 John (1 Jn)
2 John (2 Jn)
3 John (3 Jn)
Jude (Jude)
The Revelation to John

APPENDIX 2

LIST OF THE SURAS(CHAPTERS) IN THE QURAN

Surat	No.
Al-Fatiha	1
Al-Baqarah	2
Al-i-Imran	3
An-Nisaa	4
Al-Maidah	5
Al-An'am	6
Al-A'raf	7
Al-Anfal	8
At-Tauba	9
Yunus	10
Hud	11
Yusuf	12
Ar-Ra'd	13
Ibrahim	14
Al-Hijr	15
An-Nahl	16
Al-Israa	17
Al-Kahf	18
Maryam	19
Ta-Ha	20
Al-Anbiyaa	21
Al-Hajj	22
Al-Muminum	23
An-Nur	24
Al-Furqan	25
Ash-Shu'araa	26
An-Naml	27
Al-Qasas	28
Al-Ankabut	29
Ar-Rum	30
Luqman	31
As-Sajda	32
Al-Ahzab	33
Saba	34
Fatir	35
Ya-Sin	36

As-Saffar	37
Sad	38
Az-Zumar	39
Gafir	40
Fussilat	41
Ash-Shura	42
Az-Zukhruf	43
Ad-Dukhan	44
Al-Jathiya	45
Al-Ahqaf	46
Muhammad	47
Al-Fat-h	48
Al-Hujurat	49
Qaf	50
Az-Zariyat	51
At-Tur	52
An-Najm	53
Al-Qamar	54
Ar-Rahman	55
Al-Waqi'a	56
Al-Hadid	57
Mujadila	58
Al-Hashr	59
Al-Mumtahana	60
As-Saff	61
Al-Jumu'a	62
Al-Munafiqun	63
At-Tagabun	64
At-Talaq	65
At-Tahrim	66
Al-Mulk	67
Al-Qalam	68
Al-Haqqa	69
Al-Ma'arij	70
Nuh	71
Al-Jinn	72
Al-Muzzammil	73
Al-Muddaththir	74
Al-Qiyamat	75
Al-Insan	76
Al-Mursalat	77
An-Nabaa	78

An-Nazi'at	79
Abasa	80
At-Takwir	81
Al-Infitar	82
Al-Mutaffifeen	83
Al-Inshiqaq	84
Al-Buruj	85
At-Tariq	86
Al-A'la	87
Al-Gashiya	88
Al-Fajr	89
Al-Balad	90
Ash-Shams	91
Al-Lail	92
Adh-Dhuha	93
Al-Sharh	94
Al-Tin	95
Al-Alaq	96
Al-Qadar	97
Al-Baiyina	98
Al-Zalzalah	99
Al-'Adiyat	100
Al-Qari'a	101
At-Takathur	102
Al-Asr	103
Al-Humaza	104
Al-Fil	105
Quaraish	106
Al-Ma'un	107
Al-Kauthar	108
Al-Kafirun	109
An-Nasr	110
Al-Masad	111
Al-Ikhlas	112
Al-Falaq	113
An-Nas	114

Appendix 3

Interview Schedule For Experts

I.Personal Details:

1.Name :

2.Designation :

3.Educational Qualifications

a)General :

b)Theological Qualifications, if any :

II Experts' view on the treatment of knowledge and wisdom in the Bible and the Quran.

1. Do you think the Bible and the Quran deal with information, knowledge and wisdom?
2. If yes, to what extent?
3. What does the Bible and the Quran say on

1) Origin of Knowledge and Wisdom
2)Importance/Advantage/Purpose of Knowledge and Wisdom
3) Attributes/Characteristics of Knowledge and Wisdom
4) God as related to Knowledge and Wisdom
5) Origin of the Universe/Creation/Science and Technology
6) Sources of Knowledge and Wisdom
7) Search for/Acquisition of Knowledge and Wisdom
8)Types/divisions of Knowledge and Wisdom
9) Meaning of Knowledge and Wisdom
10) Reasoning/Thought/Intelligence.

4.What is the basic approach of 1) the Bible and 2) the Quran towards information, knowledge and wisdom?

III Experts' view on the relevance of the approaches of the Bible and the Quran towards information, knowledge and wisdom in the emerging cybersociety

1.What is the role of the Bible and the Quran in the Scientific and Technological developments in the world?

2.To what extent the approaches of the Bible and the Quran regarding information, knowledge and wisdom are relevant in solving the developmental problems of the humanity?

3.To what extent do a proper understanding of the approaches of the Bible and the Quran regarding information, knowledge and wisdom help in eliminating rivalries between people and communities?

4.What is the relevance of the Bible and the Quran in the modern age?

5.Based on the approach of the Bible and the Quran towards information, knowledge and wisdom, can you say that they are of high importance for the future cybersociety?

Appendix 4

LIST OF BIBLE VERSIONS

21st Century King James Version (KJ21). 21st Century King James Bible Publishers: Gary, SD. 1994.

Amplified Bible (Amp). Grand Rapids, MI: Zondervan, 1965.

Analytical-Literal Translation of the Holy Bible (ALT). Copyright © 1999-2001 by Gary F. Zeolla of Darkness to Light ministry (http://www.dtl.org/index.html).

Contemporary English Version/ Bible for Today's Family (CEV). Nashville: Thomas Nelson, 1991.

Darby, John Nelson. The English Darby Bible (DBY). Public Domain, 1890.

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Green, J.P. Literal Translation of the Bible (LITV). Copyright 1976 - 2000. Used by permission of the copyright holder, Jay P. Green, Sr.

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New American Bible for Catholics (NAB). Nashville: Thomas Nelson, 1980.

New English Translation (NET). Copyright 1999.

New Century Version/ The Everyday Bible (NCV). Dallas: Word Publishing, 1988.

New English Bible (NEB). Cambridge: At the University Press, 1972.

New International Version (NIV). Grand Rapids: Zondervan, 1984.

New King James Version (NKJV). Nashville: Thomas Nelson, 1982.

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Revised Standard Version (RSV). Grand Rapids: Zondervan, 1971.

Revised Webster's Bible (RWB). Public Domain, 1995.

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Turner, Robert L. King James - Easy Reading Version (KJER). Palm Beach, FL, n.a.

Webster, Noah. Webster's Bible (WB). Public Domain, 1833.

World English Bible (WEB). Longmont, CO: Rainbow Missions, Inc., copyright-free.

Appendix 5

LIST OF ENGLISH TRANSLATIONS OF QUR'AN

Pickthall, Muhammad Marmaduke William, The Meaning of the Glorious Qur'an (London, 1930). At least 27 edns.

Ali Abdullah Yusuf, The Holy Qur'an: Translation and Commentary (Lahore, 1934-37). At least 35 edns.

Ali, Hashim Amir, The Message of the Qur'an Presented in Perspective (Tokyo, 1974). 1 edn.

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Ahmad, Muhammad Mofassir, The Koran: The First Tafsir in English (London, 1979). 1 edn.

Muhammad Asad, The Message of The Qur'an (Gibraltar, 1980). 1 edn.

Zayid, Mahmud Y. (checked and revised) in collaboration with a committee of Muslim scholars, The Qur'an: An English Translation of the Meaning of the Qur'an (Beirut, 1980).

Khan, Mohammad Abul Hakim, The Holy Qur'an, (Patiala, 1905)

Dehlawi Mirza Hairat (ed.), The Koran: Prepared by Various Oriental Learned Scholars and Edited by Mirza Hairat (Delhi, 1912). 2 edns.

Abu'l Fadl, Mirza, The Qur'an Translated into English from the Original Arabic (Allahabad, 1912). 3 edns.

Daryabadi, Abdul Majid, The Holy Qur'an with English Translation and Commentary (Lahore, 1941-57). At least 4 edns.

Jullundri, Ali Ahmad Khan, Translation of the Glorious Holy Qur'an with Commentary (Lahore, 1962). 3 edns.

Ali, S.V. Ahmad, The Holy Qur'an with English Translation and Commentary according to the version of the Holy Ahlul Bait. With special notes from Ayatullah Agha Haji Mirza Mahdi Pooya Yazdi (Karachi, 1964). 3 edns.

Sarwar, Sheikh Muhammad, The Holy Qur'an: Arabic Text and English Translation (Elmhurst, 1981). 1 edn.

Shakir, M.M., Holy Qur'an (New York 1982).

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Irving, T.B., The Qur'an: the First American Version (Vermont, 1985). 1 edn.

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