

Tawhidi Epistemology and its Applications:
Economics, Finance, Science, and Society

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By

Masudul Alam Choudhury

With contributions from T. Mariyanti,
M. Shahadat Hossain and Jadi Suriadi

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P U B L I S H I N G

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by M.A. Choudhury

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To all those who contemplate on the monotheistic design of the universe
by integrating Science and Religion

PROLOGUE

Behold, thy Lord said to the angels! I will create
“A vicegerent on earth.” They said
“Will Thou place therein one who will make
Mischief therein and shed blood? –
While we do celebrate Thy praises
And glorify Thy holy (name)?”
He said: “I know what ye know not.”

And He taught Adam the nature
Of all things; then He placed them
Before the angels and said: “Tell Me
The names of these if ye are right.”

They said: “Glory to Thee: of knowledge
We have none, save what Thou
Hast taught us: in truth it is Thou
Who are perfect in knowledge and wisdom.”

He said: “O Adam! Tell them
Their natures.” When he had told them,
God said: “Did I not tell you
That I know the secrets of heaven
And earth, and I know what ye reveal
And what ye conceal?”

(Qur'an, 2:30-33)

Translation from Abdullah Yusuf Ali, 1946,
The Holy Qur'an, Text, Translation and Commentary,
McGregor & Werner, Inc., USA)

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FOREWORD

This book is written by an internationally reputed researcher and professor with specialization in the mathematical treatment of various political economic issues with special focus on Islamic social economy and the world system. Professor Masudul Alam Choudhury's specialization makes him well-known in pioneering the *tawhidi* epistemology applied in economics and society. The significance of the *tawhidi* methodological worldview is reflected in the unity of the monotheistic law and the unity of the world-system in which the monotheistic law prevails. Professor Masudul Alam Choudhury has written many scholarly books and scientific journal articles. His focus has been in the particular area of epistemological critique of economic and social theory with special focus on the *tawhidi* methodology of unity of knowledge and unity of the world system in the generality and specifics of socio-scientific issues and problems.

Tawhidi methodology is unique and universal when premised on a carefully sought out and comprehensive epistemology. Religion and science together comprise the foundation of knowledge, process, and reality. Sociologists have long investigated the impact of religion on human behaviour. But economists have only recently attempted to investigate and define the linkages between religion and economic behaviour in subtle ways. Hence this book will be an excellent contribution for all those interested in understanding the functional nature of moral and ethical values drawn from the divine law embodied in the *Qur'an* and explained by the *Sunnah*. Such derivations find their home in economics and social theory and practice.

Such an approach and the *functional* ontological derivations as opposed to metaphysical indefiniteness are fundamental in understanding the theory and practice of *tawhidi* methodology drawn from the *Qur'an* and the *Sunnah*. Thereby, *Qur'anic* epistemology is essential to understand and invoke in every issue and problem of life. Professor Choudhury refers to this universal expanse of conception and application of the *tawhidi* episteme as the theory of 'everything'. The foundation of the purpose and objective of the Islamic law, referred to as *maqasid as-shari'ah*, is explained in this book to comprise the *tawhidi* epistemological worldview for understanding moral sustainability across the conception and functional ontology together with applications in 'everything'.

In this book, Professor Masudul Alam Choudhury has formalized the theorem of the unification of knowledge by the uniqueness of the universal law of monotheistic oneness that applies equally within and between socio-scientific systems. This universality of the *tawhidi* law of functional ontology within its episteme is true despite the perceived differences in the specifications of the problems underlying diverse socio-scientific systems and entities. In this methodological analytic, a theory of ethics treated as endogenous values pertaining to economic forces is different from the way economic theory treats ethics as external to the economic system.

In relation to such endogenous treatment of ethics in economics and social systems, some important mathematical properties of the *tawhidi* methodological worldview have been established. The proof of universality and uniqueness of the *tawhidi* methodological worldview and rigorous analysis are brought to bear on substantive socio-scientific issues. In essence, the metaphysical formalism of religion is transformed into functional formalism. This functional transformation of unity of knowledge is then made to functionally conceptualize and thus apply to specific issues of economics, finance, and society. The resulting material is for thoughtful and informed readers of all shades of scholarly persuasion, not limited to Muslims alone.

The book also presents subtle quantitative models that are treated empirically. This approach further expands the contributions of the *tawhidi* methodology to the applied and functional domains. The book thereby establishes both the conceptual and applied horizons of the monotheistic law on mundane problems and issues of ‘everything’. This by itself is a bold and distinctive contribution *qua* materiality, encompassing thus a substantive integration of religion with a socio-scientific worldview. The result is a contribution not seen in any religious or socio-scientific study either in mainstream or Islamic literature in this area of highly scholarly investigation.

The content of the book is also extensively comparative in the review of the literature. This undertaking expands across epistemology in the field of philosophy of science, the scope of socio-scientific thinking, and moral reconstructive possibility of an ethically-benign world-system. Together with this there are deep applications in various areas of economics, finance, and society. These are epistemologically governed by unity of knowledge and unity of the induced world-system.

Throughout this book, Professor Masudul Alam Choudhury has aimed firstly, at fulfilling the gaps that exist in the available studies in Islamic economics and society. Secondly, the book, by its highly scholarly singularity of argumentation based on the *tawhidi* methodological

worldview, stimulates further scope of scholarship, reflection, and inquiry on questions of significance in the area of monotheistic dynamics and socio-scientific analysis. All this is carried out in the book under a most rigorous analytical lens.

This is a *tawhidi* methodological lesson drawn from the *Qur'an* and the *Sunnah* for all the world-systems by their generality and specifics. The theory of systems and cybernetics abounds in unravelling the inherent analytical properties of the issues and problems investigated.

In regards to the substantive methodological and expanse of outlook that Professor Masudul Alam Choudhury has offered in this book, the contributory thought will be read and referred to for all times by ardent researchers, academicians, and practitioners who look beyond the narrow limits of vision.

Wassalam,
Chairman of
Ulama Council of Indonesia
Dr. KH. Ma'ruf Amin

PREFACE

The emergence of any socio-scientific body of knowledge requires firm logical, explanatory, and applicative epistemology as its methodology. Without an epistemological mooring there cannot be science, and therefore no socio-scientific knowledge. Upon such an epistemic foundation stands the methodological worldview. By this worldview the grand design of the world-system comes about, which can be established by a moral standard based on the methodological worldview. The establishment of the worldview and its grand design of the world-system embody the evaluation of the normatively reconstructed as against the prevalent states of knowledge, thought, and application. The totality of these defining elements comprising the methodology, theory, structure and function, altogether leading into application and inferences, makes up the phenomenological model.

The worldview and its constituent epistemological elements and functional ontological projections make up the entire study in this book. The book is divided into a first part on Theory and a second part on Applications. The emphasis in this book is on methodology. This takes up a cross section of approaches extending from the *Qur'an* and the authentic *sunnah* as the unfailing guidance of the Prophet Muhammad on the instructions of the *Qur'an*. The emergent pathway is towards the details of the socio-scientific generality and its specifics of issues, themes, and topics. The methodological approach is thus of an analytical nature. It embraces philosophy of science, mathematical orientation, and real-world issues and problems extending beyond the limits of economics, finance, science, and society, into the wider domain of their interdisciplinary embedding.

The starting point of the thesis is a quest for the knowledge, mind, and matter foundations of thought that initiate the phenomenological capability. Such is the challenge for the search and discovery of the foundation of holistic socio-scientific inquiry in the mould of interdisciplinary embedding.

Can the prevailing intellection in the variety of sciences render this possibility? The answer to that quest leads us to conclude that the inherited scholarship, and thereby its structure and function, cannot enable discovery of such holism. The quest then reaches out towards the

functional nature of unity in and of everything (Barrow, 1991). This can only be found in that worldview which is unique and universal according to the technical understanding of these terms in accordance with the epistemology of unity of knowledge.

Such a cognizance of the generality and particulars of the multi-universal reality rests upon evolutionary learning processes that project reality from lesser to higher levels of understanding of the unified processes of being and becoming. But it also delineates the processes that differentiate between truth (primal and functional ontology of oneness) and falsehood (systemic conflict, individualism, and dualism). The *Qur'an* brings out these attributes of the ultimate reality of being and becoming in terms of its principles. These are, firstly, of multi-universal pairing (complementarities, participation, and thereby unity) between the good things of life as laid down by the purpose and objective of Islamic Law (*shari'ah*), known as *maqasid as-shari'ah*. Secondly, contrarily, the property of divisiveness is embodied in the character of methodological individualism, conflict, competition, and self-interest.

We begin our intellectual journey from and toward the *tawhidi* epistemic holism. In between this pathway there is the conscious cognizance of unity of knowledge and the unity of the morally constructed world-system.

Masudul Alam Choudhury

ACKNOWLEDGMENTS

This book is on the analytical deliberation of the central episteme of Islamic socio-scientific thought, *tawhid*, meaning the oneness of God and the unity of divine law at work in the unity of the generality and details of the world-system. *Tawhid* in this sense is the unique and universal message of the *Qur'an* to the entire world-system. This revolutionary worldview of Islamic socio-scientific thought, with its vista of advanced analytical inquiry derived from the *Qur'an*, the *sunnah*, the works of the great Islamic learned intellectuals, and contemporary comparative thought in the socio-scientific domain, started with the author now over twenty years ago. The focus here is on socio-scientific intellection encompassing economics, finance, science and society.

This *tawhidi* academic thought gained its first great momentum with the establishment of the Postgraduate Program in Islamic Economics and Finance (IEF) in Trisakti University, Jakarta, Indonesia in the year 2003. IEF undertakes advanced teaching and graduate and postgraduate research in the diverse areas underlining *tawhidi* epistemology and its applications in the contemporary world-system. In this institution today over one hundred students are currently pursuing their doctoral degree in various topics involving *tawhidi* epistemology and its applications. Select teachers knowledgeable in the *tawhidi* worldview are offering lectures to postgraduate students. The most advanced level of analytical intellection is used, including philosophy of science; mathematical, statistical and computer models; and various areas focusing on heterodox economics, finance, science, and society. Above all, the derivation of the methodology and methods of this heterodoxy is from the *Qur'an* and *sunnah*, combined with the thoughts of the Islamic learned masters and contemporary comparative thought. The focus is on the *tawhidi* foundation of this heterodoxy.

IEF was established by the meeting of minds and favourable circumstances offered by Trisakti University during the time of its inception. I owe this momentous event to my friend, the late Professor Sofyan Syafri Harahap of the Faculty of Economics, Trisakti University. The two of us were supported in Trisakti University by important persons like Professor Thoby Mutis, Rector of Trisakti University; Professor Yuswar Basri, Vice Rector of Trisakti University; and Dr. Tatik Mariyanti, Academic

Coordinator of IEF and Lecturer in Economics at the Faculty of Economics, Trisakti University. Their friendly academic support has increased over the years. Now IEF has its own establishment in the extension campus of Trisakti University with the Trisakti University Institute of Global Finance. IEF has by now produced ten PhD graduates, many Masters Graduates, and several more PhD graduations are continuing. These are the pioneers of the *tawhidi* epistemology and its applications to diverse areas of economics and finance in the field of comparative and heterodox socio-scientific thought.

My thanks are also due to the College of Economics and Political Science (CEPS) in Sultan Qaboos University (SQU) for approving my Summer Research Leaves to spend the time as Visiting Professor in various university departments overseas between 2010 and 2013. This opportunity enabled me to develop the reviewed book proposal and sample chapters that were approved by the notable academic publisher, Cambridge Scholars Publishing. My library work in Robarts Library of the University of Toronto and in the library of Saint Paul University, Ottawa, enabled me to draft some chapters of this momentous work.

I hope that this work, though of a deeply methodological, analytical, and applied nature in the field of *tawhidi* epistemology and its applications, will be a contribution to socio-scientific thought for *all* scholarship. By its very logical eminence, this book cannot and does not invoke parochial religious constrictions. Monotheism is a common belief of many religions.

I therefore render this book to scholarship among all good thinking people who pursue objectivity and reason for felicity to self and others. "Come my friends! It's not too late to seek a newer world."

A handwritten signature in cursive script, reading "Mansoor Alam Chaudhury". The signature is written in dark ink on a light background.

Author

ABOUT THE AUTHOR

Masudul Alam Choudhury holds the Professorial Chair of Islamic Finance in the Institute of Islamic Banking and Finance, International Islamic University Malaysia. He is also the International Chair in the Postgraduate Program in Islamic Economics and Finance, Trisakti University, Jakarta, Indonesia. He earned his Masters and Doctorate Degrees in the field of political economy of human capital theory and economic growth at the University of Toronto. Earlier he was awarded the M.Phil. Degree in Mathematical Statistics, specializing in Econometrics, from Quaid-e-Azam University, Islamabad, Pakistan. He holds an earlier Bachelors of Science Honours Degree in Pure Mathematics from Dhaka University. Professor Choudhury took his retirement as Full Professor from Cape Breton University, Nova Scotia, Canada, after twenty-two years of academic service.

Professor Masudul Alam Choudhury specializes, teaches, researches, and publishes in the field of epistemological problems of Islamic political economy and world-system, philosophy of science, and applications in diverse areas of economic theory. In these areas Professor Choudhury has published scholarly papers and books in reputed international outlets. His treatment is oriented to the study of *Qur'an* and *sunnah* along with comparative studies on the related topics. His contributions use the methodology and methods of philosophy of science, mathematics, economic theory, and applications. He is an original pioneer of Islamic economics in North America.

His selected publications are, *Socio-Cybernetic Study of God and the World-System* (IGI-Global, 2013), *Islamic Economics and Finance: an Epistemological Inquiry* (Emerald, 2011); *The Universal Paradigm and the Islamic World-System* (World Scientific Publications, 2007); *An Advanced Exposition in Islamic Economics and Finance* (Edwin Mellen Press, 2004); *The Islamic World-System, a Study in Polity-Market Interaction* (Routledge Curzon, 2004); *Explaining the Qur'an, a Socio-Scientific Inquiry*, 2 volumes (Edwin Mellen, 2003); *The Islamic Worldview, Socio-Scientific Perspectives* (Kegan Paul, 2000); *Comparative Economic Perspectives: Occidental and Islamic Perspectives* (Kluwer Academic, 1999); *Studies in Islamic Science and Polity* (Macmillan, 1998); *Reforming the Muslim World* (Kegan Paul, 1998); *Studies in*

Islamic Social Sciences (Macmillan, 1998); *Money in Islam* (Routledge, 1997); *The Principles of Islamic Political Economy, A Methodological Inquiry* (Macmillan & St. Martin's, 1992); *The Foundations of Islamic Political Economy* (Macmillan & St. Martin's, 1992); *Islamic Economic Co-operation* (Macmillan, 1990); *Contributions to Islamic Economic Theory, A Study in Social Economics* (Macmillan & St. Martin's, 1986); 5 volumes entitled *Science and Epistemology in the Qur'an* (with individual volume titles) (Edwin Mellen, 2006). Besides, Professor Choudhury has contributed many scholarly papers in international refereed journals. He is the editor of the specialized SCOPUS journal entitled, *Humanomics, International Journal of Systems and Ethics* (Emerald, now publishing volume 31).

INTRODUCTION

The epistemic use in evolutionary epistemology in this work is to unravel the conceptual, supported by the formal, followed by the empirical nature of real-world issues. Two steps are taken. These are followed by their continuity across systems spanning the dimensions of knowledge, space, and time.

The substantive matter to understand is the formalization of evolutionary epistemology in the light of *tawhid*, the monotheistic law in Islam. The imminent pursuit is then applied to specific topics and case studies in economics, finance, science, and society.

The total ontological experience of knowledge exists at two levels. Firstly, there is the premise of its universality. This acquires the nature of self-referencing in terms of stated laws of unity of knowledge. The derived Primordial Ontology explains various states of socio-scientific systems. Among these are the relationally cooperative and participatory (unity by participation and complementarities) ones on the one hand. Oppositely, there are the states of conflict and competition; differentiation of knowledge by the marginalism hypothesis.

The first ontological level is termed here as Primordial Ontology of the divine essence. Primordial Ontology therefore means existence of Being in the domain of the attributes of divine oneness. It is unravelled in the law of monotheism – not in the nature of oneness of God, though this remains the divine quiddity. According to the principle of *tawhid*, the existence of divine quiddity alone is not sufficient to understand the function of the monotheistic law in the scheme and order of things. The unravelling of the monotheistic law on the structure and function of the unified world-system as the Sign of God is essential for a complete phenomenological understanding of reality.

Secondly, *Primordial* Ontology is formalized into *Functional* Ontology by explaining and applying the *tawhidi* methodological worldview to specific problems taken from the general category of all evolutionary systems with different forms of learning behaviour. Among these are the relationally cooperative, participatory, and pervasively complementary ones. Oppositely, there are the competing, conflicting, and differentiating ones.

The principal problem that this book addresses is this: How is *Primordial* Ontology made to correspond with *Functional* Ontology to

explain the working of *tawhid* in the experiential world-system? This is the same as saying: How is the monotheistic law argued to be universal and unique by way of its self-referencing, derived from precepts, and made operational by way of evolutionary epistemology of unity of knowledge? Here, mathematical formalism is used and the language is of philosophy of science.

Finally, real world transmission of the above unity between Primordial and Functional Ontology is explained by its continuity across systemic continuums spanning the dimensions of knowledge, space, and time. The continuity of the underlying analytic that integrates Primordial Ontology and Functional Ontology across systems and across the dimensions of knowledge, space, and time is referred to as the *tawhidi* phenomenological worldview.

The phenomenological model, to be developed in depth and emphasized in every chapter, is formally presented in the following way:

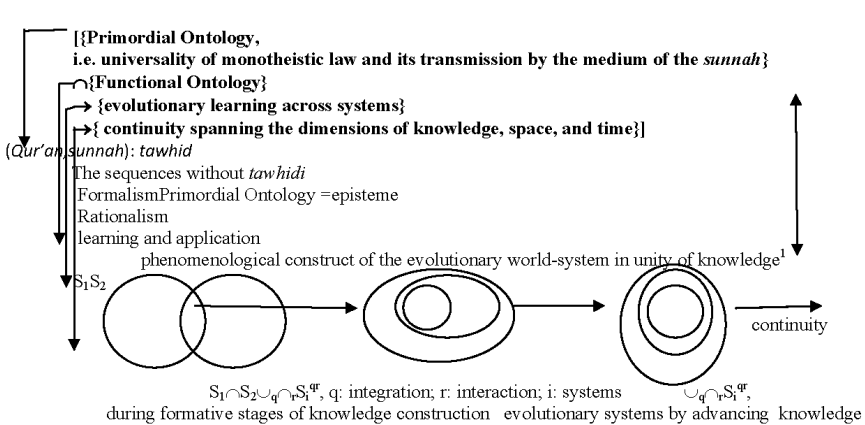


Figure I: A summary of *tawhidi* phenomenological model identifying Primordial and Functional Ontologies

Formalism

The phenomenological model will be formalized and repeated throughout this work as the groundwork of integrating Primordial Ontology and Functional Ontology. One of these without the other is a perspective of rationalism, not of the unified Mind-Matter worldview according to

tawhid. In this Introduction, too, we give the early formalism of the *tawhidi* phenomenological worldview according to its epistemic framework.

Any event in the *tawhidi* super-space happens in the dimensions of knowledge ($\theta \in \text{Primordial Ontology}$), space (\mathbf{x}), and time (t as datum). Therefore, a vector (also matrix, tensor) of variables and their relations are denoted by, $\mathbf{x} = \mathbf{x}(\theta; t)$. A monotonic positive transformation of θ is a wellbeing function, say $W(\mathbf{x}(\theta; t))$. To prove such monotonic transformation we write,

$$d\mathbf{x}/d\theta \Rightarrow dW(\mathbf{x})/d\theta > 0$$

Take the wellbeing function in the following product form:

$W(\mathbf{x}) = \Pi A_i x_i^{\alpha_i}$, all the variables and parameters on the right-hand side are θ -induced.

$$\ln W(\mathbf{x}) = \sum_i \ln A_i + \sum_i \alpha_i \ln x_i$$

By the monotonic positive transformation property between W and θ we obtain the following expression. Note the indicated signs of the terms,

$$dW/W = d\theta/\theta = \sum_i \alpha_i \cdot (dx_i/x_i)^+ + \sum_i x_i \cdot (d\alpha_i/d\theta)^+ + (dA/d\theta)^+$$

This expression can be written in terms of growth rates, $g(.) > 0$, as,

$$dg(\theta)/d\theta = \sum_i (\alpha_i \cdot dg_i/d\theta)^+ + \sum_i (dx_i/d\theta)^+ \cdot (d\alpha_i/d\theta)^+ + x_i \cdot (d^2\alpha_i/d\theta^2)^+ + (d^2A/d\theta^2)^+ \text{ as being positive or negative.}$$

This is the case of the early stages of explaining *tawhidi* evolutionary learning processes. Such stages are represented in Figure I.

In the special case of advanced *tawhidi* evolutionary learning it is possible that,

$$dg(\theta)/d\theta = \sum_i (\alpha_i \cdot dg_i/d\theta)^+ + \sum_i (dx_i/d\theta)^+ \cdot (d\alpha_i/d\theta)^+ + x_i \cdot (d^2\alpha_i/d\theta^2)^+ + (d^2A/d\theta^2)^+ > 0. \quad (I.2)$$

This case is shown in expression (1) by evolutionary symmetrical spheres of n -dimensions, n increasing but remaining finite in order to convey the socio-scientific commensurate meaning of events happening in the continuity of knowledge, space, and time.

Summary

In understanding this book in respect of *tawhidi* epistemology and its applications to the universal ‘everything’, the most important characterizations to follow are, firstly, the organic relational meaning of unity of knowledge and the world system interpreted in knowledge, space, and time in the light of the law of monotheism. Secondly, the application of *tawhidi* epistemology is studied in respect of its methodology in evaluating and constructing the world-system in terms of unity of knowledge. This characterization is represented by pervasive complementarities or relational participation. This phenomenon is explained by the pairing of the variables and entities in the generality and specific issues and problems studied. The method that reveals this perspective of unity of knowledge is presented as circular causation. This method is derived from the purpose and objective of the *shari’ah*, known as *maqasid as-shari’ah* in reference to the *tawhidi* methodological worldview. The *tawhidi* epistemological foundation comprises the *Qur’an*, the Prophetic guidance (*sunnah*), and critical examination of the historical contributions of the learned Islamic scholars. These points are elaborated in this work by way of conceptualization and application using rigorous scientific approaches.

PART I:

THEORY AND CONCEPTS: EPISTEMOLOGICAL CONTENT

CHAPTER ONE

METHODOLOGICAL INTRODUCTION: *TAWHID* AND THE WORLD-SYSTEM

Objective

The objective of this chapter is to undertake a substantive definition and explanation of various concepts that characterize the idea of consciousness according to *tawhid* and the resulting formalism of the *tawhidi* phenomenological model. *Tawhid* means the episteme of oneness of God, and its explanation in terms of the divine law of monotheism that translates its unification role into diverse world-systems and into the relations between them. Various concepts and terms linked to the comprehensive meaning of *tawhid* and their explanations are presented in this chapter, though in rudimentary form. They will be substantively developed in the chapters that follow. The totality of the interrelationships between these concepts, and their dynamic intra-systems and inter-systems across evolutionary learning processes, set up the domain upon which a formalism will be undertaken, applications carried out, and analyses done. In light of the entirety of the *tawhidi* phenomenological model with its internal socio-scientific properties, this research manuscript will develop the substantive socio-scientific accomplishment in the concept of wellbeing and its understanding as a revolutionary worldview.¹

In this manuscript a comparative study of the precept of *tawhid* and its world-system will be undertaken in comparative and contrasting perspectives. The *tawhidi* worldview will be revealed in the subsequent chapters as a socio-scientific revolution in thought and application aimed at a moral reconstruction of an unethical world-system. In the understanding

¹ We will understand by the concept of worldview *verbatim* the following, given by Smart (2000, p. 2): "The study of religion and ideologies can be called 'worldview analysis'. In this we try to depict the history and nature of the symbols and beliefs that have helped form the structure of human consciousness and society. This is the heart of the modern study of religion. As a phrase, 'worldview analysis' conveys a sense of attempted objectivity, and indeed it is for that reason a relatively modern phenomenon."

and delineation of the extended world-system by its intellection, formalism, and applications, the emergent revolutionary socio-scientific worldview of *tawhid* is substantively different from much of received socio-scientific worldview and the prevalent approach to understanding the socio-scientific worldview in the absence of the epistemological methodology. Finally, this chapter concludes with a summary of the goals of all the chapters to be included in this book.

The tenor of the whole book is a combination of textual presentation with analytical and mathematical tracts. Socio-scientific theory and concepts, diagrams, and quantitative empirical analyses are offered. Both conceptual intellection and quantitative empirical work are employed for specific issues. Policy analysis in the framework of *tawhidi* epistemology and its formalism in terms of the *tawhidi* phenomenological model are studied by the method of circular causation. This is carried out by specific country and institutional case studies.

***Qur'anic* exegesis leading to the extended meaning of *tawhid*: Oneness of God in relation to its epistemological construction of knowledge and the knowledge-induced world-system**

***Tawhid* and the monotheistic law**

Tawhid summarily means oneness of God. But simply by this ontological metaphysic it is not possible to understand the role that God plays in the created order. The created socio-scientific order comprises wholly the human intellection process in 'everything'. A particularity of this domain is the world-system that is constructed out of the organization of the extant thought and application. Thus the substantive meaning of *tawhid* comprehends not only the primordial existence, absoluteness, and non-partnership attribute of God in creation, but with God remaining the uncreated being. Besides these attributes, God and the world-system, what is termed as the created domain of 'everything' (Barrow, 1991) is the centrepiece of a substantive study of *tawhid* in reference to the monotheistic law. This is to assert that God does not descend on earth or in anything as a corporeal agent of being and change. Only the attributes of God are transmitted by the monotheistic law into the construction of the fullest extent of 'everything' in the light of *tawhid*. This creatorship is now understood both as having the attribute of God as the One (non-partnership in creation), and in terms of God's monotheistic law transmitted in everything as the attribute of oneness.

The monotheistic law establishes the non-partnership of God's command in creation as the Absolute Being, the sole Creator. Such a principle that remains without partnership and is extensively ingrained in the generality and details of things and intellection regarding the world-system must universally and uniquely be the monotheistic law of the oneness of God. Yet, God assumes no corporeal manifestation – neither by cognition nor in shape or form – in the design of relationships of the monotheistic law with the details and generality of the created world-system. Besides, the action of God on creation in respect of His absoluteness and non-partnership is instantaneous by command, God's will. Thereby, God creates out of nothing, except by His command of absolute knowledge. Such a law, though, when tried for comprehension of the human and physical worlds, demands recognition of simultaneity between the law and comprehension of the being of existence. Thus God creates by His command; and this simultaneously brings about intellect and form. The *tawhidi* induced world-system is established instantaneously with the divine command.

The perfection of knowledge in God as Creator and Sustainer and the continued incompleteness of knowledge in human and physical schemes, establishes the humble acceptance of human imperfection in knowledge. This is true both of knowledge and its induced effects in creation. The result then is an evolutionary learning process towards gaining knowledge. Consequently, there arises an evolutionary world-system of being, in relation to the incompleteness of knowledge, as knowledge gets manifested in the evolutionary learning process-oriented universe.

Regretfully, such an epistemological perspective of the *tawhid*-centred socio-scientific universe has been abandoned in contemporary times. Nonetheless, that was the centrepiece of knowledge and understanding of creation in the thought of the great scholastic Islamic thinkers. On this theme, Buchman (1998, p. xviii) writes regarding Imam Ghazzali's masterpiece, *Niche of Lights*: "While the book could stand by itself with little or no introduction, it may be helpful to elucidate the general '*tawhid*-centred' worldview of twelfth-century Islam. People today – Muslims and non-Muslims alike – usually hold drastically different assumptions on the nature of existence than those held by al-Ghazzali and most of his contemporaries." The revival and fresh quest for the *tawhid*-centred epistemological intellection, and its application to the generality and particulars of the world-system in detail, continues on for rediscovery. Such a search and rediscovery in substantive analytical content is the theme of this book.