

FREE THOUGHT, FAITH AND SCIENCE

*Finding Unity Through
Seeking Truth*

Roger Pullin

outskirtspress
DENVER, COLORADO

The opinions expressed in this manuscript are solely the opinions of the author and do not represent the opinions or thoughts of the publisher. The author has represented and warranted full ownership and/or legal right to publish all the materials in this book.

Free Thought, Faith, and Science
Finding Unity Through Seeking Truth
All Rights Reserved.
Copyright © 2014 Roger Pullin
v7.0

Cover Image © 2014 Roger Pullin. All rights reserved - used with permission.

This book may not be reproduced, transmitted, or stored in whole or in part by any means, including graphic, electronic, or mechanical without the express written consent of the publisher except in the case of brief quotations embodied in critical articles and reviews.

Outskirts Press, Inc.
<http://www.outskirtspress.com>

ISBN: 978-1-4787-3570-0

Outskirts Press and the “OP” logo are trademarks belonging to Outskirts Press, Inc.

PRINTED IN THE UNITED STATES OF AMERICA

AUTHOR'S ACKNOWLEDGEMENTS

I thank all the wonderful people who helped me to complete this work, especially the following: Jim Atkinson and Gill and John Vance, who spent much time reviewing and editing my efforts, while holding views that sometimes differed from mine, a little or a lot; Aque Atanacio for turning my scruffy diagrams into polished images, and Emma del Rosario for keeping track of a manuscript that went through many changes. Above all I thank God for His gift of Free Thought and His constant guidance in the spiritual warfare that rages during the writing of books like this and, whether you believe it or not, in the reading of them.

TABLE OF CONTENTS

Author's Acknowledgements.....	i
PREFACE.....	ix
CHAPTER 1	
INTRODUCTION.....	1
Purposes and Perspectives.....	1
Free Will.....	4
Free Thought and the Mind-Soul Interface.....	6
Divine Interventions?.....	7
Faith and Organized Religion	8
Science.....	10
The False Divide Between Faith and Science	12
Expanding the Faith-Science Quest for Truth	13
CHAPTER 2	
THE HUMAN CONDITION.....	19
Existence	19
Humans and God.....	25
Original Sin?.....	30
The Self.....	33
Happiness and Morality	37
Consciousness and the Brain	42
The Soul.....	49
CHAPTER 3	
FREE THOUGHT: SCOPE AND FOUNDATIONS.....	59
Free Thought Territory.....	59
Free Thought and free thought/freethinking	61
Information	66
The Free Will Debate.....	69
<i>The Debate in Organized Religion.....</i>	<i>74</i>
<i>The Debate in Science.....</i>	<i>78</i>

CHAPTER 4	
FREE THOUGHT: MODEL AND MECHANISMS	82
Combining Mental Reasoning and Soul Processing	82
Turning to Quantum Theory.....	85
Model and Mechanisms.....	88
Comparisons with Other Perspectives and Findings.....	94
<i>The Quantum Observer</i>	94
<i>Dual-Aspect Monism</i>	97
<i>Consciousness and the Big Picture</i>	99
Postscript.....	101
CHAPTER 5	
FAITH.....	103
What Is Faith?.....	103
Belief Without Doubt	106
Faith and Organized Religion	109
Faith in the Quest for Truth	112
Soul States: Baselines, Shifts and Leaps.....	115
Some Personal Experiences of Faith.....	123
Postscript.....	129
CHAPTER 6	
SCIENCE.....	132
God and Science	132
The Philosophy of Science	133
Creativity in Science.....	137
The Conduct of Science	140
Scientific Method.....	141
Indicators of Correctness.....	145
Undervalued Science and Persistent Pseudoscience	146
A Theory of Everything.....	150
Postscript.....	152

CHAPTER 7

BATTLEFIELDS 155

- No Neutral Ground 155
- Faith Versus Unbelief 155
- Evil Versus Good..... 157
- Organized Religion Versus Science 163
- Evolution..... 165
- Intelligent Design..... 175
- Interpersonal, Group and Institutional Battles 183
- A Few Battles At Church..... 186

CHAPTER 8

TRUTH AND MORALITY 189

- Truth, Morality and Us..... 189
- Perspectives on Truth..... 193
- Postmodernism 197
- Truth About the Material Realm 201
- Truth About the Spiritual Realm 204
- Sources of Morality..... 205
- Altruism 212
- The Universal Moral Code..... 219

CHAPTER 9

IN THE MIDST OF LIES AND NONSENSE 225

- Lies and Nonsense from Organized Religion 225
- Sacred Texts 228
- Interpretations..... 232
- Literal Impossibilities 238
- Angels..... 242
- Faith Healing 244
- Heaven..... 246
- Homosexuality 248
- The Rapture 251
- Research on Prayer 254
- Miscellaneous Superstitions 261

CHAPTER 10	
REFORMATIONS AND REVOLUTIONS	263
Concepts, Definitions and Prospects	263
The Protestant Reformation	270
Revolutions in Science	271
Christianity in Flux.....	273
Reformed Epistemology.....	276
Christian Apologetics.....	280
The Second Vatican Council	290
Postscript.....	298
CHAPTER 11	
UNITY	301
Drawing Threads Together	301
Expanding the Faith-Science Quest for Truth	304
<i>Prerequisites</i>	304
<i>Perspectives</i>	307
<i>Prospects</i>	313
Research on Free Thought and Further Development of Theory	314
<i>Brain and Consciousness Research</i>	326
<i>Towards Combined 'M and S' Theory</i>	333
APPENDIX I: DEFINITIONS	336
KEY TERMS.....	336
OTHER TERMS.....	340
APPENDIX II: CREDO	347
Church Creeds and Personal Creeds.....	347
The Apostles' Creed and the Nicene Creed	348
The Athanasian Creed	356
Miscellaneous Topics.....	357
<i>Angels</i>	357
<i>Demons</i>	359
<i>Evolution</i>	361
<i>Heaven and Hell</i>	362
<i>Miracles</i>	365

<i>Prayer</i>	368
<i>Predestination</i>	370
<i>Souls</i>	371
<i>The Spiritual Force for Evil</i>	372
<i>The Universal Moral Code</i>	373
APPENDIX III: ABOUT ME	375
Origins.....	375
School and Church	376
University.....	378
The Isle of Man.....	380
The Philippines.....	382
Lessons Learned and Looking Ahead	387
Epilogue: ‘The Most Important Thing in Life’	388
APPENDIX IV: BATTLEFIELD LITERATURE.....	390
PRO-FAITH	390
PRO-UNBELIEF.....	395
APPENDIX V: GATHERING SUBJECTIVE EVIDENCE FROM WITHIN CONCERNING FAITH AND UNBELIEF ..	420
INDEX.....	432

PREFACE

Throughout history, individual humans have felt the need to connect with something spiritual. Believers explain that need as coming from our souls as we seek God and are sought by Him. Nonbelievers explain it as a product of the evolution of the human brain and as delusions encouraged by organized religion.

Our bodies, brains and minds are made of the same materials as those of other forms of life, but we are very different. Human consciousness operates at a level far above anything seen in animals. We are highly self-aware and potentially God-aware. Our bodies, brains and minds are parts of the material realm, but each of us also has a soul, which is part of the spiritual realm.

We make our choices about the practicalities of life, such as what to eat and what to wear, by using what I call basic thought. We use what I call Free Thought to make choices about the higher things of life: creativity; faith; justice and morality. Faith is defined here as personal belief and trust in God, not as an organized religion or a religious affiliation.

Free Thought is not the same as freethinking in the conventional sense of rebelling against some religious or other form of orthodoxy. A believer has made a Free Thought choice for faith. Choosing faith does not mean accepting everything in the doctrines, dogma and books of an organized religion. In faith or unbelief, everyone has a private and personal creed, derived from Free Thought.

I take the human condition to be a state of combined existence in the material and spiritual realms. There is plenty of objective evidence for our material realm existence, but our spiritual realm existence is entirely a matter of subjective experience. From that dualistic perspective of reality, with its inevitable mixing of objective and subjective evidence, my model for Free Thought has the material realm components of self (body, brain and mind) and the spiritual core of self (soul) working as an integrated whole.

Science is based upon objective evidence, repeatability of findings, and the explanatory and predictive power of theory. As theories get better, we approach truths about the material realm. Strictly speaking, all truthful disclosures through science are verisimilitudes, not absolute truths. For all practical purposes, however, we can take as true the existence of energy, electromagnetism, gravity, the genetic code, matter etc.

Nonbelievers, especially scientists, hold that the question of whether anything spiritual truly exists can be answered only by rigorous scientific investigation. Probing the human brain with the instruments and methods of science is not likely to detect the soul or spiritual revelations and responses. The only clearly researchable evidence for our choices of faith or unbelief is our subjective evidence. Nevertheless, that subjective evidence can be gathered systematically and analysed rigorously, as part of science.

Free Thought is the processing of information from the material and spiritual realms about the higher things of life. The mind reasons about what is sensed from the material realm. The results of that reasoning pass through the mind-soul interface to the soul. The soul processes revelations from God and/or the spiritual force for evil. Information about the state of the soul passes through the mind-soul interface to the mind. Free Thought is the whole of that interactive and iterative, spiritual and mental process, together with responses from the body-mind to the surrounding material realm

and from the soul to the spiritual realm.

Information passing through the mind-soul interface must be in one or more common non-material formats, so that it can be combined and appraised to produce the outcomes of Free Thought. Our individual mind-soul interfaces are the *only* connections between the material and spiritual realms. Free Thought takes place in an open system - an individual human who is always part of and connected to the material and spiritual realms.

Believers have diverse perspectives on the spiritual realm and the extents to which God intervenes in the material realm. Deists believe in a non-interventionist God. Some theists believe that God intervenes, either a little or a lot, in general or specifically, on behalf of believers who ask for His help. Some believe that God has predestined everything to proceed only according to His fixed and perfect plan, in His perfect timing. That would prevent God and humans from doing anything beyond playing out His fully scripted drama.

I am a theist, but I believe that God's interventions in the material realm are made *only* through His spiritual revelations to individual souls. I believe that the outcomes of an individual's Free Thought change her/his behaviour and can thereby change the behaviour of others and the state of the world.

I believe that we all live free-willed lives in a free process material realm and must accept the attendant risks. I do not believe that God choreographs the physics, chemistry and biology of accidents, diseases and natural disasters. God allows nature to help us or harm us. I do not believe that God invites or grants requests for any miracles that would require contravening the laws of nature, by which He made this world to work.

I believe that good and evil are at war, in us and around us. God does

not direct acts of evil. The rebel soldiers who chop limbs off children and the jihadists who commit mass murder are not fulfilling God's perfect plan in His 'perfect timing.' They are acting for the spiritual force for evil, which engineers all human acts of evil: betrayal; corruption; cruelty; discrimination; greed; injustice and lying. God allows evil to remain a potent force.

I believe that the Big Bang, which led to the evolution of our observable material realm, was the initial mega-miracle in the material realm. I believe that the Incarnation of God, as Jesus Christ, was the only other opportunity in the material realm for some God-performed miracles that overrode the God-given laws of nature. I have seen no other convincing reports of any supernatural miracles, signs and wonders. Believers who cling to such notions are hindering the quest for truth and turning honest seekers away from exploring faith.

I believe that God created the means by which everything in the material and spiritual realms came into being. Some nonbelievers, especially scientists, argue that explanations of reality involving God and the spiritual realm are unnecessarily complex and therefore almost certainly wrong. But explanations based solely on the material realm are also highly complex. Scientific theory has posited the parallel existence of 10 to the power 500 universes and a material realm made of tiny strings with up to 11 dimensions. What matters is the *truth*, regardless of its complexity or simplicity.

We are all on the same side when we refuse to make compromises over truth and recognize that an inconvenient truth is still a truth. Faith and science are complementary paths to truth. Believers find truth through spiritual revelations from God. I believe that all truthful disclosures about the material realm through mathematics and science also come from God, as believers and nonbelievers develop and use their God-given creativity in Free Thought.

Exploring faith requires no compromise in the rigorous methods of science. Embracing science requires no compromise in faith. The faith-science quest for truth can be expanded through science-friendly reformations in organized religion and faith-friendly revolutions across science. The reformations will require believers, especially religious authorities, to embrace science. The revolutions will require nonbelievers, especially scientists, to admit the validity of subjective evidence from within concerning faith and unbelief.

I am a biologist, working mostly on fish and other aquatic biodiversity. I am also a Christian and a member of an international church, where I have served as an Elder and in the music ministry. My faith and my enthusiasm for science are fully in tune. This book is sprinkled with stories from my life and work in the Isle of Man and the Philippines and my various travels. I hope that it will contribute to bringing more believers and nonbelievers together in an expansion of the faith-science quest for truth. In this book, ‘we’ means everybody.

Roger Pullin

Makati City, Philippines; May 6, 2014

CHAPTER 1

INTRODUCTION

“Whatsoever things are true, whatsoever things are honest...if there be any virtue, and if there be any praise, think on these things”¹

PURPOSES AND PERSPECTIVES

The Apostle Paul gave good advice for finding the best way through this world of wonders and horrors, pleasures and pain - *think* and focus on whatever is *true*. All the truth that we can glimpse, whether through faith, where faith is defined as personal belief and trust in God, or through science, or through a combination of both, comes from one whole body of truth. Truth cannot contradict itself.

Richard Dawkins² stated as follows the purpose of his most famous book against religion: *“If this book works as I intend, religious readers who open it will be atheists when they put it down.”* My purpose here is to encourage believers who distrust science and nonbelievers who regard faith as a delusion to reassess their positions and consider participation in an expanded faith-science quest for truth.

1 Philipians 4:8

2 Dawkins, R. 2006. *The God Delusion*. Bantam Press: London.406p.p.5.

FREE THOUGHT, FAITH, AND SCIENCE

This book is an attempted contribution in a complex field of study to which I am a relative newcomer. It is also a personal testimony. Writing in the first person singular is generally frowned upon in science, but I had no other option here in order to describe some of my experiences concerning faith and science, my present beliefs and my journey through life so far.

I begin with general explanations about the human condition, human thought processes, faith and science. I move on through reviews of the battlefields on which we fight about the nature of truth and morality, in the midst of lies and nonsense. I conclude by making the case for reformations and revolutions and for taking the path to faith-science unity through a common quest for truth. The various chapters and subchapters in this book are best read and considered in turn, as steps along this path, as if they form a series of lectures.

The literature in this field is vast. I consulted mainly Western sources and I recognize the deficiencies of this position. All my sources are referenced as footnotes to the pages on which they are cited rather than as endnotes, in order to provide easy access for those who would like to see immediately what I have consulted and to have rapid access to websites.

Readers who are unused to and/or distracted by references as footnotes can choose to ignore them and stick with the text. No one need feel pushed to read my original sources, unless she/he wishes to do so. This book should suffice as an account of the main points that I am making and the necessary evidence.

I hold that every individual is a unique self - a material body-mind integrated with a spiritual soul - existing in and relating to a reality than spans the material realm and the spiritual realm. Many eminent scholars have covered and continue to cover the same ground. I am trying to draw together some existing threads in order to develop what

INTRODUCTION

I call a theory of Free Thought.

Free Thought is *not* what is commonly called ‘freethinking’ or ‘free thought,’ meaning opposition to faith, or to conformity or orthodoxy. Free Thought can have agnosticism, or atheism, or faith as its outcome. Free Thought is the combined mental and spiritual process by which we explore and make our choices about the higher things in life: the development and use of our creativity; faith and unbelief; justice and injustice; morality and immorality.

Free Thought has capital letters to indicate its higher status above our basic thought about the practicalities of life. Free Thought is special. One can postpone a Free Thought decision about faith or about making creative contributions in a given field, but one cannot go for long without basic thought about what to eat, what to wear, how to dodge traffic etc.

By way of comparison, Peter Russell³ wrote: “*In every moment I have a choice as to how I see a situation. I can see it through eyes caught in the materialist mindset that worries whether or not I am going to get what I think will make me happy. Alternatively, I can choose to see it through eyes free from the dictates of this thought system... The place to go for help is deep within, to that level of consciousness that lies beyond the materialistic mindset - to the God within.*”

Basic thought about our material needs and circumstances occupies most of our waking hours. We spend comparatively little time in Free Thought about the higher things of life, but Free Thought time is time well spent. It is the means by which we make reality checks on the spiritual dimension in our own lives and the human condition in general.

Basic thought and Free Thought are sometimes complementary. We

3 Russell, P. 2003. *From Science to God: A Physicist's Journey into the Mystery of Consciousness*. New World Library: Novato CA.129p.p.96.

need money to obtain the necessities of life, which are the targets of our basic thought. We use Free Thought in ethical choices about how we earn money - by a fair day's work for a fair day's pay or by scams. We use Free Thought for decisions about whether to purchase products that damage people and/or nature.

Daniel Kahneman⁴ describes us as experiencing selves and remembering selves, with our minds working through “*an uneasy interaction*” between two systems of thinking - the “*automatic*” (fast thinking) *System 1 and the effortful* (slow thinking) *System 2.*” My differentiation between basic thought and Free Thought is similar, but I define Free Thought from a much wider perspective, including interactions between the spiritual and material realms across the mind-soul interface. Those interactions are more than “*uneasy.*” They are battlefields.

I do not venture here into any discussion of the unconscious. I regard all episodes of Free Thought as conscious experiences. I make no attempts to relate Free Thought to brain structure and states or to R.D. Laing's⁵ work on the divided self. I regard the body-mind, including the brain, and the soul as complex works in progress, integrated and working together as a human self.

FREE WILL

Each of us is undeniably a self. Each self has a will. Individual free will has been a controversial topic for centuries. The main question is whether the choices made by a human self derive from a sovereign and independent self will or are determined by factors beyond the self's control. These alternative positions are called *free will* and *determinism*.

The position that free will and determinism are incompatible is called

⁴ Kahneman, D. 2012. *Thinking Fast and Slow*. Penguin Books: London.499p.p.415.

⁵ Laing, R.D. 1960. *The Divided Self: An Existential Study in Sanity and Madness*. Republished in 2010 by Penguin Classics: London.218p.

INTRODUCTION

incompatibilism. Within incompatibilism, *libertarianism* affirms free will and denies determinism, whereas *hard determinism* takes the opposite view. The alternative to incompatibilism is *compatibilism* or *soft determinism*, in which free will is seen as compatible with determinism in various ways. The works of Robert Kane⁶ and Bob Doyle's⁷ layperson-friendly compilation are excellent guides to the complex debates about free will.

I define free will as every individual's ever-present capacity to *choose* her/his personal goals privately and to decide freely to what extent those goals are divulged to others. The extent to which we have freedom of *action* to profess and/or pursue our freely chosen goals is a separate issue from how we make the *choices* that we keep inside us.

Our family members, peers and others can pressure us into making professions of our goals, but those professions can be either true or false. The choices about what we profess are always ours. We can also be pressured into joining efforts in which we pretend to pursue goals that differ from our chosen ones. On this basis, I hold that we have free will to set our personal goals and that free will is foundational for Free Thought.

I believe that God and the spiritual force for evil fight their battle of wills in our souls and use us to project that battle on to interpersonal and group battlefields, through the outcomes of our Free Thought. Despite all of those human and spiritual pressures, we remain free-willed, sovereign selves. We make free choices in respect of our personal goals and our privately held preferences for actions to pursue those goals.

We share with other living organisms instinctive and natural goals

6 Kane, R. 2005. *A Contemporary Introduction to Free Will*. Oxford University Press: Oxford.196p.
Kane, R. Editor. 2008. *Free Will*. Blackwell Publishing: Malden MA.310p.

7 Doyle, B. 2011. *Free Will: The Scandal in Philosophy*. I-Phi Press: Cambridge MA.458p. Available, with updates, at: www.informationphilosopher.com/scandal

for survival and reproduction. We pursue those goals through basic thought. We also have personal goals concerning the higher things of life. We seek truth about our selves and the world around us. We strive to make creative contributions in our chosen fields and to enjoy the creative contributions of others in many fields. We pursue our higher goals through Free Thought. Their pursuit can help or hinder the attainment of our basic biological goals. Ask any starving artist.

FREE THOUGHT AND THE MIND-SOUL INTERFACE

I define Free Thought as the integrated and iterative process that combines soul processing of and responses to information from the spiritual realm with mental reasoning about and responses to information from the material realm. Free Thought involves three inter-linked processes of stimuli and responses: revelations from God and the soul's responses; revelations from the spiritual force for evil and the soul's responses; and revelations from the material realm and the body-mind's responses.

The pivotal element is what I call the *mind-soul interface*. Any dualistic system must have an interface if there is to be any exchange between one subsystem and the other. For mind and soul, John Turl⁸ expressed that necessity as follows: “*For the Christian who believes that the Holy Spirit is active in the world, causal closure of the physical domain is not an option. **There is something in the mind that is designed to interface with the spiritual*** (present author's emphasis). *It should not therefore be seen as an inappropriate mechanism if a person's soul, which I contend to be a spiritual entity, can affect her/his own brain.*”

That mechanism is much more than appropriate. It *defines* the human self as an integrated whole. During Free Thought, the spiritual

8 Turl, E.J. 2010. Substance Dualism or Body-Soul Duality? *Science and Christian Belief* 22(1): 57-86.p.75.

INTRODUCTION

battlefield in a soul is connected across the mind-soul interface to body-mind experiences of the material realm. Information, in one or more non-material formats, is read, combined and recombined, to make decisions in mind and soul.

DIVINE INTERVENTIONS?

When there were no humans on Earth, as it was for most of its history, neither God nor the spiritual force for evil would have needed any portals through which to make interventions in the material realm. From the dawn of life, God's 'eye' could have been on the sparrow⁹ and on everything else in His creation - the sparrow hawk, the cat, the bacterium, the parasitic worm, the giant squid, the virus, the whale and the rest of biodiversity - but He need not have had His 'hands' on any of it until we came on the scene.

I see no reason to believe that God has ever intervened in the post-Big Bang material realm to effect material change in any of its nonliving components and nonhuman life forms, apart from the period of His Incarnation as Christ. For all other times and places, I believe that God made all the necessary mechanisms for the material realm to work without any physical interventions from Him. It has worked very well in that mode. It has led to the evolution of many species, among which God chose us for His completion, to be spiritual company for Him.

John Polkinghorne¹⁰ used "*the free-process defence*" to explain the *free process* by which the material realm works. This can be readily observed. Neither God nor the spiritual force for evil choreographs accidents, diseases and natural disasters, or indeed bumper harvests and lottery wins. God and the spiritual force for evil intervene only in our souls, which are part of the spiritual realm, after which *we* act on the

9 Luke 12:6-7

10 Polkinghorne, J.C. 1996. *The Faith of a Physicist: Reflections of a Bottom-Up Thinker*. Fortress Press: Minneapolis MN.211p.p.83-85.

outcomes of our individual Free Thought, with impacts on ourselves, our fellow humans and the environment.

Whether we perceive them as such or not, we all receive spiritual revelations in our souls, from God and from the spiritual force for evil, as information for our Free Thought. In our Free Thought episodes, we use all available information from the spiritual and material realms and we choose, in private, our goals, our beliefs, our preferred behaviour and how we will actually behave.

Our Free Thought and our mind-soul interfaces are the only portals for information exchange between the spiritual and material realms and the only route for divine interventions. We have evolved and been gifted by God with souls and mind-soul interfaces to be spiritually influenced agents of change in the free process material realm,

FAITH AND ORGANIZED RELIGION

I define faith as personal belief and trust in God, not as an organized religion, or a religious affiliation, or a general sense of spirituality, or the search for something sacred. I define organized religion as an institution or organization, the purpose of which is to further specific beliefs and associated practices in recognition of the spiritual realm, spiritual beings and their alleged influences on the material realm, especially on humans.

Faith is about true freedom and high personal empowerment, living life with God not only as Lord but also as Friend. One cannot be truly free without recognizing the existence of God and the context in which He has given us our freedom. The word religion has origins in Middle English and Old French, where it was used to describe monastic vows. Religion is based on adherence to rules. Faith is a personal and constantly evolving relationship with God.

INTRODUCTION

A believer is one who has made a decision for faith. A nonbeliever is one who has made a decision against faith or has yet to make a decision for or against faith. Everyone is either a believer or a nonbeliever, but our professions of faith and unbelief can be true or false. No person can ever know for sure what any other person really believes. Memberships of organized religions and participation in religious practices are not proofs of faith. Some nonbelievers comply with religious practices for purely economic and/or social reasons.

Organized religion can support faith, but organized religion allied with political and economic agendas has often perverted faith and led believers away from the love and truth that are the basis of a personal relationship with God. Throughout history powerful religious authorities have established command-and-control over relatively powerless flocks and have served their own selfish interests, rather than serving God. Religious authorities have led and bankrolled many horror shows including the dispossession, killing, maiming and torturing of outsiders, all under religious banners and allegedly in God's name.

Charles Mackay¹¹ gave chilling accounts of the Christian crusades, inquisitions and persecutions of alleged witches. For a villager in medieval Europe, a trip to Jerusalem or participation in the disposal of an alleged witch would have been an exciting episode in a drab life - especially when paid and assured by political and religious authorities of rewards in heaven. Suicide bombers hear, believe, and respond to similar lies. Present day horror shows include the attacks of 9/11 and the maiming and killing of girls for wanting to choose whom they will marry, or simply for wanting to go to school.

I applaud all who condemn the past and present lies, nonsense and horror shows perpetrated by organized religion. Faith *per se* merits no such condemnation. God does not direct religious horror shows. The

11 Mackay, C. 1841. *Extraordinary Popular Delusions and the Madness of Crowds*. Available from Maestro Reprints: Lexington KY.399p.

spiritual force for evil recruits the participants in religious horror shows by dominating their Free Thought.

SCIENCE

I define science as any intellectual activity, observation or experiment concerning the composition and workings of the material realm and the nature of spirituality in the human condition. The systematic gathering and analysis of subjective evidence from within concerning faith and unbelief qualifies as scientific research. Anyone who seeks an explanation about any aspect of the material realm and/or the true nature of the human condition, including our spirituality, acts as a scientist.

Simon Blackburn¹² noted that science and common sense share: “*a peculiar feature... which is not shared by every ‘discourse’ such as ethics or aesthetics or pure mathematics. Science and common sense offer **their own** (original author’s emphasis) explanation of why we do well by using them. It is not the privilege of some second-order, philosophical, subtle and elusive theory called realism. Science and common sense do it all by themselves.*”

In science, we ask questions about the composition and workings of the material realm. We make observations, gather evidence, analyze that evidence, and ask more questions - all in the quest for truth. Early science led to traditional knowledge, mostly about food production and health. Modern science brings us ever closer to truths about the material realm and enables the development of impressive technology for our material wellbeing.

In any given discipline, normal science progresses slowly under a current paradigm. Major advances in science are made through scientific revolutions followed by paradigm shifts, as described by Thomas

¹² Blackburn, S. 2006. *Truth: A Guide for the Perplexed*. Penguin Books Limited: London. 238p.p.180.

INTRODUCTION

Kuhn.¹³ Under current paradigms *and* during revolutions, all advances in science depend upon the development and application of human creativity, through Free Thought. Human creativity is God-given. God uses the Free Thought of believers and nonbelievers to make truthful disclosures through mathematics and science.

Science is a commonwealth. Science provides the same information to everyone, regardless of age, gender, race, creed and social status. Science requires everyone to provide evidence for whatever findings and conclusions they communicate. No one is considered infallible in science and everyone faces the same rigorous standard of criticism. Science is an activity for all honest seekers of truth, including agnostics, atheists and believers.

John Searle¹⁴ rejected as follows Daniel Dennett's denial that science can investigate subjectivity: "*Science does indeed aim at epistemic objectivity. The aim is to get to a set of truths that are free from our special preferences and prejudices. But epistemic objectivity of **method** does not require ontological objectivity of **subject matter*** (original author's emphases).

Searle continued: "*He (Dennett) thinks the objective methods of science make it impossible to study people's subjective feelings and experiences. This is a mistake, as should be clear from any textbook of neurology... There is no reason why an objective science cannot study subjective experiences.*"

Michael Polanyi¹⁵ celebrated the primacy of individual "*commitment*" to "*facts, knowledge, proof, reality etc.,*" as "*the only path for approaching the universally valid*" and emphasized the necessity of objectivity in material realm science. Objectivity in science and the subjective nature

13 Kuhn, T.S. 1996. *The Structure of Scientific Revolutions*. University of Chicago Press: Chicago IL.212p.First published in 1962.

14 Searle, J.R. 1997, *The Mystery of Consciousness*. The New York Review of Books: New York.224p.p.114, 123.

15 Polanyi, M.1974. *Personal Knowledge: Towards a Post-Critical Philosophy*. University of Chicago Press: Chicago IL.428p.p.303. First published in 1958; based M. Polanyi's 1951-1952 Gifford Lectures, delivered at the University of Aberdeen, Scotland, UK.

of the internal milieu that drives and sustains us are of course *complementary*. We must safeguard objectivity in science. We must also use science to explore subjective evidence from within concerning faith and unbelief.

THE FALSE DIVIDE BETWEEN FAITH AND SCIENCE

I know from my own experiences that the faith-science divide is false. It persists because opinions are polarized between those who hold that the spiritual realm really exists and those who hold that anything alleged to be spiritual in nature is simply imagination, formed entirely by the brain.

Stephen Jay Gould¹⁶ held that science and religion are “*Non-Overlapping Magisteria (NOMA)*.” He defined a magisterium as “*a domain where one form of teaching holds the appropriate tools for meaningful discourse and resolution*” and added that: “*we debate and hold dialogue under a magisterium.*” Richard Dawkins¹⁷ commented as follows: “*I simply do not believe that Gould could possibly have meant much of what he wrote in Rocks of Ages. As I say, we have all been guilty of bending over backwards to be nice to an unworthy but powerful opponent, and I can only think that this is what Gould was doing*”.

I am sure that Gould meant every word. I also reject his NOMA model, but for very different reasons than those of Dawkins. In each magisterium, the teaching, debate and dialogue mentioned by Gould go hand in hand with exploration. If there was no overlap between the material realm magisterium of science and the spiritual realm magisterium of what Gould called religion, but what I call faith, then no human living in the material realm could ever carry out any meaningful exploration of anything in the spiritual realm.

16 Gould, S.J. 2002. *Rocks of Ages: Science and Religion in the Fullness of Life*. Vintage: London. 241 p. p.5-6.

17 Dawkins, R. 2006. *The God Delusion*. Bantam Press: London. 406 p. p.57.

INTRODUCTION

‘No problem!’ say the nonbelievers, because nothing exists except the material realm. However, there really is a *huge* problem for humanity if the spiritual realm does exist but has no overlap with the material realm. In that case, no human, made allegedly “*in the image of God*,”¹⁸ would have any hope of contacting Him during her/his earthly life. In truth, the spiritual realm not only exists, it also overlaps with the material realm at the mind-soul interface of every person.

Many believers argue that the evidence for God is best seen when science fails to explain something. This so-called ‘God-of-the-gaps’ argument always fails. The gaps get filled sooner or later. However, there is a huge *hole* in all attempted explanations of the human condition that deny completely the existence of the spiritual realm. The science of the material realm and the study of faith and unbelief must therefore be brought closer together, with complete honesty about the human condition and the composition and workings of the material realm.

Most believers can acknowledge readily that all truth comes from God, but many are so reliant on their allegedly inerrant sacred texts and/or allegedly infallible religious authorities that they are afraid of making the obvious connection that all truthful disclosures through mathematics and science must also come from God. Many nonbelievers refuse to explore anything of a spiritual nature. Some are afraid of what others might think of them if they did so. No one need ever be afraid to open wide every possible window to truth.

EXPANDING THE FAITH-SCIENCE QUEST FOR TRUTH

The great historical examples of those who pursued the faith-science quest for truth in the Common Era (CE) include the following, among many: Hildegard of Bingen (1098-1179); Moses Maimonides (1135-1204); Francis Bacon (1561-1676); Galileo Galilei (1568-1642); Sir

18 Genesis 1:27

Thomas Browne (1605-1682); Isaac Newton (1643-1727); Michael Faraday (1791-1867); Charles Darwin (1809-1882); Bertrand Russell (1872-1970); and Albert Einstein (1879-1955). I include believers *and* nonbelievers in this distinguished list, because all truthful disclosures through mathematics and science come from God.

Faith-science convergence is seen today in the lives and works of scientists who are believers; for example, Francis Collins,¹⁹ Alister McGrath,²⁰ John Polkinghorne,²¹ and Gerry Schroeder.²² Ruth Bancewicz²³ and others have compiled further examples in the “*Test of Faith*” project. Faith-science convergence is also seen in organizations including, *inter alia*: the American Scientific Affiliation,²⁴ Christians in Science;²⁵ the Society of Ordained Scientists;²⁶ and the Science and Religion Forum.²⁷

Further pointers to faith-science convergence can come from unlikely sources. At a TED (Technology, Entertainment, Design)²⁸ event in 2010, the prominent atheist author Sam Harris²⁹ stated: “*The demagogues are right about one thing. We need a universal conception of human values.*” Harris proposed science as the source of a standard moral code for everyone. Believers hold that the Universal Moral Code is authored by God and revealed to all of us by Him. Those positions become convergent if one believes that God created everything and that all truthful disclosures through science come from Him.

19 Collins, F.S. 2006. *The Language of God: A Scientist Presents Evidence for Belief*. Free Press: New York.294p.

20 McGrath, A.E. 2008.*The Open Secret: A New Vision for Natural Theology*. Blackwell Publishing: Malden MA.372p.

21 Polkinghorne, J.C.2009.*Theology in the Context of Science*. Yale University Press: New Haven CT.166p.

22 Schroeder, G.L. 2009. *God According to God: A Physicist Proves We’ve Been Wrong About God All Along*. HarperOne: New York.249p.

23 Bancewicz, R. Editor. 2009. *Test of Faith: Spiritual Journeys with Scientists*. Authentic Media Limited: Milton Keynes, UK.119p. *Test of Faith: Does Science Threaten God?* DVD. Paternoster/Authentic Media: Milton Keynes, UK. Available at: www.testoffaith.com

24 www.asa3.org

25 www.cis.org.uk

26 www.ordainedscientists.org

27 www.srforum.org

28 www.ted.com

29 Available at: www.youtube.com/watch?v=Hj9oB4zpHww

INTRODUCTION

Richard Feynman³⁰ wrote the following in the context of whether moral problems could be approached in ways similar to experimental science: “*I believe that it is not at all impossible that there be agreements on consequences, that we agree on the net result, but maybe not on the reason we do what we ought to do...I therefore consider the Encyclical of Pope John XXIII...to be one of the most remarkable occurrences of our time and a great step to the future. I can find no better expression of my beliefs of morality, of the duties and responsibilities of mankind, people to other people...And I recognize this encyclical as the beginning, possibly, of a new future where we forget, perhaps, about the theories of why we believe things as long as we ultimately in the end, as far as action is concerned, believe the same thing.*”

Everyone uses Free Thought to make choices in matters of faith, justice, morality, and creative activities in mathematics, science and the arts. Free Thought includes reasoning about and responses to spiritual revelations. Thomas Henry Huxley worked out his position of agnosticism by his using Free Thought, which included his reasoning about and responses to spiritual revelations, even though he did not recognize them as such. The same applies to Richard Dawkins, Sam Harris and others as they strive to sustain their atheism.

In faith and in science, Free Thought advances our understanding by combining soul processing with mental reasoning. Free Thought provides us with combined access to the spiritual and material realms. Prayers, scientific experiments, and all development and use of human creativity are Free Thought explorations of one unified whole - the spiritual realm and the material realm. In every scientific experiment there is a result, even if it is not a clear-cut result or the desired one. The same applies to prayers. All prayers are heard and answered, even if the

30 Feynman, R.P. 2007. *The Meaning of It All*. Penguin Edition: London.133p.p.121-122.First published in 1998. The Encyclical of Pope John XXIII, to which Feynman referred, has the short title *Pacem in Terris* and the full title *On Establishing Universal Peace in Truth, Justice, Charity and Liberty*. It was released on April 11, 1963 and is available at: www.vatican.va/holy_father/john_xxiii/encyclicals

answer is not clear or not the desired one.

I believe that we can glimpse more truths about both the material and spiritual realms by working together and by starting from the premise that those realms form one unified whole, which is our reality. The main bone of contention will always be whether any theory or model like Free Thought can have any real spiritual component. Nonbelievers will say 'No,' on the basis that no spiritual realm exists. I contend that Free Thought *must* have a spiritual component, whether it is about faith, or science, or anything concerning the higher things of life. For now, we will just have to agree to disagree on this.

Most of us dislike being challenged to look beyond our comfort zones. If you think that anything spiritual is nonsensical and/or non-testable, please try to rise above criticizing the ills of organized religion and focus on the meaning of faith *per se*. If you are a believer and you consider a sacred book to be the only source of truth and/or your particular brand of organized religion to be the only path to God, please try to rise above shunning science and focus on what is demonstrably true about the world of nature and the whole of humanity. Despite our various comfort zones, we are all very well equipped to accomplish all of the above.

Expanding the faith-science quest for truth will require science-friendly reformations in organized religion and faith-friendly revolutions across science. The reformations will challenge believers to assess honestly what they claim to know through their faith. The revolutions will challenge nonbelievers, especially scientists, to assess honestly all evidence for the existence of the spiritual realm. The greatest stumbling block will be lack of agreement on the rules of evidence.

There is little point in trying to appraise further the claims from organized religion for supernatural signs and wonders. Christ Himself is reported to have said the following to those who craved for signs and

INTRODUCTION

wonders during His Incarnation: “*Why doth this generation seek after a sign? verily I say unto you, There shall be no sign given to this generation.*”³¹ The same applies today. Bob Dylan³² sings to those who ask for a sign of the Lordship of Christ that no sign is needed, because all the evidence comes from within. We must learn how to study subjective evidence from within concerning faith and unbelief, as part of science.

Michael Polanyi³³ wrote as follows about the big picture and the personal picture: “*So far as we know, the tiny fragments of the universe embodied in man are the only centres of thought and responsibility in the visible world. If that be so, the appearance of the human mind has been so far the ultimate stage in the awakening of the world; and all that has gone before, the strivings of myriad centres that have taken the risks of living and believing, seem to all have been pursuing, along rival lines, the aim now achieved in us up to this point. They are all akin to us... We may envisage then a cosmic field which called forth these centres by offering them a short-lived, limited, hazardous opportunity for making some progress of their own towards an unthinkable consummation. And that is also, I believe, how a Christian is placed when worshipping God.*” The faith-science quest for truth brings us closer to that “*unthinkable consummation.*”

David Deutsch³⁴ argued that: “*all progress, both theoretical and practical, has resulted from a single human activity: the quest for...good explanations.*” He added: “*Though this quest is uniquely human, its effectiveness is also a fundamental fact about reality at the most impersonal, cosmic level - namely that it conforms to universal laws of nature that are indeed good explanations. This simple relationship between the cosmic and the human is a hint of a central role of people in the cosmic scheme of things.*”

31 Mark 8:12

32 Bob Dylan.1980. *Pressing On*.

33 Polanyi, M.1974. *Personal Knowledge: Towards a Post-Critical Philosophy*. University of Chicago Press: Chicago IL.428p.p.405.First published in 1958; based M. Polanyi's 1951-1952 Gifford Lectures, delivered at the University of Aberdeen, Scotland, UK.

34 Deutsch, D.2011. *The Beginning of Infinity: Explanations That Transform the World*. Viking: New York.487p.p.vii.

FREE THOUGHT, FAITH, AND SCIENCE

I agree with Deutsch, but must add that faith can make those “*good explanations*” better still, because faith explains much more of that “*central role of people,*” in terms of the God-human-cosmic “*scheme of things.*” Truthful disclosures through mathematics and science come from God. Faith and science together explain our one whole spiritual and material reality.

E. O. Wilson³⁵ wrote: “*Science faces in ethics and religion its most interesting and possibly humbling challenge, while religion must somehow find the way to incorporate the discoveries of science in order to retain credibility.*” If one substitutes ‘faith’ for ‘religion’ in the above statement, the rationale for expanding the faith-science quest for truth is very strong.

35 Wilson, E.O. 1999. *Consilience: The Unity of Knowledge*. Vintage Books: New York.367p.p. 262-263,290.